	Electronics Corporation of Tamil Nadu Limited
Open Tender	. **Tender Document for the** **Supply, Installation and Commissioning of Microsoft Software, Anti-Virus, Computer Stationery, IT Consumables, Apple Products, Server & related items, Biometric Systems, SSL, Digital Signature certificates, Cisco or Equivalent Products, Linux Products, Information Kiosks, High End Plotters & Scanners, IP Camera, Firewall and Laptop to Government Departments on Rate Contract basis** **Tender Ref.** **ELCOT/Proc/OT/33450/RC Tender-Group B/2021-22**
	Electronics Corporation of Tamil Nadu Limited **MHU Complex II Floor,** **692 Anna Salai, Nandanam** **Chennai-600035** **Phone: +91-44-66401400 Fax: +91-44-2433 0612** **Email:** proctenders@elcot.in**Website: www.elcot.in**

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IMPORTANT NOTICE

This Tender Process is governed by the Tamil Nadu Transparency in Tenders Act, 1998 and the Tamil Nadu Transparency in Tenders Rules, 2000 as amended from time to time.

In case of any conflict between the terms and conditions in the Tender Document and the Tamil Nadu Transparency in Tenders Act, 1998 and the Tamil Nadu Transparency in Tenders Rules, 2000, the Act and Rules shall prevail.

Acronyms and Definitions	
AIO	All in One
AMC	Annual Maintenance Contract
CAMC	Comprehensive Annual Maintenance Cost
DSC	Digital Signature Certificate
EMD	Earnest Money Deposit
FOR	Free On Road / Rail
GST	Goods and Services Tax
IPR	Intellectual Property Rights
ISO	International Organisation for Standardisation
IT	Information Technology
LD	Liquidated Damage
LOA	Letter of Acceptance
MAF	Manufacturer's Authorisation Form
MDM	Mobile Device Management
MFD	Multi-Function Device
OEM	Original Equipment Manufacturer
PC	Personal Computer
ROHS	Restriction Of Use of Hazardous Substances
RAM	Random Access Memory
ROM	Read Only Memory
SD	Security Deposit
SNR	Site Not Ready
SPOC	Single Point of Contact

Know Your Rights

1. ALL TENDERS WILL BE OPENED ONLY IN THE PRESENCE OF THE BIDDERS.

2. THE BIDDERS HAVE A RIGHT TO INSIST ON PROCESSING OF TECHNICAL BIDS IN THE BIDDERS PRESENCE ONLY.

3. PRICE BID OPENING AND PRICE COMPARISON WILL BE DONE ONLY IN THE PRESENCE OF THE BIDDERS.

4. BIDDER(S) ARE ELIGIBLE FOR A COPY OF THE PRICE BID COMPARISON STATEMENT ON THE SPOT.

5. PLEASE INSIST ON YOUR RIGHTS AND AVAIL THE SAME.

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MANAGING DIRECTOR
ELCOT

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Letter of Undertaking

To
The Managing Director
Electronics Corporation of Tamil Nadu Limited
692 Anna Salai, Nandanam, Chennai-600035

Sir,

Sub: Undertaking for participating in ELCOT's Procurement Tender - Reg.
Ref: **Tender No. ELCOT/Proc/OT/33450/RC Tender-Group B/2021-22**

I/We ---------------------- have gone through fully the Terms and Conditions, Scope of Work and Specification and will abide by them as laid down (Tender Documents, Technical bid and Price Bid)

I/We ----------------------- hereby confirm that our Company was not blacklisted by any State Government/ Central Government/ Public Sector Undertakings during the last three years. We also hereby confirm that our EMD/SD was not forfeited by any State Government / Central Government / Public Sector Undertakings during the last three years due to our non-performance, non-compliance with the tender conditions etc.

I/We --- hereby declare that all the particulars furnished by us in this Tender are true to the best of my/our knowledge and we understand and accept that if at any stage, the information furnished is found to be incorrect or false, we are liable for disqualification from this tender and also are liable for any penal action that may arise due to the above.

I/We -------------------------------------ensure that the Year of Manufacturing for the products supplied vide this tender is2020 or later.

I/We --------------------------------------- certify that no refurbished components are used in the manufacturing and supply of tendered items. The licences for the operating systems and other software to be installed under this contract are certified as genuine and valid.

I/We _____ certify that we are liable and responsible for any disputes arising out of Intellectual Property Rights.

In case of violation of any of the conditions above, I/We ....understand that I/ We are liable to be blacklisted by ELCOT for a period of three years.

Yours faithfully
for _____
Name, Signature
Designation
Seal

<u>Note:</u>

1) Declaration in the company's letter head should be submitted as per format given above

2) If the bidding firm has been blacklisted by any State Government/ Central Government/ Public Sector Undertakings earlier, then the details should be provided.

1. Preamble

Electronics Corporation of Tamil Nadu Limited (ELCOT), a wholly owned Government of Tamil Nadu Undertaking is the Optional Procurement Agency of the Government of Tamil Nadu for the procurement of IT related products such as Computers, Printers, other peripherals and softwares as per G.O.Ms.No.58 of Finance (BPE) Department dated 16.2.1999 with latest amendments. ELCOT is procuring various IT related products and services for all the State Government Departments / Boards / Autonomous Bodies, etc. As a part of the procurement activities, ELCOT is inviting bids for the **Supply, Installation and commissioning of Microsoft Software, Anti-Virus, Computer Stationery, IT Consumables, Apple Products, Server & related items, Biometric Systems, SSL, Digital Signature certificates, Ciscoor Equivalent Products, Linux Products, Information Kiosks, High End Plotters & Scanners, IP Camera, Firewall & Laptop to Government Departments of Tamil Nadu on Rate Contract basis.**

Short Titles used in the Tender Document:

1) **Bidder:** Bidder means the party who makes a formal offer in pursuance of the tender floated.
2) **Successful Bidder:** Successful Bidder means the Bidder who becomes successful through the tender process.
3) **Day:** A day means a calendar day.
4) **Service Centre:** Service Centre means the centre or place, wherein the Bidder, interalia undertakes and performs the service activities relating to the tendered items indicated in the tender and shall include a <u>Direct service centre or an Authorised dealer or a Franchisee service centre of the bidder/OEM</u>
5) **Details about the Regions and Districts:**

Region	Districts to be Covered under each Region
North	(Chennai), Chengalpattu, Kancheepuram, Kallakuruchi, Ranipet, TirupatturTiruvallur, Tiruvannamalai, Vellore &Villupuram.
East	Ariyalur, Cuddalore, Nagapattinam,Mayiladuthurai,Perambalur, Pudukkottai, Thanjavur, (Tiruchirapalli) &Thiruvarur
South	Dindigul, Kanyakumari, (Madurai), Ramanathapuram, Sivagangai, Tenkasi, Theni, Tirunelveli, Thoothukudi&Virudhunagar.
West	(Coimbatore), Dharmapuri, Erode, Karur, Krishnagiri, Namakkal, Nilgiris, Salem &Tiruppur

6) **Life Cycle Cost:** Life Cycle Cost under this tender means the total cost to be incurred by the Purchaser towards the purchase of tendered items and also charges to be incurred by the Purchaser towards maintenance of this tender itemsfor the whole period including Product Standard warranty and CAMC period of 2 years or any extended period mutually agreed by the Successful Bidder and the Purchaser.
7) **Purchaser:** Purchaser means the end-user for whom the procurement is indented through the tender.

2. e-Tender Schedule

ELECTRONICS CORPORATION OF TAMILNADU LIMITED (ELCOT)

1.	Tender inviting Authority, Designation and Address	Managing Director ELCOT, II Floor MHU Complex 692 Anna Salai, Nandanam, Chennai-600035. e-mail: md@elcot.in and proctenders@elcot.in URL: www.elcot.in
2.	Tender Accepting Authority	Board of Directors of ELCOT
3.	A) Name of the Work	**Supply, Installation and commissioning of Microsoft Software, Anti-Virus, Computer Stationery, IT Consumables, Apple Products, Server & related items, Biometric Systems, SSL, Digital Signature certificates, Ciscoor Equivalent Products, Linux Products, Information Kiosks, High End Plotters & Scanners, IP Camera, Firewall & Laptop to Government Departments on Rate Contract basis.**
	B) Tender reference	**ELCOT/Proc/OT/33450/RC Tender-Group B/2021-22**
	C) Installation	At the Purchaser premises throughout the State of Tamil Nadu
4.	Tender documents available place	Tender documents can be freely downloaded from **https://tntenders.gov.in,www.elcot.in** and **www.tenders.tn.gov.in** till the closing date and time of the Tender.
5.	Tender Fees	**Tender Fee of Rs.10,000/- (Rupees Ten Thousand only) plus applicable taxes** should be paid electronically through the Bidder's respective internet banking enabled account via NEFT / RTGS to the account of ELCOT: **Account Number: 6681528770** **Indian Bank, Nandanam Branch, Chennai – 600 035.** **IFSC Code: IDIB000N078.**
6.	Earnest Money Deposit (EMD)	**The EMD Amount of Rs. 5,00,000/- (Rupees Five Lakhs Only) should be paid electronically through the Bidder's respective internet banking enabled account via NEFT / RTGS to the account of ELCOT:** **Account Number: 6681528770** **Indian Bank, Nandanam Branch, Chennai– 600 035.** **IFSC Code: IDIB000N078.**
7.	Tender submission	Two Part Tender comprising of Technical Bid and Price Bid should be submitted electronically through the e-Tender Portal https://tntenders.gov.in

8.	Bid signing	Bidders should possess valid Class 3 - Signing and Encryption Digital Signature Certificates for signing the Bids
9.	Help manuals for e-Tender	Bidders may download the help documents and user manuals from **https://tntenders.gov.in**
10.	e-Portal Training & Pre-bid meeting	Bidders along with concerned OEM should attend the Pre-bid meeting scheduled on **20.09.2021 @ 11.00 AM at ELCOT, Perungudi.** Bidders shall send their queries in the prescribed format to the email id proctenders@elcot.in. It may be noted that the queries received after the above mentioned date will not be considered.
11.	Due Date, Time and Place of submission of Tender	**12.10.2021 @ 3.00 PM** through the site **https://tntenders.gov.in**.
12.	Date, Time and Place of opening of the Technical Bids	**12.10.2021 @ 4.00 PM** at the address mentioned in Row (1) above.
13.	Date, Time and Place of opening of Price Bids	Will be intimated only to the Technically Qualified Bidders.

3. General Instructions

3.1	General

a) The Bidders are requested to examine the instructions, terms and conditions and specifications given in the Tender. Failure to furnish all required information in every aspect will be at the Bidder's risk and may result in the rejection of bid.

b) It will be imperative for each Bidder(s) to familiarise itself with the prevailing legal situations for the execution of contract. ELCOT shall not entertain any request for clarification from the Bidder regarding such legal aspects of submission of the Bids.

c) It will be the responsibility of the Bidder that all factors have been investigated and considered while submitting the Bids and no claim whatsoever including those of financial adjustments to the contract awarded under this tender will be entertained by ELCOT. Neither any time schedule nor financial adjustments arising thereof shall be permitted on account of failure by the Bidder to appraise themselves.

d) The Bidder shall be deemed to have satisfied itself fully before Bidding as to the correctness and sufficiency of its Bids for the contract and the price quoted in the Bid to cover all obligations under this Tender.

e) It must be clearly understood that the Terms and Conditions and specifications are intended to be strictly enforced. No escalation of cost in the Tender by the Bidder will be permitted throughout the period of Agreement or throughout the period of completion of contract whichever is later on account of any reasons whatsoever.

f) The Bidder shall make all arrangements as a part of the contract to supply, install and commission and train the beneficiaries at various locations at their own cost and transport.

g) The Bidder should be fully and completely responsible to ELCOT and State Government for all the deliveries and deliverables.

h) Any bidder who is blacklisted in ELCOT will not be eligible to bid for the Tenders of ELCOT, as per the conditions of blacklisting.

i) In case show cause notice has been issued by ELCOT for poor performance, then ELCOT reserves the right to disqualify the bid submitted by such Bidder.

3.2	Clarifications in the Tender

a) A prospective Bidder requiring any clarification in the Tender may notify ELCOT by letter or by E-mail to proctenders@elcot.in. We encourage paper free e-mail communication.

b) The responses to the clarifications will be notified in the websites by means of Corrigendum to the Tender Document. It would be advantageous to commence e-mail contact with proctenders@elcot.in to register your e-mail id.

3.3	Amendments to the Tender

a) Before closing of the Tender, clarifications and amendments if any will be notified in the websites mentioned in the Tender Schedule. The Bidders have to periodically check for the amendments or corrigendum or information in the websites till the closing date of this Tender. ELCOT will not make any individual communication and will in no way be responsible for any ignorance pleaded by the Bidders.

b) No clarifications would be offered by ELCOT within 48 hours prior to the due date and time for opening of the Tender.

c) Before the closing of the Tender, ELCOT may amend the Tender document as per requirements or wherever ELCOT feels that such amendments are absolutely necessary.

d) Amendments also may be given in response to the queries by the prospective Bidders.

e) Such amendments will be notified in the websites mentioned in the Tender schedule.

f) ELCOT at its discretion may or may not extend the due date and time for the submission of bids on account of amendments.

g) ELCOT is not responsible for any misinterpretation of the provisions of this tender document on account of the Bidders failure to update the Bid documents on changes announced through the website.

3.4	Language of the Bid

The bid prepared by the Bidder as well as all correspondence and documents

relating to the bid shall be in English only. The supporting documents and printed literature furnished by the bidder may be in another language provided they are accompanied by an accurate translation in English duly notarised, in which case, for all purposes of the bid, the translation shall govern. Bids received without such translation copy are liable to be rejected.

3.5	Bid Currency

Price should be quoted in Indian Rupees (INR) only and Payment shall be made in Indian Rupees only.

3.6	Contacting Tender Inviting Authority

a) Bidders shall not make attempts to establish unsolicited and unauthorised contact with the Tender Inviting Authority, Tender Scrutiny Committee and Tender Accepting Authority, after the opening of the Tender and prior to the notification of the Award and any attempt by any Bidder to bring to bear extraneous pressures on the Tender Accepting Authority shall be sufficient reason to disqualify the Bidder.

b) Notwithstanding anything mentioned above, the Tender Inviting Authority or the Tender Accepting Authority may seek bonafide clarifications from Bidders relating to the tenders submitted by them during the evaluation of tenders.

3.7	Force Majeure

Neither the Purchaser / ELCOT nor the Successful Bidder shall be liable to the other for any delay or failure in the performance of their respective obligations due to causes or contingencies beyond their reasonable control such as:

- Natural phenomena including but not limited to earthquakes, floods and epidemics.
- Acts of any Government authority domestic or foreign including but not limited to war declared or undeclared, priorities and quarantine restrictions.
- Accidents or disruptions including, but not limited to fire, explosions, breakdown of essential machinery or equipment, power and water

shortages.

● In such claim of Force Majeure clause, the bidder should submit the written claim, explaining the cause within 7 days of such occurrence and may be accepted by ELCOT/ Purchaser.

3.8	Dispute and Jurisdiction

"Any dispute or difference, whatsoever, arising between the parties to this contract arising out of or in relation to the terms of this contract shall be resolved by the parties mutually by acting in good faith towards fulfilling the contract and for this purpose the parties mutually agree to furnish or exchange all relevant documents, information and any other material within their special knowledge and thereby conclude their discussions between them / their representatives or officers within a period of time as may be mutually agreed to say the time of commencement of the move to resolve the dispute".

"Incase the parties failed to resolve the disputes amicably within the time frame agreed and in the manner stated supra, the aggrieved party shall approach the Court in Chennai city alone to the exclusion of all other Courts to adjudicate the unresolved dispute".

4. Eligibility Criteria

The Bidders should have the following Eligibility Criteria for participating in the Tender. The Bidders should enclose documentary evidence for fulfilling the Eligibility in the Technical Bid. If bidders fail to enclose the documentary proof for eligibility, their bids will be summarily rejected.

4.1 Eligibility

OEM or Authorised distributor / Dealer are only eligible to Bid. OEM should authorize minimum 2 partners (If OEM bids directly then authorising minimum 2 patners is not applicable). The term "Bidder" refers to OEM or Authorised distributor/dealer.

The term OEM refers to OEM & OEM Software / Original Software Developer.

Eligibility for All Categories

S.No.	Criteria	Eligibility Conditions	Documentary Proof to be submitted
1	Legal Entity for Bidder / Bidder's existence in India	The Bidder shall be a Company registered in India under the Indian Companies Act 1956 / Partnership Firm / Sole Proprietorship Firm and existing for atleast past 3 years as on 31.03.2021.	The Bidder shall provide the Certificate of Incorporation for Registered Companies, Partnership Deed for Partnership Firms / GST or Service Tax Registration Certificate for Sole Proprietorship Firms.
2	Legal Entity for OEM / OEM's existence in India	OEM shall be a Company registered in India under the Indian Companies Act 1956 and existing for atleast past 3 years as on 31.03.2021	OEM shall provide the valid Certificate of Incorporation.

3	OEM's manufacturing presence in India	The OEM should have their manufacturing facility in India for atleast past 3 years.	Copy of OEM's Manufacturing License with Manufacturing capacity to be submitted.
		The OEM should have executed a single purchase order of their manufactured product for a minimum value as per S.No.7 of Eligibility Criteria to any Government Department/ Organisations/ PSU's/ Nationalized Banks in India directly or through dealer/distributors on or before 31.03.2021.	Copy of the Purchase order along with performance certificate issued by the customer for the quoted make against each bidding category to be submitted
4	OEM's Authorisation	In the case of Authorised Distributor/ Dealer should submit the OEM's Authorisation for the relevant items.	Letter of Authorisation from the manufacturer to represent their product against each bidding category for this Tender in the prescribed format or in any format comprising the conditions prescribed in ELCOT MAF format to be submitted by the Authorized Dealer / Distributor of the OEMs. **(Bidder who quotes for items should submit the MAFs from concerned OEM).**
5	Existence in the field of IT products supply	The Bidder should have 3 or more years of existence in the field of IT products supply as on 31.03.2021	Relevant proof of purchase orders and work completion certificate for the similar products make with customer contact details shall be submitted.

6	Turnover	The Bidder should have an **<Average Annual Turnover value>*** in the last three Successive Audited Financial Years. * Average Annual Turnover value as in Eligibility Criteria Annexure	Copies of the Audited Balance sheets and Profit and Loss account should be submitted.
7	Single Order value	The Bidder should have executed a Single order for supply, installation and commissioning for a <value>* not less than for any Government Departments / Organisations / Public Sector Undertakings in India in the last 3 years. Single item bidding is allowed within the category. In that case as per for S.No. 7 of the Eligibility Criteria, the bidder should have executed Single Order value for that item. *value as in Eligibility Criteria Annexure	Relevant copies of Purchase Orders obtained in the name of the bidder and copy of completion/ performance certificate obtained from the Purchasers for the similar products against each bidding categoryshould be submitted.
8	Service Centres	The Bidder should have at least one service centre in each region (North, East, South and West as given in the Tender Document) with a total of minimum 10 service centres in the State. The service centre may be run by Manufacturer or Franchise or authorised distributors/ dealers.	In case of OEM's own service centre copies of the land-line telephone bills (Minimum one bill generated in the preceding two months prior to the due date)/ valid rental agreement/any legal proof shall be submitted as a proof for availability in each region. In case of OEM's Franchisee Service centre, copy of the valid agreement entered between the OEM and the franchisee shall be submitted.

9.	Certification / Licenses	OEM should have certified manufacturing facility. The OEM should haveISO 14001:2015 certified for handling hazardous products and authorised dealer should have ISO 9001:2015	Should submit copy of VALID (as on date of tender opening) ISO 9001:2015 and ISO 14001:2015 Certificates.
		Indian BIS Certification for the mandated products to be submitted.	Relevant valid BIS certifications (as on date of tender opening) to be submitted for the quoted products, if applicable.
		For Firewall category the Bidder should possess 27001	
10	Office presence in Chennai	Bidder should have office in Chennai.	Copies of the land-line telephone bills (Minimum one bill generated in the preceding two months prior to the due date)/ valid rental agreement/ any valid legal proof should be submitted as a proof for availability of the office in Chennai.
11	Website	The OEMs and Authorised dealer shall have their own Website.	The URL of the Website Name and Copy of Home Page Print out of the OEMs and Bidder shall be submitted.
12	Technical Compliance	The OEM and Authorised dealer /distributor should submit Technical Compliance for the quoted products.	The Compliance to the technical specifications in the tender document should be submitted by the OEM as well as by the Authorised Dealer/Distributor duly signed by the Authorised Person.

| 13 | Product Validity | The Bidder should submit the brochure for the quoted products.

The brochure of the quoted products should be available in OEM website till the validity of this tender or until the issuance of last purchase order for the product vide this tender, whichever happens later. | Brochure for the quoted products to be submitted.

Relevant proof of brochure availability in OEM website to be submitted.

An undertaking letter by OEM authorized signatory ensuring the availability of the brochures submitted for this tender till the validity of the tender should be submitted. |

Note: * The Annual Turnover, Single Order Value is enclosed as Eligibility criteria Annexure for various categories

a) Additional Eligibility to be complied for the Categories IP Camera, Anti-Virus, Computer Stationery, Digital Signature Certificates

Category name	Eligibility Criteria	Documentary Proof
IP Camera	IP Camera –MAF from concerned OEM	Bidder who quotes for NVR, NAS, Video Management Software, Video Analytic Software shall submit the MAF from concerned OEM.
Antivirus	The OEM should have presence in latest GARTNER'S Magic Quadrant for Anti Virus.	Copy of latest GARTNER Report should be attached.
Computer Stationery	Manufacturing License	Copy of Manufacturing License for Plain and Pre-Printed Computer Stationery should be submitted or SSI / Medium Small Industries Registrations / NSIC Registrations certificates should be submitted.
Digital Signature Certificates	The Bidder should be a recognized Certifying Authority by CCA (Controller of Certifying Authorities) (or) The bidder should be a Licensed Registering Authority under the approved Certified Authority.	Valid Copy of Certification issued by CCA (Controller of Certifying Authorities) for CA (Certifying Authority) shall be enclosed. (or) The LRA should submit the authorizationletter issued by the Certifying Authority along with the Copy of Valid Certification issued by CCA for the CA.

4.2	**Eligibility Criteria Annexure**

S.No	Item Description	Average Annual Turnover (in Rs)	Single Order Value (inRs.)
1.	Microsoft Software	2 Crores	20 Lakhs
2.	Anti-Virus	1 Crores	5 Lakhs
3.	Computer Stationery	1 Crores	5 Lakhs
4.	IT Consumables	1 Crores	5 Lakhs
5.	Apple Products	2 Crores	20 Lakhs
6.	Server & related items	5 Crores	50 Lakhs
7.	Biometric Systems	1 Crores	10 Lakhs
8.	SSL, Digital Signature certificates	40 Lakhs	-
9.	Cisco or Equivalent Products	2 Crores	20 Lakhs
10.	Linux Products	1 Crore	10 Lakhs
11.	Information Kiosks	2 Crores	20 Lakhs
12.	High End Plotters & Scanners	1 Crores	10 Lakhs
13.	IP Camera	3 Crores	30 Lakhs
14.	Firewall	5 Crore	50 Lakhs
15.	Laptop	5 Crore	50 Lakhs

5. SPECIFICATIONS

Important Note: The bidders should offer reputed products for all the items.

The item-wise specifications for the below mentioned categories are provided in the section"A1.5 Bidder Compliance"

S.No	Category	Item Description
1.	B1	Microsoft Software
2.	B2	Anti-Virus
3.	B3	Computer Stationery
4.	B4	IT Consumables
5.	B5	Apple Products
6.	B6	Server & related items
7.	B7	Biometric Systems
8.	B8	SSL, Digital Signature certificates
9.	B9	Cisco or Equivalent Products
10.	B10	Linux Products
11.	B11	Information Kiosks
12.	B12	High End Plotters & Scanners
13.	B13	IP Camera
14.	B14	Firewall
15.	B15	Laptop

**The Year of Manufacturing should be 2020 or later for the supplying products.

**Random Evaluation for the tendered products may be carried out at any point of time during the validity of this tender.

6. Bid Preparation and Submission

6.1   Tender Procedure

a) ELCOT is using the e-Tender portal **https://tntenders.gov.in.** The prospective Bidders should register themselves in the e-Tender Portal and submit the Bids electronically through the e-Tender portal. The paper based physical Tender submission is not permitted.

b) The pre-bid session with e-Tender training will be held on the date and time as mentioned in the Tender Schedule. The Bidders are requested to download the e-Tender help manual and user manuals from the Portal for reference.

c) It is mandatory for the Bidders to possess a valid **Class 3 Digital Signature Certificate (DSC) having signing and encryption certificates,** in the name of the **Tender Submitting Authority** to complete the e-Tender Bid submission process as per the provisions of Government of India IT Act 2000 with latest amendments.

d) The format of the contents of Technical Bid and Price Bid will be available in the tender site. The registered Bidders can log into the e-Tender system and download the tender documents/corrigendum as applicable and go through them carefully. Then the bidders can get ready the relevant documents as required for the technical bid and upload the documents as indicated before submitting the bid. Similarly the bidder has to down load the Bill of Quantity(BOQ), the price bid form in xls format, fill up the relevant portions only in offline and then upload the final one against the price bid portion before submitting the bid.

e) The contents of the Technical Bid with supporting documents and the Price Bid should be uploaded and submitted online using the Digital Signature Certificates within the due date and time indicated.

6.2   Cost of Bidding

The Bidders shall bear all the costs associated with the preparation and submission of Bids. ELCOT will in no way be responsible or liable for these charges/costs incurred regardless of the conduct or outcome of the bidding process.

6.3	**Availability of Tender Document**

The Tender Documents may be freely downloaded from the portals as mentioned in the Tender Schedule.

6.4	**Earnest Money Deposit (EMD)**

1 a)   An EMD amount as specified in the Tender Schedule shall be paid shall be paid through NEFT/RTGS in offline mode as per the details mentioned in S.No.6 of the e-Tender schedule. **In the case of EMD charges paid in advance by the bidders, but due to some reasons, the bids could not be uploaded/submitted, the EMD charges paid earlier will be refunded by applying through a Letter of request to ELCOT with necessary proofs.**

b)   The EMD of the unsuccessful Bidders will be returned at the expense ofthe Bidders within a reasonable time as per the rules and regulations in this regard. The EMD amount held by ELCOT till it is refunded to the unsuccessful Bidders will not earn any interest thereof.

c)   The EMD amount of the Successful Bidder can be converted as part of the Security Deposit (SD) for successful execution of the work and will be returned only after the successful fulfilment of the Contract.

2)   The EMD amount will be forfeited by ELCOT, if the Bidder withdraws the bid during the period of its validity specified in the tender or if the Successful Bidder fails to sign the contract or the Successful in bidder fails to remit Security Deposit within the respective due dates.

6.5	**Tender Fee Charges**

For each and every Bid submitted, a non-refundable Tender fee charges as mentioned in the Tender Schedule should be paid through NEFT/RTGS in offline mode as per the details mentioned in **S.No.5** of the Tender schedule.**In the case of Tender Fee charges paid in advance by the bidder, but due to some reasons, the bids could not be uploaded/submitted, the Tender fee charges paid earlier will not be refunded.**

6.6	Updation of payment details

(a) The payment particulars should be entered in the e-Tender Portal. In the e-tender portal, the bidder should select the payment type as NEFT/RTGS payments and then enter UTR.No and other details as asked.

(b) The necessary payment receipt copies paid through RTGS/NEFT should be submitted to ELCOT through a covering letter indicating the tender reference no, before the due date and time of opening of the tender.

(c) At the time of opening of Technical Bids, the payment committed in the Bid should be factual and should match with the details of the physically submitted payment receipts.

(d) Even though the payment particulars are entered in the Tender portal, and if the Bidder fails to submit the payment receipts, their bid is liable for rejection. If any of the information committed in the e-Tender Bid, does not match with physically submitted payment receipt, ELCOT reserves the right to reject the bid summarily.

6.7	Letter of Authorization

A letter of Authorisation from the Board of Directors / Appropriate Authority authorising the Tender submitting authority or a Power of Attorney with date for this tender participation shall be submitted in the bid, otherwise the Bids will be summarily rejected.

6.8	Two Part Bidding

Bidders should examine all Instructions, Terms and Conditions and Technical specifications given in the Tender document. Failure to furnish information required by the Bid or submission of a Bid not substantially responsive in every respect will be at the Bidders risk and may result in rejection of Bids. Bidders should strictly submit the Bid as specified in the Tender, failing which the bids will be non-responsive and will be rejected.

6.8.1 Technical Bid

a) The content format of the Technical Bid will be presented in the tender site and the bidder has to upload the relevant documents in the format, as asked in the tender against each item. The Bidder has to verify each uploaded document and then sign the same using the Digital Signature Certificate (DSC) before final submission.

b) The Technical Bid Format should not be changed or altered or tampered. If the Bid format is found to be tampered, the Bids will be summarily rejected.

c) The Technical Bid documents uploaded should not contain any Price indications strictly; otherwise the Bids will be summarily rejected.

6.8.2 Price Bid

a) The Price Bid Format called Bill of Quantity (BOQ) will be in spread sheet format. The original BOQ should be downloaded from the tender site, filled in at the appropriate places indicated in offline and then it has to be uploaded with the same name against the price bid option. The BOQ has to be verified and then signed using the DSC before final submission.

b) **The Price Bid Form should not be changed or altered or tampered. If the Bid form is tampered, the Bids will be summarily rejected.**

c)   The Price Bid Form should not contain any conditional offers or variation clauses, otherwise the Bids will be summarily rejected.

d) The Prices quoted shall be only in **INDIAN RUPEES (INR) only.** The tender is liable for rejection if Price Bid contains conditional offers.

e) The cost quoted by the Bidder shall include cost and expenses on all counts viz., cost of equipment, materials, tools, techniques, methodologies, manpower, supervision, administration, overheads, travel, lodging, boarding, in-station & outstation expenses, etc., and any other cost involved in the supply.

f) The cost quoted by the Bidder shall be kept firm for a period specified in the Tender from the date of opening of the tender. The Bidder should keep the Price firm during the period of Contract including during the period of extension of time if any. Escalation of cost will not be permitted during the said periods or during any period while providing services whether extended or not for reasons other than increase of duties / taxes payable to the Governments in India within the stipulated delivery period. The Bidders should particularly take note of this factor before submitting the Bids.

g) The Prices finalised after negotiations should be kept valid during the Rate Contract period and no escalation in the final price will be entertained including reasons due to Foreign Exchange fluctuations.

h) **Exchange Rate fluctuations (Foreign Currency Rate Exchange) cannot be cited as reasons for the delay or dishonour of Purchase Order.**

6.9   Bid closing date and time

The Bids should be submitted online not later than the date and time specified in the Tender Schedule or Corrigendum if published. The Tender portal will automatically lock the date and time exactly on the scheduled due date and time. Even if the Bid submission is in half way through during the closing date and time, submission would not be possible. Hence the Bidders should be cautious to submit the Bids well in advance to avoid disappointments.

6.10   Withdrawal of bids

Bidders can withdraw their bids submitted earlier, in case they do not want to participate in this tender, before the bid closing date and time. Bidders should note that once withdrawn, bids cannot be submitted again for this tender.

6.11   Resubmission of bids

Bidders can resubmit the bids at any point of time either in technical bid or in price bid or both, before the bid submission end date and time and only the last content updated successfully will be available for bid opening, at the scheduled date and time.

6.12   Bid Acknowledgement

The e-tender system will issue a **bid acknowledgement receipt** which is the final proof for the successful bid submission from the bidder side.

7. Tender opening and Evaluation

7.1	Technical Bid Opening

The Technical Bid will be opened on the date and time as specified in the Tender schedule in the presence of those Bidders, who choose to be present against production of an authorisation letter from the Bidding authority. A maximum of two representatives for each Bidder would be allowed to attend the Tender opening.

7.2	Bid Validity

The offer submitted by the Bidders should be valid for a minimum period of 180 days from the date of opening of the Tender.

7.2a	Rate Contract Validity

The Rate Contractwillbe valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later. The Successful Bidder should keep the Price firm during the period of Contract including during the period of extension of time if any.

7.3	Initial Scrutiny

Initial Bid scrutiny will be conducted and incomplete details as given below will be treated as non-responsive.

If Tenders are;

- not submitted in two parts as specified in the Tender;
- received without the Letter of Authorisation;
- received without EMD amount and e-Portal charges;
- found with suppression of information or incomplete information;
- furnished with subjective and conditional offers;
- submitted without supporting documents in compliance to the Eligibility Criteria and Evaluation Criteria;
- non-compliance of any of the clauses stipulated in the Tender;
- lesser validity period

All responsive Bids will be considered for further evaluation.

The decision of ELCOT will be final in this regard.

7.4	**Clarifications by ELCOT**

When deemed necessary, ELCOT may seek bonafide clarifications on any aspect from the Bidder. However, that would not entitle the Bidder to change or cause any change in the substance of the Bid or price quoted. During the course of Technical Bid evaluation, ELCOT may seek additional information or historical documents for verification to facilitate decision making. In case the Bidder failed to comply with the requirements of ELCOT as stated above, such Bids may at the discretion of ELCOT, shall be rejected as technically non-responsive.

7.5	**Tender Evaluation**

7.5.1 Suppression of facts and misleading information

a. During the Bid evaluation, if any suppression or misrepresentation or any of its kind, is brought to the notice of ELCOT, then ELCOT shall have the right to reject the Bid and if after selection, ELCOT would terminate the contract, as the case may be, without any compensation to the Bidder and the EMD / SD, as the case may be, shall be forfeited.

b. Bidders should note that any figures in the proof documents submitted by the Bidders for proving their eligibility is found suppressed or erased, ELCOT shall have the right to seek the correct facts and figures or reject such Bids.

c. It is up to the Bidders to submit the full copies of the proof documents to meet out the criteria. Otherwise, ELCOT at its discretion may or may not consider such documents.

d. The Tender calls for full copies of documents to prove the Bidder's experience and capacity to undertake the project.

7.5.2 Technical Bid Evaluation

a) TenderEvaluation Committee will examine the Technical Bids against the Eligibility Criteria and Evaluation Criteria given in the Tender document. The evaluation will be conducted based on the support documents submitted by the Bidders. The documents which did not meet the eligibility criteria will be rejected and further evaluation will not be carried

out for such bidders. The eligible Bidders alone will be considered for further evaluation.

b)   The sample submitted will be evaluated by ELCOT against the tendered specification as given in the Scope of work to select the technically qualified bidder.

c)   The bidders have to submit their samples as per the terms specified in "9.2 Sample Submission Clause" to ELCOT. Bids without submission of samples are liable for rejection.

d)   For those Bidders who have already worked or working with ELCOT, their previous performance in ELCOT would be the mandatory criteria for selection. If any unsatisfactory performances of those Bidders are found, their Bids will be straight away rejected.

The Unsatisfactory performance is defined as

1. Non responsiveness after getting the LOA or Purchase order
2. Delay in supply, installation of the ordered items etc.
3. Lack of communication about the delay in deliveries, Installation etc.
4. Poor warranty and CAMC period support.
5. Delay in providing services citing reasons of OEM's support issues.

7.5.3   Price Bid Evaluation

a) The Price Bids of the Technically Qualified Bidders alone will be opened and evaluated. The Price Bid should include all expenses towards this Tender. The Price Bids will be opened in the presence of the Bidders at ELCOT. The Bidders or their authorised representatives will be allowed to take part in the Price Bid Opening.

b) Price Bid evaluation will be done as per the Tamil Nadu Transparency in Tenders Act 1998 and Tamil Nadu Transparency in Tender Rules 2000 there on.

c) Following method of price evaluation will be adopted.

- The Price Bid Evaluation shall includes all taxes and levies imposed by the Governments in India as part of the price.The GST rates quoted should comply with the statutory guidelines and will be paid as applicable at the time of billing.

- The prices will be evaluated as follows and the decision of ELCOT will be the final.

    i) The bidder who becomes lowest for all the main items under each Category will be called as L1 bidder for that Category.

    ii) **Bidder shall quote for all the items in a Category. Partial bid is not allowed within a Category, whereas Partial bid is allowed between Categories. Bidder shall ensure that they have quoted the CAMC charges as listed in Annexure-2.16 without fail. Failing which the bid is liable for rejection.**

    iii) **Partial Bid is allowed within the category of computer stationery and IT Consumables.**

    iv) Within each Category, if the L1 bidder has not quoted least for any line item, then the L1 bidder shall be asked to match the least price for that line item.

    v) The total cost (including applicable taxes, duties and charges prevailing at the time submitting the bid) of individual items will be taken for the price bid evaluation.

    vi) The L2, L3 and above Bidders should match the rates with the L1 finalized price of each items. If more than one bidder matches the L1 price, the preference will be given to the Item wise L1 bidder

    vii) **It is purely ELCOT's discretion to ask the willingness of L2, L3 etc to match the L1 price and they cannot claim as their right.** The decision of ELCOT will be the final.

    viii) **However the L1 bidder/s shall be asked to match the price of the** applicable add on items,where they have not become L1.

d) All the Bidder(s), who are selected after the Price Bid evaluation will be called as Successful Bidder/s.

e) The Successful Bidder cannot claim orders from ELCOT as a matter of right.

f) ELCOT reserves the right to cancel the tender and retender to invite the competitive offers / quotes after a thorough analysis of the tender specification terms and conditions.

g) The Successful Bidder should not sell the Tendered items to any other Purchaser at a price which is lower than the final negotiated price offered to ELCOT. If it is found that the item has been sold at lower rate, then that lower price will be fixed by ELCOT for that item in future and also for the already supplied quantities under this tender.

h) The successful bidder/s should supply, install and commission the ordered items only as per the approved specification and as per the OEM's MAF conditions.IfBidder(s) found violating the conditions, then the tender is liable for cancellation and penal action will be initiated against the erring bidder or OEM including blacklisting them.

7.6 Negotiations

Negotiations will be conducted with the L1 Bidder for improvement in the further reduction in price and advancement of delivery schedule.

7.7 Award of Contract

a) Orders will be placed to the L1 Bidder/s as per the provisions of Tamil Nadu Transparency in Tenders Act, 1998 and the Tamil Nadu Transparency in Tenders Rules, 2000 and Terms and Conditions of the Tender.

b) No dispute can be raised by any Bidder whose Bid has been rejected and no claims will be entertained or paid on this account.

7.8 ELCOT reserves the right to:

7.8.1 Negotiate with the Bidder whose offer is the lowest evaluated price for further reduction of prices.

7.8.2 Insist on quality / specification of materials to be supplied.

7.8.3 Modify, reduce or increase the quantity requirements to an extent of the tendered quantity as per the provisions of Tamil Nadu Transparency in Tenders Act 1998 and Tamil Nadu Transparency in Tenders Rules, 2000.

7.8.4 Change the list of areas of supply locations from time to time based upon the requirement of the purchase.

7.8.5 ELCOT reserves its right to inspect the bidder's factory before or afterplacement of Orders.

7.8.6 ELCOT reserves its right to withhold any amount, for the deficiency in the service aspect of the ordered items supplied to the Purchaser anytime during the contract \ period.

8. Execution of Work

8.1	Acceptance of Tender and Withdrawals

The final acceptance of the tender is entirely vested with ELCOT who reserves the right to accept or reject, any or all of the tenders in full or in parts without assigning any reason whatsoever. The Tender Accepting Authority may also reject all the tenders for reasons such as change in Scope, Specification, lack of anticipated financial resources, court orders, calamities or any other unforeseen circumstances. After acceptance of the Tender by ELCOT, the Successful Bidder shall have no right to withdraw their tender or claim higher price.

8.2	Letter of Acceptance (LOA)

After acceptance of the Tender by ELCOT, a Letter of Acceptance (LOA) will be issued to the Successful Bidder/sby ELCOT.

8.3	Payment of Security Deposit (SD)

The successful Bidder will be required to remit a Security Deposit (SD) equivalent to five percent of the value of the order*, inclusive of EMD by way of Demand Draft payable at Chennai or in the form of unconditional irrevocable Bank Guarantee from nationalized banksvalid for a period of 15 months from the date of issuance of letter of acceptance and confirmation from ELCOT. The SD shall be paid within 10 days from the date of letter of acceptance (LOA) issued by ELCOT. The SD furnished by the Successful Bidder in respect of the tender will be returned to them after successful fulfilment of contract i.e only after successful completion of the Purchase Orders issued under this contract.The Security Deposit held by ELCOT till it is refunded to the Successful Bidder will not earn any interest thereof.

The Security Deposit will be forfeited if the Successful Bidder withdraws the Bid during the period of Bid validity specified in the Tender or if the Bidder fails to sign the contract or the bidder fails to supply/ deliver the items as per purchase / work order within the stipulated delivery / time schedule.

*Note: Order Value will be derived based on the previous RC Orders of relevant categories and as decided by the Management of ELCOT, subject to actual work order value in the current tender.

8.4	**Execution of Contract**

a) The Successful Bidder should execute a Contract in the INR 100 non-judicial Stamp Paper bought in Tamil Nadu only in the name of the Bidder within one week from the date of Letter of Acceptance issued by ELCOT with such changes /modifications as may be indicated by ELCOT at the time of execution on receipt of confirmation from ELCOT.

b) The Successful Bidder shall not assign or make over the contract, the benefit or burden thereof to any other person or persons or body corporate for the execution of the contract or any part thereof without the prior written consent of ELCOT. ELCOT reserves its right to cancel the purchase order either in part or full, if this condition is violated. If the Successful Bidder fails to execute the agreement, the SD of the Successful Bidder will be forfeited and their offer/bid will be held as non-responsive.

c) The expenses incidental to the execution of the agreement should be borne by the Successful Bidder.

d) The conditions stipulated in the agreement should be strictly adhered to and violation of any of the conditions will entail termination of the contract without prejudice to the rights of ELCOT and ELCOT also have the right to recover any consequential losses from the Successful Bidder.

8.5	**Release of Purchase Order**

After execution of the Contract and payment of Security Deposit, "Firm Purchase Order" for the supply of Tendered items will be issued to the Successful Bidder by ELCOT. The supply and payment will be based on the Purchase Order(s) issued.

8.6	**Refund of EMD**

The EMD amount paid by the Successful Bidder(s) will be adjusted towards Security Deposit payable by them. If the Successful Bidder submits Security Deposit for the stipulated value in full by way of Bank Guarantee, the EMD will be refunded upon submission of EMD claim lodgement by the successful bidder to ELCOT.

8.7	Release of SD

The Security Deposit will be refunded to the Successful Bidder on completion of entire supply subject to satisfaction of ELCOT and after 15 months. Such completion would be arrived at when the entire quantity is supplied by the Bidder as per the Contract Agreement and as per the LOA or order including Purchase Order(s) issued by ELCOT.

8.8	Forfeiture of EMD and SD

a) If the successful Bidder fails to act according to the tender conditions or backs out, after the tender has been accepted, the EMD will be forfeited by ELCOT.

b) If the Successful Bidder fails to remit the SD, the EMD remitted by them will be forfeited by ELCOT and the tender will be held void. If the successful bidder fails to sign the contract within the stipulated time, then the SD remitted will be forfeited and the tender will be held void.

c) If the Successful Bidder fails to act up on to the tender conditions or backs out from the contract, the SD mentioned above will also be forfeited by ELCOT.

8.9	Termination of Contract

8.9.1   Termination for default

a) ELCOT may without prejudice to any other remedy for breach of contract, by written notice of default with a notice period of 7 days, sent to the Successful Bidder, terminate the contract in whole or part, (i) if the Successful Bidder fails to deliver any or all of the goods within the time period(s) specified in the Contract, or fails to supply the items as per the Delivery Schedule or within any extension thereof granted by ELCOT; or (ii) if the Successful Bidder fails to perform any of the obligation(s) under the contract; or (iii) if the Successful Bidder, in the judgement of ELCOT, has engaged in fraudulent and corrupt practices in competing for or in executing the Contract or (iv) supplies the items inferior to the ordered / accepted specifications ; or (v) not procured and supplied the item from the OEM from whom the MAF was obtained and not submitted as per tender conditions unless and otherwise taking written approval from ELCOT for alternate OEM source.

b) In the event ELCOT terminates the Contract in whole or in part, ELCOT may procure, upon terms and in such manner as it deems appropriate, the goods and services similar to those delivered and the Successful Bidder shall be liable to ELCOT for any additional costs for such similar goods. However, the Successful Bidder shall continue the performance of the contract to the extent not terminated.

8.9.2 Termination for Insolvency

ELCOT may at any time terminate the Contract by giving written notice with a notice period of 7 days to the Successful Bidder, if the Successful Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Successful Bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to ELCOT.

8.9.3 Termination for Convenience

ELCOT may by written notice, with a notice period of seven days sent to the Successful Bidder, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for ELCOT's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective. On termination, the successful Bidder is not entitled to any compensation whatsoever.

8.10	Execution of Work Order

The Successful Bidder should nominate and intimate ELCOT, an Account Manager for Single Point of Contact (SPOC), who should be responsible for effective delivery of work complying with all the terms and conditions. The Successful Bidder should ensure that the Account Manager fully familiarises with the Tender Conditions, Scope of Work and deliverables.

8.11	Assigning of Tender whole or in part

The successful Bidder shall not assign or make over the contract, the benefit or burden thereof to any other person or persons or body corporate. The Bidder

should not under-let or sublet to any person(s) or body corporate for the execution of the contract or any part thereof without the written consent of ELCOT.

8.12	Liquidated Damages (LD)

Liquidated damage will be levied at the rate of 0.25% per day to the maximum of 10% on the un-delivered portion of the material, if the delivery has not been completed in full within the stipulated period. The delivery period will be taken into account from the next date of approval of Purchaser Order. If the Successful Bidder fails to supply even after the lapse of two times of the stipulated delivery period, then the orders are liable for cancellation and the EMD/ Security Deposit will be forfeited in addition, ELCOT may also to blacklist the successful bidders for a period of three years from participating in ELCOT's tenders.In addition to this, due to purchase of the item from the other dealer the differential cost if any will also be recovered from defaulted Bidder.

8.13	Penalty for Non-Fulfilment of Tender

A Penalty will be levied at 5% of the total value of the Purchase Order, for non-fulfilment or non-observance of any of the conditions stipulated in the Agreement, Terms and Conditions and Work Order / contract.

8.14	Other Conditions

a) The final decision would be based on the technical capacity and pricing of the Bidder.

b) ELCOT reserves the right to reject any or all the tenders without assigning any reason, to relax or waive any of the conditions stipulated in the terms and conditions of tender as deemed necessary in the best interest of ELCOT for good and sufficient reasons.

8.15	Dispute and Jurisdiction

"Any dispute or difference, whatsoever, arising between the parties to this contract arising out of or in relation to the terms of this contract shall be resolved by the parties mutually by acting in good faith towards fulfilling the contract and for this purpose the parties mutually agree to furnish or exchange all relevant documents, information and any other material within their special knowledge and thereby

conclude their discussions between them / their representatives or officers within a period of time as may be mutually agreed to say the time of commencement of the move to resolve the dispute".

"Incase the parties failed to resolve the disputes amicably within the time frame agreed and in the manner stated supra, the aggrieved party shall approach the Court in Chennai city alone to the exclusion of all other Courts to adjudicate the unresolved dispute".

9. Scope of Work

This tender is floated for **procurement ofMicrosoft Software, Anti-Virus, Computer Stationery, IT Consumables, Apple Products, Server & related items, Biometric Systems, SSL, Digital Signature certificates, Cisco or Equivalent Products, Linux Products, Information Kiosks, High End Plotters & Scanners, IP Camera, Firewall & LaptopforGovernment Departments on a Rate Contract basis.**

9.1 Scope of work

Scope for the Successful Bidder:-

1. Supply,Installation and Commissioning of the Ordered items in time
2. Necessary drivers and software should be given for Quoted items
3. No incompatible or refurbished items shall be supplied
4. It is the responsibility of the Successful Bidder to provide Warranty and CAMC Services.

9.2 Sample Submission

a) For each item quoted in the Tender, the samples should be submitted to ELCOT at the time of bidding indicating the make, model number and brochures / specification of the items for testing by ELCOT as per Appendix-3 (Sample Submission Form) of the Tender.

b) The bidders have to submit the samples at the time of bidding from the date of submission of Bids unless any specific time given by ELCOT in writing.

c) If the samples are not delivered within the time limit specified in the Tender, it would be treated as non-responsive to the Tender conditions and the Bid is liable for rejection.

d) Technical compliance report for each sample should be given **by the bidder and the OEM**, by filling up the Hardware compliance sheet provided in the e-tender portal along with the Make and Model.

e) Sample evaluation is part of technical bid evaluation.

f) **The brochure submitted by the Bidder should be hosted in the OEMs website and made available till the validity of this tender or until the issuance of last purchase order for the product vide this tender, whichever happens later.**

g) Sample submission is not applicable for Software products (B1- Microsoft Software, B2- Anti-Virus, B3- Computer Stationery & B4-IT Consumables, B8-SSL, Digital Signature certificates, B10-Linux Products).

9.3	Compliance with Technical Specification

Bidders should submit the samples to ELCOT.The samples of Bidders, which conform to the tendered specifications, bids of those bidders alone will be considered for further processing by selecting the bidder as technically qualified bidder. The samples of those Bidders, which do not conform to the technical/tendered specifications, the Bids of those Bidders will be rejected. The whole evaluation exercise would be done in the presence of the bidders in a transparent manner.

9.4	Software to be pre loaded

The licensed / supported version of the software(whereverapplicable) shall be pre-loaded and the license shall be in the name of Purchaser. The Original License shall be submitted to the Purchaser at the time of delivery. ELCOT or Purchaserwill not be liable or responsible for any disputes arising out of Intellectual Property Rights. It is at the risk of the Successful Bidder when such dispute arises.

9.5	Supply, Installation & Commissioning

a) **Delivery Schedule:**

The tendered itemsshall be supplied as specified in the below table from the date of receipt of the purchase order.

Category	Delivery Schedule
B1- Microsoft Software, B2- Anti-Virus, B3- Computer Stationery, B4-IT Consumables, B8-SSL, Digital Signature certificates, B10-Linux Products	**28 days** irrespective of the Quantity and Locations.
B5- Apple Products	**For Quantity:-** 1 to 25 Nos. - Within 28 days from the date of Purchase Order. 26 and above - Within 42 days from the date of Purchase Order.

B6-Server & related items, B9-Cisco or Equivalent Products, B11-Information Kiosks, B12-High End Plotters & Scanners, B14- Firewall	**42 days** irrespective of the Quantity and Locations.
B7-Biometric Systems	**For Quantity:-** 1 to 50 Nos. - Within 20 days from the date of Purchase Order. 51 to 100 Nos. - Within 28 days from the date of Purchase Order. 101 to 250 Nos. - Within 30 days from the date of Purchase Order. 251 to 500 Nos. - Within 40 days from the date of Purchase Order. 501 to 1000 Nos. - Within 50 days from the date of Purchase Order. 1001 and above Nos. - Within 60 days from the date of Purchase Order. **For Locations:-** 1 to 50 locations – Within 20 days from the date of Purchase Order. 51 to 100 locations – Within 42 days from the date of Purchase Order. 101 to 200 locations – Within 50 days from the date of Purchase Order. 201 and above locations – Within 60 days from the date of Purchase Order. The Delivery Schedule shall be taken from Quantity/ Location whichever is higher
B13-IP Camera	**For Locations:-** 1 to 50 locations – Within 42 days from the date of Purchase Order. 51 to 100 locations – Within 49 days from the date of Purchase Order. 101 and above locations – Within 56 days from the date of Purchase Order.
B15-Laptop	**For Quantity/ Locations:-** 1 to 25 Nos. / 1 to 25 locations- Within 28 days from the date of Purchase Order. 26 to 100 Nos. / 26 to 100 locations - Within 42 days from the date of Purchase Order. 101 to 200 Nos. / 101 to 200 locations - Within 49 days from the date of Purchase Order. 201 and above Quantity / Locations – Within 56 days from the date of Purchase Order.

In general the delivery schedule is taken from next day of purchase order and on specific instructions from ELCOT the delivery schedule is taken from the date of LOA or any written instruction through email or Fax etc.

b) The Successful Bidders after obtaining the Purchaser address shall visit the sites to assess the readiness of the site for installation. A report in this respect shall be submitted to ELCOT within 10 days. ELCOT may advise the Purchaser to prepare the site ready for installation. ELCOT advises the successful bidders not to supply the items for the SITES which are NOT READY and in this connection the successful bidder on receipt of supply instructions from ELCOT shall get the information on site readiness from the respective purchaser.

c) However the Purchaser is responsible for the site preparation before the scheduled installation dates.

d) The Successful Bidder is responsible for all unpacking, assemblies, wiring, installations, cabling between hardware units and connecting to power supplies. The Successful Bidder will test all hardware operations and accomplish all adjustments necessary for successful and continuous operation of the hardware at all the installation sites.

e) The Successful Bidder must send the proposed delivery schedule to purchaser and to ELCOT well in advance.

f) After successful Installation, commissioning and handing over of the ordered items to the purchasers the Successful Bidder must obtain signed delivery challan cum installation certificate / Installation Report (IR)in the Format prescribed by ELCOT along with Sample test results duly certified by the purchaser on the installed item/delivered item. The IR/delivery challan should carry the full specification and OEM description as per tender.

g) The Successful Bidder shall send status report in the format prescribed in such intervals as may be required by ELCOT from time to time till the execution of the entire order.

h) The Successful Bidder shall undertake to supply spares for the maintenance of the supplied items for period of Standard Product Warranty or extended period mutually accepted.

i) An escalation matrix holding the basic Customer Care details to be provided and labelled to the core hardware for quick and easy reference.

j) The details of the service centre representatives responsible for attending the installation, warranty services at each purchaser site, name and designation of the contact person and centre in–charge, higher level in-charge who is responsible to oversee the service centres, person to whom complaints can be made in case the service provided by any centre is not satisfactory, phone, fax, mobile numbers & email address must be provided well in advance to each purchaser and to ELCOT. The above shall be complied by the Successful Bidders. Service Centre details shall be made available in the Websites of the OEM / Bidder.

k) In the rare event of non-acceptance of delivery items by the user, the successful bidder shall immediately report ELCOT for suitable directions.

9.6	Warranty Clause

The Product warranty must be for a minimum of one year or Product Standard warranty whichever is higher would be applicable as follows.

a) All the Tendered items should be supplied to the Purchaser site free from breakages, malfunctions, breakdowns or manufacturing defects. If any of the items are found defective due to manufacturing defect or design fault or transit damage occurred at the time of supply or within one month from the date of installation, the items in full should be replaced.

b) All the materials and components of the Tendered items should be covered with a replacement during the warranty period from the date of signing of installation report of the ordered items. The successful Bidder shall be liable to make good the loss by replacing the items or other accessories found defective during the warranty period.

c) During the warranty period, the complaints received from the Purchasers should be attended as below.

1) If the complaint is received during the forenoon (up to 2 PM), the complaint should be attended on the same day.

2) If the complaint is received during the afternoon (after 2 PM), the complaint should be attended on the next day. If next day is the declared Holiday, the

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complaint should be attended in the next working day under normal circumstances. In emergency situations or urgent requirement of the Purchaser, the complaint should be attended within 2 hours on the same day.

3) All the complaints should be attended from the nearest service centres.

4) All the complaints should be rectified within 2 working days excluding the date of complaint.

5) **Penalty for non-adherence of the above SLA (Service Level Agreement)**

If the complaints are not rectified within the stipulated period as mentioned in clause 9.6.c.4, an equivalent standby shall be supplied till rectification. A penalty of 0.25% on the value of the item will be charged per day till the equipment is put on working condition, in case the standby item is not supplied**and the same shall either be deducted from the performance BG or from any payment due from ELCOT, whichever is earlier.**

9.7	Minimum Stock Maintenance

a.   Some occasions may arise that tendered items may be required to be delivered within a short period of 24 hours to the Purchasers. In such occasions, it may be very difficult to arrange shipment of the items from the successful bidder premises due to the routine formalities. To tackle such conditions, the successful Bidder should maintain an ex-stock of about 10 units of the respective items at their premises. Upon issuance of Purchase orders from ELCOT, the successful Bidder should supply, install and commission the ex-stock at the Purchaser premises.

b.   No financial commitment will be given by ELCOT for maintaining the ex-stock items.

c.   At any point of time, the successful Bidder should ensure the minimum ex-stock level. The successful bidder should also ensure that the short fall of 10 numbers should be replenished within 7 days from the date of delivery of the items from the minimum stock.

d.   ELCOT reserves the right to inspect the Minimum stock level at any point of time and may impose a penalty. If the bidder fails to maintain the minimum stock level in three instances during the Rate contract period, ELCOT reserves the right to terminate the Contract with the successful bidder and the bidder will be declared as non-performer which may not permit the bidder in participating tenders floated by ELCOT in future, for the next three years.

10. Payment Clause

10.1 a) 100% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, on installation, commissioning (wherever applicable) and handing over of the ordered items to the Purchaser, after testing and fulfilling the technical specifications on submission of an irrevocable Bank Guarantee from nationalized banks for 5% of the cost of the ordered value valid for 15 months or product standard warranty plus 3 months. (OR)

b) 95% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, on installation, commissioning (wherever applicable) and handing over of the ordered items to the Purchaser, after testing all the software and fulfilling the technical specifications and the balance 5% will be released to the successful bidder after completion of warranty period.

c) The 75% of total cost of the invoice will be made to the Successful Bidder after the receipt of funds from the Purchaser on verifying the same with the Purchaser.

The site is not ready within 15 days of delivery, on submission of proof of delivery and SNR certificate from the Purchaser.

10.2 1. ELCOT advises the successful bidder to supply the items only if the site is ready. On receipt of the purchaser details, the concerned authority may be contacted for the issuance of Site Ready Certificate and then arrange for supplies only to the sites, which are ready.

2. However if the site is not ready within 15 days of delivery, on submission of proof of delivery and SNR certificate from the Purchaser

10.3 Bills will be honoured within 30 working days after submission of bills along with all supporting documents in complete shape and accepted by ELCOT. The Successful Bidder should file relevant invoices online using the web based procurement software in operation at ELCOT.

10.4 The Successful Bidder hereby agrees to get the refund of incentive, excise duty and proportionate sales tax from authorities concerned and pass it on to Purchaserif the Government or any other appropriate agency reduces the Excise duty or Sales tax or give incentive of any type retrospectively after supplying the

Ordered items failing which action will be taken to recover the balance amount from the Successful Bidder under the Revenue Recovery Act or any other relevant act. If any purchaser (Government Department/ Institutions/ Unit/ PSU etc) request/claim for exemption from ED or Tax, then the successful bidder before accepting the order should produce the relevant documentation and accordingly the PO / Work order will be issued.

10.5   Penalty amount, if any, will be adjusted in the payment due to the Successful Bidder.

10.6   **However subject to above conditions payment will be released only after the receipt of funds received from the purchaser.**

10.7   All taxes and other levies imposed by Governments in India will be paid at actual as applicable.

Appendix-1 Model Form of Contract

(To be executed on a Rs. 100/- Non-Judicial Stamp Paper bought in Tamil Nadu by the Successful Bidder for the Supply, Installation and commissioning of Microsoft Software, Anti-Virus, Computer Stationery, IT Consumables, Apple Products, Server & related items, Biometric Systems, SSL, Digital Signature certificates, Cisco or Equivalent Products, Linux Products, Information Kiosks, High End Plotters & Scanners, IP Camera, Firewall & Laptop to Government Departments on Rate Contract basis)

(NO FIGURES IN NUMERALS OR WORDS SHALL BE FILLED UP IN THIS SAMPLE FORM AT THE TIME OF SUBMISSION OF TENDER)

This CONTRACT is entered into at Chennai on the ....day of .... (Year) between Electronics Corporation of Tamil Nadu Limited, a wholly owned Government of Tamil Nadu Undertaking, a Company registered under the Companies Act, 1956 and having its Registered office at 692, Anna Salai, Nandanam, Chennai- 600 035 herein after referred to as "ELCOT" (which term shall mean and include its Successors and permitted assigns) on behalf of Purchaser (herein after referred to as "Purchaser") and .... a Company registered under the Companies Act, 1956 and having its Registered Office at .... hereinafter referred to as the "Successful Bidder" (which term shall mean and include its Successors and permitted assigns)

Whereas, ELCOT had floated a Tender vide Tender No. **ELCOT/Proc/OT/33450/RC Tender - Group B/2021-22** for the **Supply, Installation and commissioning of Microsoft Software, Anti-Virus, Computer Stationery, IT Consumables, Apple Products, Server & related items, Biometric Systems, SSL, Digital Signature certificates, Cisco or Equivalent Products, Linux Products, Information Kiosks, High End Plotters & Scanners, IP Camera, Firewall & Laptopto Government Departments on Rate Contract basis**and the Successful Bidder has been selected as one of the successful bidders in the Tender as per the following terms and conditions:-

1. This document on having been signed by both the parties shall constitute a binding contract between the parties and shall remain in force for a period One

year. But in the event of any breach of agreement at any time on the part of the Successful Bidder, the contract shall be determinable by ELCOT without compensation to the Successful Bidder. The contract may also be put to an end at any time by ELCOT upon giving seven days notice to the Successful Bidder.

2. The Successful Bidder agrees that in the event of failure of 10% or more of the vital components of the equipment's occurring during the warranty period, ELCOT would have a right to blacklist them for any procurement through ELCOT for a period of three years from that date.

3. The Successful Bidder agrees to supply and maintain the approved Bill of Materials in this Tender at the quoted price plus applicable Taxes as indicated in Annexure to this Contract. Price offered is firm and is not subject to enhancement on any ground.

4. **Delivery Schedule**:

   The tendered items shall be supplied as specified in the below table from the date of receipt of the purchase order.

Category	Delivery Schedule
B1- Microsoft Software, B2- Anti-Virus, B3- Computer Stationery, B4-IT Consumables, B8-SSL, Digital Signature certificates, B10-Linux Products	**28 days** irrespective of the Quantity and Locations.
B5- Apple Products	**For Quantity:-** 1 to 25 Nos. - Within 28 days from the date of Purchase Order. 26 and above - Within 42 days from the date of Purchase Order.
B6-Server & related items, B9-Cisco or Equivalent Products, B11-Information Kiosks, B12-High End Plotters & Scanners, B14- Firewall	**42 days** irrespective of the Quantity and Locations.
B7-Biometric Systems	**For Quantity:-** 1 to 50 Nos. - Within 20 days from the date of Purchase Order. 51 to 100 Nos. - Within 28 days from the date of Purchase Order. 101 to 250 Nos. - Within 30 days from the date of Purchase Order. 251 to 500 Nos. - Within 40 days from the date of Purchase Order.

	501 to 1000 Nos. - Within 50 days from the date of Purchase Order. 1001 and above Nos. - Within 60 days from the date of Purchase Order. **For Locations:-** 1 to 50 locations – Within 20 days from the date of Purchase Order. 51 to 100 locations – Within 42 days from the date of Purchase Order. 101 to 200 locations – Within 50 days from the date of Purchase Order. 201 and above locations – Within 60 days from the date of Purchase Order. The Delivery Schedule shall be taken from Quantity/ Location whichever is higher
B13-IP Camera	**For Locations:-** 1 to 50 locations – Within 42 days from the date of Purchase Order. 51 to 100 locations – Within 49 days from the date of Purchase Order. 101 and above locations – Within 56 days from the date of Purchase Order.
B15-Laptop	**For Quantity/ Locations:-** 1 to 25 Nos. / 1 to 25 locations- Within 28 days from the date of Purchase Order. 26 to 100 Nos. / 26 to 100 locations - Within 42 days from the date of Purchase Order. 101 to 200 Nos. / 101 to 200 locations - Within 49 days from the date of Purchase Order. 201 and above Quantity / Locations – Within 56 days from the date of Purchase Order.

In general the delivery schedule is taken from next day of purchase order and on specific instructions from ELCOT the delivery schedule is taken from the date of LOA or any written instruction through email or Fax etc.

5. The price of the ordered items as per the Tender includes all taxes and levies as imposed by the Governments in India that may be applicable. Any concessional tax or Duty claimed by purchaser shall be considered based on documentation.

6. The goods or materials to be supplied under this contract are to be of the quality and of the sort mentioned in the ELCOT Tender document.

7. The goods or materials are to be delivered on F.O.R destination indicated by ELCOT/Purchaser without any extra cost in such quantities or numbers contained in the purchase order to be issued by ELCOT from time to time. Any

amendments to the orders in terms of quantities or delivery period etc., may be incorporated on a mutually agreed basis. The delivery of goods to the destination is the responsibility of the Successful Bidder only. The goods supplied under the contract shall be covered for comprehensive insurance by the Successful Bidder till delivery and acceptance by the authority concerned.

8. The goods sold under this agreement shall not be taken back. However any replacement necessitated, as part of the warranty commitments shall be carried out by the Successful Bidder and faulty parts/materials that arise out of such replacements shall be taken back by the Successful Bidder within a reasonable time.

9. If the supply and maintenance of the Ordered items are not effected as specified in the purchase order, Purchaser /ELCOT shall have the full authority to cancel the order and to take any such action that will be deemed fit in the circumstances.

10. In case of failure by the Successful Bidder to deliver goods or materials demanded from them, within the period specified for delivery or in case of goods or materials delivered by them, not being of the stipulated quality and specifications or in the case of goods or materials being delivered without a correct invoice in duplicate, ELCOT or anyone duly authorized by ELCOT shall have the power to reject any such goods or materials and to purchase from others instead of any goods or materials so rejected or not delivered. Unless the successful Bidder shall themselves forthwith supply that shall be sufficient and satisfactory any excess of cost so incurred by the Purchaserover the contract price together with all charges and expenses attending the purchase shall be recoverable by ELCOT / Purchaser(s) from the Successful Bidder.

11. Liquidated damage will be levied at the rate of 0.25% per day to the maximum of 10% on the un-delivered portion of the material, if the delivery has not been completed in full within the stipulated period. The delivery period will be taken into account from the next date of approval of Purchaser Order. If the Successful Bidder fails to supply even after the lapse of two times of the stipulated delivery period, then the orders are liable for cancellation and the EMD/ Security Deposit will be forfeited in addition, ELCOT may also to blacklist the successful bidders

for a period of three years from participating in ELCOT's tenders. In addition to this, due to purchase of the item from the other dealer the differential cost if any will also be recovered from defaulted Bidder.

12. The Successful Bidder agrees that in the event of non-fulfillment or non-observance of any of the conditions stipulated in the tender Terms & Conditions and work order, the Successful Bidder shall pay as penalty an amount equivalent to 5% of total value of Contract or an amount equal to the actual loss incurred by the Purchaser whichever is higher subject to the condition that the loss amount would not exceed the value of the goods supplied / to be supplied.

13. Notwithstanding anything contained in the penalty clause, ELCOT reserves the right to blacklist the successful bidder from taking part in any of the procurement operations of ELCOT for a minimum period of three years from the date of blacklisting for failure to carry out supply in time or according to the quality and quantity prescribed or any such similar reasons. This penalty shall be over and above all other penalties.

14. **WARRANTY**:-

i) **The Product Warranty must be for a minimum of one year or product standard warranty whichever is higher** for the materials or goods are to be given after installation and commissioning against any manufacturing defect and bad workmanship solely by the Successful Bidder irrespective of whether the same have been manufactured by them or not. The warranty period will commence from the date of installation and commissioning of the ordered items after carrying out successfully the tests prescribed by Purchaserand installation in good working condition.

ii) The Successful Bidder shall undertake to supply the spares for the Product Standard warranty and CAMC period of the offered items. If any manufacturing or other technical defects is found during the warranty and CAMC period from the date of installation, commissioning and handing over of the ordered items to Purchaser (s), they will have to be rectified or replaced free of cost by the Successful Bidder in good working condition.

(iii) If the complaints are not rectified within the stipulated period as mentioned in

the tender conditions, an equivalent standby shall be supplied till rectification. A penalty of 0.25% on the value of the item will be charged per day till the equipment is put on working condition, in case the standby item is not supplied.

(iv) The Successful Bidder agrees to provide comprehensive maintenance of the ordered items, which shall include preventive maintenance and corrective maintenance at the location specified by the Purchaser. The maintenance shall include replacement of all parts. The Ordered items, which are down, shall be restored in good working condition within 48 hours.

15. **PAYMENT TERMS:**

a) 100% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, on installation, commissioning (wherever applicable) and handing over of the ordered items to the Purchaser, after testing and fulfilling the technical specifications on submission of an irrevocable Bank Guarantee from nationalized banks for 5% of the cost of the ordered value valid for 15 months or product standard warranty plus 3 months. (OR)

b) 95% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, on installation, commissioning (wherever applicable) and handing over of the ordered items to the Purchaser, after testing all the software and fulfilling the technical specifications and the balance 5% will be released to the successful bidder after completion of warranty period.

c) The 75% of total cost of the invoice will be made to the Successful Bidder after the receipt of funds from the Purchaser on verifying the same with the Purchaser.

The site is not ready within 15 days of delivery, on submission of proof of delivery and SNR certificate from the Purchaser.

d) However if the site is not ready within 15 days of delivery, on submission of proof of delivery and SNR certificate from the Purchaser.

e) Bills will be honoured within 30 working days after submission of bills along with all supporting documents in complete shape. The Successful Bidder shall file relevant invoices online using the web based procurement software in operation at ELCOT.

f) The Successful Bidder hereby agrees to get the refund of incentive, excise duty

and proportionate sales tax from authorities concerned and pass it on to Purchaser(s) if the Government or any other appropriate agency reduces the Excise duty or Sales tax or give incentive of any type retrospectively after supplying the Ordered items failing which action will be taken to recover the balance amount from the Successful Bidder under the Revenue Recovery Act or any other relevant act.

g) Penalty amount, if any, will be adjusted in the payment due to the Successful Bidder.

h) **However subject to above conditions payment will be released only after the receipt of funds received from the purchaser.**

i) All taxes and other levies imposed by Governments in India will be paid at actual as applicable.

16. The contract or any part share of interest in it is not be transferred or assigned by the Successful Bidder directly or indirectly to any person or persons whomsoever without the prior written consent of the Purchaser(s).

17. Neither the Purchaser(s)/ ELCOT nor the Successful Bidder shall be liable to the other for any delay or failure in the performance of their respective obligations due to causes or contingencies beyond their reasonable control such as

i) Natural phenomena including but not limited to earthquakes, floods and epidemics.

ii) Acts of any Government authority domestic or foreign including but not limited to war declared or undeclared, priorities and quarantine restrictions.

iii) Accidents or disruptions including, but not limited to fire, explosions, break down of essential machinery or equipment, power and water shortages.

18. The following documents shall be deemed to form and be read and construed as part of this Contract.

a) Technical Specifications

b) Tender Terms and Conditions

c) Amendments issued by ELCOT for the Tender document

d) Corrigendum / Clarifications issued by ELCOT for the Tender Document

e) Detailed final offer of the Successful Bidder

f) Purchase Order(s) issued by ELCOT from time to time

g) Correspondence made by ELCOT to the Successful Bidder from time to time during the period of the contract.

h) Wherever the offer conditions furnished by the Successful Bidder are at variance with conditions of this contract or conditions stipulated in the purchase order, the latter shall prevail over the offer conditions furnished by the Successful Bidder.

19. (a) Unless otherwise provided in the agreement, any notice, request, consent or other communication given or required to be given here under shall be given by mailing the same by registered mail, postage prepaid, return receipt requested in the case of the Successful Bidder to the Purchaser(s) at their respective addresses and set forth above or with other addresses and to the attention of such other person or persons as may hereafter be designated by like notice here under and any such notice sent by post shall be deemed to have been served on the date when in the ordinary course of post, it would have been delivered at the address to which it was sent.

(b) Any notice to the Successful Bidder shall be deemed to be sufficiently served, if given or left in writing at their usual or last known place of abode or business.

20. **Termination of Contract:**

20.1 Termination for default:-

(a)ELCOT may without prejudice to any other remedy for breach of contract, by written notice of default with a notice period of seven days, sent to the Successful Bidder, terminate the contract in whole or part,

(i) if the Successful Bidder fails to deliver any or all of the goods within the time period(s) specified in the Contract, or fails to supply the items as per the Delivery Schedule or within any extension thereof granted by ELCOT; or

(ii) if the Successful Bidder fails to perform any of the obligation(s) under the contract; or

(iii) if the Successful Bidder, in the judgement of ELCOT, has engaged in fraudulent and corrupt practices in competing for or in executing the Contract.or

(iv) supplies the items inferior to the ordered / accepted specifications ; or

(v) not procured and supplied the item from the OEM from whom the MAF was obtained and not submitted as per tender conditions unless and otherwise taking written approval from ELCOT for alternate OEM source.

(b) In the event of ELCOT terminating the Contract in whole or in part, ELCOT may procure, upon terms and in such manner as it deems appropriate, the goods and services similar to those and delivered and the Successful Bidder shall be liable to ELCOT for any additional costs for such similar goods. However, the Successful Bidder shall continue the performance of the contract to the extent not terminated.

20.2 Termination for Insolvency:-

ELCOT may at any time terminate the Contract by giving written notice with a notice period of 7 days to the Successful Bidder, if the Successful Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Successful Bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to ELCOT.

20.3 Termination for Convenience:-

ELCOT may by written notice, with a notice period of seven days sent to the Successful Bidder, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for ELCOT's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective. On termination, the successful Bidder is not entitled to any compensation whatsoever.

21. ELCOT reserves the right to cancel the order(s) and to terminate the contract in the event of short performance or non performance of the Successful Bidder.

22. **Dispute and Jurisdiction:**

"Any dispute or difference, whatsoever, arising between the parties to this contract arising out of or in relation to the terms of this contract shall be resolved by the parties mutually by acting in good faith towards fulfilling the contract and

for this purpose the parties mutually agree to furnish or exchange all relevant documents, information and any other material within their special knowledge and thereby conclude their discussions between them / their representatives or officers within a period of time as may be mutually agreed to say the time of commencement of the move to resolve the dispute".

"Incase the parties failed to resolve the disputes amicably within the time frame agreed and in the manner stated supra, the aggrieved party shall approach the Court in Chennai city alone to the exclusion of all other Courts to adjudicate the unresolved dispute".

In Witness whereof the parties hereto have signed on the day, month and year above written in the presence of

For and on behalf of
Successful Bidder

Witnesses:

1.

2.

For and on behalf of
Electronics Corporation of
Tamil Nadu Limited

Witnesses:

1.

2.

Appendix-2 Bank Guarantee Format

(To be executed in Rs.100/- Stamp Paper)

To
The Managing Director
Electronics Corporation of Tamil Nadu Limited
MHU Complex II Floor
692 Anna Salai, Nandanam
Chennai - 600035

Bank Guarantee No:
Amount of Guarantee:
Guarantee covers from:
Last date for lodgement of claim:

This Deed of Guarantee executed by ……………….. (Banker's Name & Address) having our Head Office at …………………..(address) (hereinafter referred to as "the Bank") in favour of The Managing Director, Electronics Corporation of Tamil Nadu Limited, MHU Complex II Floor, 692 Anna Salai, Nandanam, Chennai - 600035 (hereinafter referred to as "the Beneficiary") for an amount not exceeding Rs._____/- (Rupees _____ Only) as per the request of M/s. _____ having its office address at _____ (hereinafter referred to as "Successful bidder") against Letter of Acceptance reference _____ dated __/__/____ of M/s. Electronics Corporation of Tamil Nadu Limited. This guarantee is issued subject to the condition that the liability of the Bank under this guarantee is limited to a maximum Rs._____/- (Rupees _____ Only) and the guarantee shall remain in full force up to ___ months from the date of Bank Guarantee and cannot be invoked otherwise by a written demand or claim by the beneficiary under the Guarantee served on the Bank before ___ months from the date of Bank Guarantee.

AND WHEREAS it has been stipulated by you in the said ORDER that the Successful bidder shall furnish you with a Bank Guarantee by a Scheduled/Nationalised Bank for the sum specified therein as security for compliance with the Contractor's performance obligations for a period in accordance with the contract.

AND WHEREAS we have agreed to give the Successful bidder a Guarantee.

THEREFORE, we (Bankers address)……………, hereby affirm that we are Guarantors and responsible to you on behalf of the Successful bidder up to a total of Rs._____/- (Rupees _____ Only) and we undertake to pay you, upon your first written demand declaring the Successful bidder to be in default under the contract and without any demur, cavil or argument, any sum or sums within the limit of Rs._____/- (Rupees _____ Only) as aforesaid, without your needing to prove or show grounds or reasons for your demand or the sum specified therein. We will pay the guaranteed amount notwithstanding any objection or dispute whatsoever raised by the Successful bidder.

This Guarantee is valid until _____ months from the date of Bank Guarantee.

Notwithstanding, anything contained herein

Our liability under this guarantee shall not be exceedRs._____/- (Rupees _____ Only). This bank guarantee shall be valid up to __ months from the date of Bank Guarantee and we are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____

In witness whereof the Bank, through its authorised Officer, has set its, hand and stamp on this …………………………………. at _____.

Witness: (Signature)

 (Name in Block Letters)

Appendix-3 Sample Submission Form for each Category

Date of submission: __/___/____

Bidder Name   :

Bidder Address   :

Tender No.   :

Sample Submitted On:

Tender Product Sl No.   :

Sl. No.	Item No. in the Tender	Item Description	Make	Model	Sl. No of the Item

BIDDER   **ELCOT**

Bidding Company Name:	*Name & Designation of the Person Receives the Sample:*
Signature of the Representative:	*Store I/C Name & Designation:*
Name:	*Signature:*
Designation:	
Contact No.	

Appendix-4 Manufacturer's Authorisation Form (MAF)

To
The Managing Director,
Electronics Corporation of Tamil Nadu Ltd.,
MHU Complex, II Floor,
692, Anna Salai,Nandanam, Chennai – 600 035.

Sir,

We hereby authorise M/s ....to undertake to submit a Bid, and subsequently negotiate and sign the contract with the purchaser against Tender No: ELCOT/Proc/OT/33450/ RC Tender-Group B/2021-22 for the (type the Description of goods) developed by us. We hereby extend our full warranty for the goods offered for supply by the above firm against this tender.

We also undertake to provide timely supplies as per terms of tender and as agreed mutually and also to provide a trouble free and continuous support either directly or through our authorised partners under our supervision during the Warranty and CAMC period. We will provide the necessary spares support in the event of replacement of any spare parts is necessitated while providing Warranty and CAMC period or any Extended Warranty Period and if the spares are not available then we will arrange for complete replacement of the item(s) with an equivalent / higher model.

For this tender we authorise M/s. _____ (Complete address and full contact details of the partner) to be our sales and service partner. In the event of discontinuation of supply and service by our partner viz., M/s. _____ or any problem arises during provision of supply and services, the entire responsibility to provide trouble free and continuous supply and services to the end user / purchaser rests with us and we undertake to provide supply and services directly or through our alternative sales / service partners.

In case of violation of any of the conditions above, I/We ....understand that I/ We are liable to be blacklisted by ELCOT for a period of three years.

(Signature for and on behalf of Principal)
Signature with date:
Name of the signatory:
Designation:

Note: (1) Competent authority of the Manufacturer / Principal should issue the letter of authority.

Appendix-5 Letter of Guarantee for Maintaining Minimum Stock

To
The Managing Director,
Electronics Corporation of Tamil Nadu Ltd.,
MHU Complex, II Floor,
692, Anna Salai, Nandanam, Chennai – 600 035.
Sir,

We, M/s .... hereby undertake and ensure that as per the Tender clause **9.6 C Warranty Clause** and **9.7 Minimum Stock Maintenance** for the tender reference **ELCOT/Proc/OT/33450/RC Tender -Group B/2021-22** floated by ELCOT for the supply of tendered items, will maintain the minimum stock for the tendered items and strictly follow the instructions of ELCOT for the immediate delivery of the tendered items as per the conditions stipulated in the Tender.

a)   Minimum ex-stock of about 10 units of all quoted items will be kept in the premises as confirmed by ELCOT. Upon issuance of notice from ELCOT, we will deliver and install the items within 24 hours for the Chennai Purchasers and 48 hours for the Purchasers outside Chennai.

b)   No financial commitment will be claimed by us for maintaining the ex-stock items.

c)   We ensure that at any point of time the minimum ex-stock level will be maintained. The short fall of 10 numbers will be replenished within 7 days from the date of delivery of the items from the minimum stock.

4. ELCOT can inspect the Minimum stock level at any point of time and may impose a penalty of 20% of the cost of the equipments which are shortage of the specified qty.

If we fail to maintain the minimum stock level in three instances during the Rate Contract period, ELCOT reserves the right to terminate the RC contract with us and we may be declared as non performer which may not permit us in participating tenders floated by ELCOT in future, for the next three years.

In case of violation of any of the conditions above, I/We ....understand that I/ We are liable to be blacklisted by ELCOT for a period of three years.

(Signature for and on behalf of Principal)
Signature with date:
Name of the signatory:
Designation:

Appendix-6 Format for Clarifications / Amendments

FORMAT FOR
QUERIES ON TENDER CONDITIONS AND TECHNICAL SPECIFICATIONS

(A) FOR COMMERCIAL CONDITIONS:

Sl. No.	Page No.	Clause No.	Title of the Clause	Description of the Clauses as per Tender Document	Amendment requested	Reasons for requesting the amendment

(B) FOR TECHNICAL SPECIFICATIONS:

Sl. No.	Page No.	Product Code	Item Name	Existing Specification as per Tender Document	Technical Parameter as per Tender Document	Amendment requested	Reasons for requesting the amendment

Appendix-7 Restrictions on Public Procurement Instructions to bidders to be complied

Bidders are requested to comply with the below instructions without fail.Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. The Competent Authority for the purpose of registration under this tender shall be

a) The Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT). OR

b) The Registration Committee constituted by Government of Tamil Nadu consisting of the following members:-

1.Managing Director & Chief Executive Officer, Guidance (as Chairman)
2. Additional Chief Secretary to Government (Finance), or his representative
3.Additional Chief Secretary to Government (Information Technology) or his representative
4. Principal Secretary to Government (Public Works Department) or his representative
5. Industries Commissioner and Director of Industries and Commerce.

Definitions:

i. "Bidder" for the purpose of the tender(including the term 'tenderer', 'consultant', 'vendor' or 'service provider' in certain contexts) means any persons or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

ii. Bidder from a country which shares a land border with India" for the purpose of this tender means-
   a. An entity incorporated, established or registered in such a country; or
   b. A subsidiary of an entity incorporated, established or registered in such a country; or
   c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
   d. An entity whose beneficial owner is situated in such a country; or
   e. An Indian (or other) agent of such an entity; or
   f. A natural person who is a citizen of such a country; or
   g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

However, there are no restrictions in case of procurement of goods or services from the bidder from those Countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is

engaged in development Projects.

iii. The "Beneficial owner "for the purpose of (ii) above will be as under:

(1)In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means.

Explanation –
   a. "Controlling ownership interest" means ownership of, or entitlement to, more than twenty-five percent of shares or capital or profits of the company;

   b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.

(2) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

(3) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

(4) Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

(5) In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

(6) An 'agent' for the purpose of this tender is a person employed to do any act for another, or to represent another in dealings with third person.

(7) The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority. The definition of a 'Contractor' from a Country which shares a land border with India' shall be as detailed in paragraph (ii) above.

Each Bidder shall have to submit the Undertaking as per A1.6.
Where applicable, the bidder shall have to submit the Certificate of Registration from the Competent Authority.

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Appendix-8 Instructions to BIDDERS on e-TENDERING through the website
https://tntenders.gov.in

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1. ELCOT is using the e-tendering system of Government of Tamil Nadu namely tntenders.gov.in which is developed and hosted by NIC.

2. Bidders can go to the ELCOT tenders page directly by selecting the **e-Tender** option from the home page of ELCOT site **elcot.in**.The bidders should enroll themselves on the website **https://tntenders.gov.in** using the option "**Online Bidder Enrolment**". This enrolment is free at this pint of time.

3. Possession of a **Valid Class III Digital Signature Certificate (DSC) in the form of smart card/e-token with signing and encryption keys,** in the Company's name is a prerequisite for registration and participating in the bid submission activities through this web site.

4. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://tntenders.gov.in under the link "**Information about DSC**".

5. The web site also has user manuals with detailed guidelines on enrolment and participation in the online bidding process. The user manuals can be downloaded for ready reference.

6. Vendors can also attend the **training/familiarization programme** on the e-tendering system conducted periodically by NIC.

7. The bidders will be able to see the status of the tenders for which they have submitted bids in different stages and would also be informed of the status by E-Mail. For the bidders who have specified the Product Category through "Product Category" option, information of all the tenders published, under the selected product category, will be sent by E-Mail.

8. Bidders should submit the bid well in advance before bid submission end date and time, instead of doing at the last minute, which may fail. In this case, the Tender Inviting Authority is not responsible for the non-submission of bids at the bidders end.

9. Bidder should contact the help desk for any clarifications on the bid submission at any point of time one day before the bid submission, so that bid submission goes through' smoothly. Bidders should not assume and do the steps and then get into

issues which cannot be solved.

10. Bidders should go through the tender documents and get ready the all relevant documents in pdf/xls/rar formats as indicated and then have to be uploaded against each category. In the technical bid, bidders may attach an index page wherever necessary, in the beginning, which indicates the details of the files/documents that follow the index page against each technical bid content indicated. This will also help for easy reference later.

11. While scanning the bid documents to convert to pdf, bidders are asked to scan the page in 65 to 100 dpi mode, to get a readable page after scanning and also the size of the document will also be lesser. For pages in text, it is advised to use 65dpi mode and for pages with images, 100 dpi mode.

12. Bidders can get ready the technical bid and price bid in filled form in advance instead of doing at the last moment and once ready in all aspects, they may chose the **freeze** option to submit the bid finally and thereafter they will get a **bid acknowledgement receipt** which is the final end, indicating the successful submission of the bid submission process.

13. Bidders can do the resubmission of the bid any number of times, either technical bid or price bid or both till the end date and time of bid submission. The content of the last submitted bid alone will be opened at the time of tender opening.

14. Bidders can withdraw the submitted bid, before the end of bid submission date and time with proper reasons and once it is withdrawn, bids cannot submitted again for that tender.

15. For all tender processing activities, the server time indicated at the top, while doing bid submission/tender opening activities is the final. The Local system time will not be taken into account in this case.

16. Bidders may contact the help desk by mail **etendersupport@elcot.in** or by mobile **9566003517** to get any clarifications on ebid submission process well in advance.

Annexure-1 Technical Bid

A1.1   Check-list for Enclosures

Documents to be submitted	**Fill (YES or NO)**
Filled Tender Technical Bid Form and Price Bid Form (Digitally Signed)	
Payment of Tender Fee and EMD amount	
Two Part Bid submission	
Letter of Undertaking	
Letter of Authorisation for signing the Tender document	
Eligibility Criteria	
a) **Eligibility Criteria for All categories**	
1. Certificate of Incorporation of bidder	
2. Certificate of Incorporation of OEM/s	
3(a). Copy of the OEM's Manufacturing License with manufacturing capacity	
3(b). Copy of Purchase Order and performance / order completion certificate from the Purchasers for executing single order value for the quoted products against each bidding category to be submitted by OEM.	
4. Manufacturing Authorisation letter from OEM/s against each bidding category	
5. Copy of Purchase Order and work completion certificate from the Purchasers for three years existence.	
6. Copies of the last three successive Audited financial years. Profit & Loss account and Balance sheet.	
7. Copy of Purchase Order and performance / order completion certificate from the Purchasers for executing single order value for the quoted products against each bidding category to be submitted by Bidder	
8. **Service Centre Facilities** **OEM's Own Service Centre:** Copies of the land-line telephone bills (anyone of the last 2 months before the due date)/ valid rental agreement/any legal proof **OEM's Franchisee Service centre:** Copies of the valid agreement entered between the Franchisee and the OEM. Proof of availability of service centre in each region.	
8(a) Enclose the Documentary proof stating minimum 10 service centres existence in Tamil Nadu	

Documents to be submitted		Fill (YES or NO)
9(a).	Copies of valid ISO 9001:2015 or latest and ISO 14001:2015 or latest to be submitted by OEM	
9(b)	Copies of validISO 14001:2015 or latest to be submitted by Authorised Dealer.	
9(c)	Copies of BIS certification for the mandated items as per GoI standardto be submitted by OEM	
10.	Proof of availability of bidder'soffice in Chennai	
11.	Copy of the screenshot of URL Homepage of OEM and Bidder	
12.	Compliance to the technical specification, General certification and OS compliancefor the quoted products against each bidding category to be submitted by the OEM and the Authorised Dealer/Distributor duly signed by the Authorised person	
13(a).	Brochure for the quoted products to be submitted against each bidding category.	
13(b).	Relevant proof of brochure availability in OEM website to be submitted.	
13(c)	An undertaking letter by OEM authorized signatory ensuring the availability of the brochures submitted for this tender till the validity of the tender should be submitted.	
14.	Power of Attorney for submitting the bid	
15.	Language of the supporting documents only in English	
16.	OEM should enclose the Documentary proof for minimum 2 partners.	
17	Sample Submission form quoted products against each bidding category to be submitted.	
18	Letter of Guarantee for maintaining minimum stock for quoted products against each bidding category to be submitted.	
b)	**Additional Eligibility to be complied for the Categories IP Camera, Anti-Virus, Computer Stationery, Digital Signature Certificates**	
19	IP Camera- MAF to be submitted for NVR, NAS, Video Management Software, Video Analytic Software	
20	OEM should be present in Gartner Magic Quadrant 2020	
21	Copy of Manufacturing License for Plain and Pre-Printed Computer Stationery should be submitted or SSI / Medium Small Industries Registrations / NSIC Registrations certificates should be submitted.	
22	Valid Copy of Certification issued by CCA (Controller of Certifying Authorities) for CA (Certifying Authority) shall be enclosed.	

Documents to be submitted	Fill (YES or NO)
(or) The LRA should submit the authorization letter issued by the Certifying Authority along with the Copy of Valid Certification issued by CCA for the CA.	

A1.2   Profile of the Bidder

1.	Name of the Company	
2.	Year of incorporation	
3.	Nature of the Company (Registered Company or Partnership or Proprietary)	
4.	**Registered office (In India) or the office covering the Business transaction in India**	
	Telegraphic Address	
	Office Telephone Number	
	Fax Number	
	Contact Person	
	Name	
	Personal Telephone Number	
	Email Address	
5.	**Local presence at Tamil Nadu**	
	Telegraphic Address	
	Office Telephone Number	
	Fax Number	
	Contact Person	
	Name	
	Personal Telephone Number	
	Email Address	
6.	**Registration Details**	
	Permanent Account Number(PAN)	
	GST Registration Number	
7.	Banker's Name, Address and Account Number	

A1.3   Details in support of Eligibility Criteria

Sl. No.	Description	Please give details along with proof
a)	**Eligibility Criteria for All categories**	
1.	Certificate of Incorporation of Bidder	
2	Certificate of Incorporation of OEM(s)	
3(a)	Copy of the OEM's Manufacturing License with manufacturing capacity	
3(b)	Copy of Purchase Order and performance / order completion certificate from the Purchasers for executing single order value for the quoted products against each bidding category to be submitted by OEM.	
4.	Manufacturing Authorisation letter from OEM/s against each bidding category	
5.	Copy of Purchase Order and work completion certificate from the Purchasers for three years existence.	
6	Copies of the last three successive Audited financial years. Profit & Loss account and Balance sheet	
7.	Copy of Purchase Order and performance / order completion certificate from the Purchasers for executing single order value for the quoted products against each bidding category to be submitted by Bidder.	
8.	Proof of availability of OEM service centres in each region.	
8(a).	Enclose the Documentary proof stating minimum 10 service centres existence in Tamil Nadu.	
9(a).	Copies of valid ISO 9001:2015 or latest and ISO 14001:2015 or latest to be submitted by OEM	
9(b).	Copies of valid ISO 14001:2015 or latest to be submitted by Bidder	
9(c).	Copies of BIS Certication for the mandated items as per GoI standards to be submitted by OEM	
10.	Proof of availability of bidder office in Chennai	

11.	Copy of the screenshot of URL Homepage of OEM and Bidder	
12.	Compliance to the technical specification, General certification and OS compliance for the quoted products against each bidding category to be submitted by the OEM and the Authorised Dealer/Distributor duly signed by the Authorised person	
13(a).	Brochure for the quoted products to be submitted against each bidding category.	
13(b).	Relevant proof of brochure availability in OEM website to be submitted.	
13(c)	An undertaking letter by OEM authorized signatory ensuring the availability of the brochures submitted for this tender till the validity of the tender should be submitted.	
14.	Power of Attorney for submitting the bid	
15.	Language of the supporting documents only in English	
16.	OEM should enclose the Documentary proof for minimum 2 partners.	
17	Sample Submission form quoted products against each bidding category to be submitted.	
18	Letter of Guarantee for maintaining minimum stock for quoted products against each bidding category to be submitted.	
b)	**Additional Eligibility to be complied for the Categories IP Camera, Anti-Virus, Computer Stationery, Digital Signature Certificates**	
19	IP Camera- MAF to be submitted for NVR, NAS, Video Management Software, Video Analytic Software	
20	OEM should be present in Gartner Magic Quadrant 2020	
21	Copy of Manufacturing License for Plain and Pre-Printed Computer Stationery should be submitted or SSI / Medium Small Industries Registrations / NSIC Registrations certificates should be submitted.	
22	Valid Copy of Certification issued by CCA (Controller of Certifying Authorities) for	

CA (Certifying Authority) shall be enclosed. (or) The LRA should submit the authorization letter issued by the Certifying Authority along with the Copy of Valid Certification issued by CCA for the CA.	

A1.4   Hardware Compliance

The Bidders and/ OEM should submit the details of the make and model of each item offered against the tender requirement and samples for the same need to be submitted for evaluation.

A1.4.1 Category B1 – Microsoft Software

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B1-001	Office Standard 2019	
2	33450-B1-002	Office Professional Plus 2019	
3	33450-B1-003	Office 365 E1	
4	33450-B1-004	Office 365 E3	
5	33450-B1-005	Exchange Online Kiosk	
6	33450-B1-006	Exchange Online (Plan 1)	
7	33450-B1-007	Exchange Online (Plan 2)	
8	33450-B1-008	Exchange Online Archiving for Exchange Online	
9	33450-B1-009	Exchange Online Protection	
10	33450-B1-010	Microsoft 365 Apps for enterprise	
11	33450-B1-011	Microsoft 365 Business Standard	
12	33450-B1-012	Microsoft 365 Apps for business	
13	33450-B1-013	M365 F1	
14	33450-B1-014	Power BI Pro	
15	33450-B1-015	Power BI Premium P1	

16	33450-B1-016	Power BI Premium P3	
17	33450-B1-017	Power BI Premium P5	
18	33450-B1-018	Project Plan 3	
19	33450-B1-019	Project Plan 5	
20	33450-B1-020	Project Online Essentials	
21	33450-B1-021	SQL Server 2019 Enterprise Core - 2 Core License Pack	
22	33450-B1-022	SQL Server 2019 Standard Core - 2 Core License Pack	
23	33450-B1-023	SQL Server 2019 Standard Edition	
24	33450-B1-024	SQL Server 2019 - 1 Device CAL	
25	33450-B1-025	Windows Server 2019 Remote Desktop Server CAL - 1 Device CAL	
26	33450-B1-026	Windows Server 2019 Remote Desktop Services External Connector	
27	33450-B1-027	Windows Server 2019 External Connector	
28	33450-B1-028	Windows Server 2019 Datacenter Core - 16 Core License Pack	
29	33450-B1-029	Windows Server 2019 Datacenter Core - 2 Core License Pack	
30	33450-B1-030	Windows Server 2019 Standard - 16 Core License Pack	
31	33450-B1-031	Windows Server 2019 Standard - 2 Core License Pack	
32	33450-B1-032	Windows Server 2019 Client Access License - 1 Device CAL	
33	33450-B1-033	Available in AZURE pricelist and filter the Meter Category column to Visual Studio	
34	33450-B1-034	Windows GGWA - Windows 10 Professional	
35	33450-B1-035	Visual Studio Professional 2019	
36	33450-B1-036	Dynamics 365 Team Members	
37	33450-B1-037	Azure Monetary Commitment	

A1.4.2 Category B2- Anti-Virus

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B2-001	Anti Virus for Desktop and laptop-Single User-One Year Subscription	
2	33450-B2-002	Anti Virus for Desktop and LaptopSingle User-Three Year Subscription	
3	33450-B2-003	Anti Virus for Desktop and LaptopThree User-one Year Subscription	
4	33450-B2-004	Anti Virus for Desktop and Laptop Three User Three Year Subscription	
5	33450-B2-005	Anti Virus for Desktop and Laptop Five User One Year Subscription	
6	33450-B2-006	Anti Virus for Desktop and Laptop Five User Three Year Subscription	
7	33450-B2-007	Anti Virus for Desktop and Laptop Ten User One Year Subscription	
8	33450-B2-008	Anti Virus for Desktop and Laptop Ten User Three Year Subscription	
9	33450-B2-009	Anti Virus for Desktop and Laptop Total Security-Single User-One Year Subscription	
10	33450-B2-010	Anti Virus for Desktop and Laptop Total Security-Single User-Three Year Subscription	
11	33450-B2-011	Anti Virus for Desktop and Laptop Total Security-Two User-One Year Subscription	
12	33450-B2-012	Anti Virus for Desktop and Laptop Total Security-Two User- Three Year Subscription	
13	33450-B2-013	Anti Virus for Desktop and Laptop Total Security-Three User-One Year Subscription	
14	33450-B2-014	Anti Virus for Desktop and Laptop Total Security-Three User-Three Year Subscription	

15	33450-B2-015	Anti Virus for Desktop and Laptop Total Security-Five User-One Year Subscription	
16	33450-B2-016	Anti Virus for Desktop and Laptop Total Security-Five User-Three Year Subscription	
17	33450-B2-017	Anti Virus for Desktop and Laptop Total Security-Ten User-One Year Subscription	
18	33450-B2-018	Anti Virus for Desktop and Laptop Total Security-Ten User-ThreeYear Subscription	
		End Point Security	
19	33450-B2-019	End point Security Business -Single User-One Year Subscription	
20	33450-B2-020	End point Security Business -Single User-Three Year Subscription	
21	33450-B2-021	End point Security Business -Five User-One Year Subscription	
22	33450-B2-022	End point Security Business -Five User-Three Year Subscription	
23	33450-B2-023	End point Security Business -Ten User-One Year Subscription	
24	33450-B2-024	End point Security Business -Ten User-Three Year Subscription	
25	33450-B2-025	End point Security Business -Fifty User-One Year Subscription	
26	33450-B2-026	End point Security Business -Fifty User-Three Year Subscription	
27	33450-B2-027	End point Security Business - Hundred user -One Year Subscription	
28	33450-B2-028	End point Security Business - Hundred user - Three Year Subscription	
29	33450-B2-029	End point Security Total -Single User-One Year Subscription	
30	33450-B2-030	End point Security Total -Single User-Three Year Subscription	
31	33450-B2-031	End point Security Total -Five User-One Year Subscription	

32	33450-B2-032	End point Security Total -Five User-Three Year Subscription	
33	33450-B2-033	End point Security Total -Ten User-One Year Subscription	
34	33450-B2-034	End point Security Total -Ten User-Three Year Subscription	
35	33450-B2-035	End point Security Total -Fifty User-One Year Subscription	
36	33450-B2-036	End point Security Total -Fifty User-Three Year Subscription	
37	33450-B2-037	End point Security Total -Hundred User-One Year Subscription	
38	33450-B2-038	End point Security Total - Hundred User Three Year Subscription	
39	33450-B2-039	End point Security Enterprise Suite -Single User-One Year Subscription	
40	33450-B2-040	End point Security Enterprise Suite -Single User-Three Year Subscription	
41	33450-B2-041	End point Security Enterprise Suite -Five User-One Year Subscription	
42	33450-B2-042	End point Security Total -Five User-Three Year Subscription	
43	33450-B2-043	End point Security Enterprise Suite -Ten User - One Year Subscription	
44	33450-B2-044	End point Security Enterprise Suite -Ten User-Three Year Subscription	
45	33450-B2-045	End point Security Enteprise Suite -Fifty User One Year Subscription	
46	33450-B2-046	End point Security Total -Fifty User-Three Year Subscription	
47	33450-B2-047	End point Security Total -Hundred User-One Year Subscription	
48	33450-B2-048	End point Security Total -Hundred User-Three Year Subscription	

A1.4.3 Category B3 – Computer Stationery

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B3-001	10" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
2	33450-B3-002	10" x 12"x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
3	33450-B3-003	10" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
4	33450-B3-004	11" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 os.)	
5	33450-B3-005	11" x 12"x 1 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
6	33450-B3-006	11" x 12"x 2 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
7	33450-B3-007	11" x 12"x 3 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
8	33450-B3-008	11" x 12"x 4 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
9	33450-B3-009	11" x 12"x 1 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
10	33450-B3-010	11" x 12 "x 2 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
11	33450-B3-011	11" x 12"x 3 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
12	33450-B3-012	11" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
13	33450-B3-013	11" x 12 "x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
14	33450-B3-014	11" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
15	33450-B3-015	12" x 12"x 1 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
16	33450-B3-016	12" x 12"x 2 60 GSM Cream Wove (1 Unit = 1000 Nos.)	

17	33450-B3-017	12" x 12"x 3 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
18	33450-B3-018	12" x 12"x 4 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
19	33450-B3-019	12" x 12"x 1 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
20	33450-B3-020	12" x 12"x 2 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
21	33450-B3-021	12" x 12"x 3 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
22	33450-B3-022	12" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
23	33450-B3-023	12" x 12"x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
24	33450-B3-024	12" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
25	33450-B3-025	15" x 12"x 1 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
26	33450-B3-026	15" x 12"x 2 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
27	33450-B3-027	15" x 12"x 3 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
28	33450-B3-028	15" x 12"x 4 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
29	33450-B3-029	15" x 12"x 1 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
30	33450-B3-030	15" x 12"x 2 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
31	33450-B3-031	15" x 12"x 3 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
32	33450-B3-032	15" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
33	33450-B3-033	15" x 12"x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
34	33450-B3-034	15" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
35	33450-B3-035	Single colour single side printing (1 Unit = 1000 Nos.)	
36	33450-B3-036	With One serial number in one page (1 Unit = 1000 Nos. of sheets)	

37	33450-B3-037	70 GSM Copier Paper - (A4 Size) (1 Ream - 500 Nos.of sheets)	
38	33450-B3-038	75 GSM Copier Paper - (A4 Size) (1 Ream - 500 Nos. of sheets)	
39	33450-B3-039	80 GSM Copier Paper - (A3 Size) (1 Ream - 500 Nos.of sheets)	
40	33450-B3-040	80 GSM Copier Paper - (A4 Size) (1 Ream - 500 Nos. of sheets)	
41	33450-B3-041	80 GSM Copier Paper - (Legal Size) (1 Ream - 500 Nos. of sheets)	
42	33450-B3-042	White Window Covers size 11.5 X 26.5 cm, with ELCOT Logo & Address	
43	33450-B3-043	Brown Craft Covers - size 26.5 X 31 cm, with ELCOT Logo & Address	
44	33450-B3-044	Brown Craft Covers - size 43.5 X 29 cm, with ELCOT Logo & Address	
45	33450-B3-045	Covers:- Brown Craft Covers - size 30 X 12.5 cm, 11.5" X 4.75" with ELCOT Logo & Address	
46	33450-B3-046	Cloth Covers - size 37 X 28 cm, with ELCOT Logo & Address	
47	33450-B3-047	Cloth Covers - size 30 X 25 cm, with ELCOT Logo & Address	
48	33450-B3-048	Continuation sheet (Executive Bond Paper) (100 sheets in each pad)	
49	33450-B3-049	Scribbling pad – size 21.5 X 13 cm (20 sheets per pad) with ELCOT Logo in the top of the right corner in each sheet and in the front cover.	
50	33450-B3-050	Voucher pads - size 22 X 14 cm, with ELCOT Logo in the top of the right corner in each sheet and in the front cover. (100 sheets in each pad)	
51	33450-B3-051	Leave Application Form size 22 x 14cm (100 sheets in each pad)	
52	33450-B3-052	ON Duty Slip 18 x 13cm (100 Sheets in each pad)	
53	33450-B3-053	Visitors pass (22 X 14 cm)	
54	33450-B3-054	Telephone Message 18 x 13cm (100 Sheets in each pad)	

55	33450-B3-055	CPL /OT Form size 22 x 14cm (100 sheets in each pad)	
56	33450-B3-056	Vehicle Requisition Form size 22 x 14cm (100 sheets in each pad)	
57	33450-B3-057	Permission Slip size 22 x 14cm (100 sheets in each pad)	
58	33450-B3-058	Petrol Coupon of size 22 x 14cm (100 sheets in each pad) (Colour)	
59	33450-B3-059	A4 size MD's letter heads multi colour printing with logo for Plastic Pollution Free, Tamil Nadu, Executive Bond 100 GSM Paper (100 sheets in each pad)	
60	33450-B3-060	A4 size letter heads with Logo for Plastic Pollution Free Tamil Nadu (Executive Bond Paper) (100 sheets in each pad)	
61	33450-B3-061	Synthetic Visiting Cards (Executive Double Colour)	
62	33450-B3-062	ELCOT Brown Folder with tag (Procurement) with Printing	
63	33450-B3-063	ELCOT Folder with Printing (Legal Size)	
64	33450-B3-064	ELCOT Folder with Printing (A4 Size)	
65	33450-B3-065	Office Tag File with printing	
66	33450-B3-066	Urgent / Ordinary Pad	
67	33450-B3-067	Preprinted OP Slip 120 GSM Parchment paper with Logo 3"X4"x1 slip- (1 Unit = 500 slips)	
68	33450-B3-068	Preprinted OP case Record 80 GSM TNPL paper with Logo 9"X8"x1 part - (1 Unit = 500 Nos)	
69	33450-B3-069	Preprinted Lab Report 80 GSM TNPL paper with Logo 9"X8"x1 part - (1 Unit = 500 Nos)	

A1.4.4 Category B4 – IT Consumables

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B4-001	Toner for (KYOCERA FS 6525/ FS 6530) - TK-479	
2	33450-B4-002	Drum Kit for (KYOCERA FS 6525/ FS 6530) - MK-479	
3	33450-B4-003	Fixing Kit for (KYOCERA FS 6525/ FS 6530) - FK-475	
4	33450-B4-004	DP HINGE for (KYOCERA FS 6525/ FS6530/ FS 8525) - LEFT HINGE	
5	33450-B4-005	DP BASE for (KYOCERA FS 6525/ FS6530/ FS 8525) - BASE DP	
6	33450-B4-006	Power Supply PCB for (KYOCERA FS 6525/ FS6530) - PART LOW VOLTAGE PCB 230V	
7	33450-B4-007	Power Supply Sub board (KYOCERA FS 6525/ FS 6530) - PART LOW SUB VOLTAGE PCB 230	
8	33450-B4-008	Toner Cartridge for (KYOCERA TASKalfa 1800/ 1801) - TK-4109	
9	33450-B4-009	Drum Kit for (KYOCERA TASKalfa 1800/ 1801) - MK-4105	
10	33450-B4-010	Fixing Kit for (KYOCERA TASKalfa 1800/ 1801) - FK-4105	
11	33450-B4-011	Black Toner for (KYOCERA TASKalfa 2551ci) - TK-8329K	
12	33450-B4-012	Yellow Toner for (KYOCERA TASKalfa 2551ci) - TK-8329Y	
13	33450-B4-013	Magenta Toner for (KYOCERA TASKalfa 2551ci) - TK-8329M	
14	33450-B4-014	Cyan Toner for (KYOCERA TASKalfa 2551ci) - TK-8329C	
15	33450-B4-015	Black Drum Kit for (KYOCERA TASKalfa 2551ci) - Maintenance kit MK-8325A	

16	33450-B4-016	Colour Drum Kit for (KYOCERA TASKalfa 2551ci) - Maintenance kit MK-8325B	
17	33450-B4-017	Toner Cartridge for (KYOCERA ECOSYS M4125idn/ M4132idn) - TK-6110	
18	33450-B4-018	Drum kit for (KYOCERA ECOSYS M4125idn/ M4132idn) - Maintenance kit MK-6119	
19	33450-B4-019	Fixing Kit for (KYOCERA ECOSYS M4125idn/ M4132idn) - FK-6115	
20	33450-B4-020	DP HINGE for (KYOCERA ECOSYS M4125idn/ M4132idn) - LEFT HINGE	
21	33450-B4-021	DP BASE for (KYOCERA ECOSYS M4125idn/ M4132idn) - BASE DP	
22	33450-B4-022	Toner Cartridge for (KYOCERA TASKalfa 3212i) - TK-7120	
23	33450-B4-023	Toner Cartridge for (KYOCERA TASKalfa 4012i) - TK-7220	
24	33450-B4-024	Drum kit for (KYOCERA TASKalfa 3212i/ 4012i) - Maintenance kit MK-7125	
25	33450-B4-025	Wireless Kit for (KYOCERA TASKalfa 3212i/ 4012i) - IB-36	
26	33450-B4-026	Fixing Kit for (KYOCERA TASKalfa 3212i/ 4012i) - FK-7125	
27	33450-B4-027	Developing Unit for (KYOCERA TASKalfa 3212i/ 4012i) - DV-7125	
28	33450-B4-028	Main Charge Roller (KYOCERA TASKalfa 3212i/ 4012i) - MC-7125	
29	33450-B4-029	Toner Cartridge for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - TK-6329	
30	33450-B4-030	Drum Kit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - Maintenance kit MK-6335	
31	33450-B4-031	Fixing Kit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - FK-8560	
32	33450-B4-032	Transfer Unit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - TR-6500	

33	33450-B4-033	Developing Unit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - DV-8560K	
34	33450-B4-034	Wireless Kit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - IB-36	
35	33450-B4-035	Main Charge Roller (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - MC-8550	
36	33450-B4-036	Black Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110K	
37	33450-B4-037	Cyan Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110C	
38	33450-B4-038	Yellow Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110M	
39	33450-B4-039	Magenta Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110Y	
40	33450-B4-040	Black Drum Kit for (KYOCERA ECOSYS M8124cidn) - Maintenance kit MK-8115A	
41	33450-B4-041	Colour Drum Kit for (KYOCERA ECOSYS M8124cidn) - Maintenance kit MK-8115B	
42	33450-B4-042	Transfer Belt for (KYOCERA ECOSYS M8124cidn) - TR-8115A	
43	33450-B4-043	Fuser Unit for (KYOCERA ECOSYS M8124cidn) - FK-8115	
44	33450-B4-044	Developing Unit for (KYOCERA ECOSYS M8124cidn) - DV-8115K	
45	33450-B4-045	Black Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339K	
46	33450-B4-046	Cyan Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339C	
47	33450-B4-047	Yellow Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339M	
48	33450-B4-048	Magenta Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339Y	
49	33450-B4-049	Black Drum Kit for (KYOCERA TASKalfa 3252ci) - Maintenance kit MK-8335A	
50	33450-B4-050	Colour Drum Kit for (KYOCERA TASKalfa 3252ci) - Maintenance kit MK-8335B	

51	33450-B4-051	Transfer Belt for (KYOCERA ECOSYS 3252ci) - TK-8550	
52	33450-B4-052	Fuser Unit for (KYOCERA ECOSYS 3252ci) - FK-8530	
53	33450-B4-053	Developing Unit for (KYOCERA ECOSYS 3252ci) - Maintenance kit MK-8335D	
54	33450-B4-054	Black Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529K	
55	33450-B4-055	Cyan Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529C	
56	33450-B4-056	Yellow Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529M	
57	33450-B4-057	Magenta Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529Y	
58	33450-B4-058	Black Drum Kit for (KYOCERA TASKalfa 4052ci) - Maintenace kit MK-8515A	
59	33450-B4-059	Colour Drum Kit for (KYOCERA TASKalfa 4052ci) - Maintenace kit MK-8515B	
60	33450-B4-060	Transfer Belt for (KYOCERA TASKalfa 4052ci) - TR-8550	
61	33450-B4-061	Fuser Unit for (KYOCERA TASKalfa 4052ci) - FK-8550	
62	33450-B4-062	Developing Unit for (KYOCERA TASKalfa 4052ci) - DV-8560K	
63	33450-B4-063	Black Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349K	
64	33450-B4-064	Cyan Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349C	
65	33450-B4-065	Yellow Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349M	
66	33450-B4-066	Magenta Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349Y	
67	33450-B4-067	Black Drum Kit for (KYOCERA TASKalfa 2552ci/ 2553ci) - Maintenance kit MK-8335A	
68	33450-B4-068	Colour Drum Kit for (KYOCERA TASKalfa 2552ci/ 2553ci) - Maintenance kit MK-8335B	

69	33450-B4-069	Transfer Belt for (KYOCERA TASKalfa 2552ci/ 2553ci) - TR-8550	
70	33450-B4-070	Fuser Unit for (KYOCERA TASKalfa 2552ci/ 2553ci) - FK-8350	
71	33450-B4-071	Developing Unit for (KYOCERA TASKalfa 2552ci/ 2553ci) - Maintenance kit MK-8335D	
72	33450-B4-072	Black Toner for FS 8525ci - TK-899K	
73	33450-B4-073	Yellow Toner for FS 8525ci - TK-899C	
74	33450-B4-074	Magenta Toner for FS 8525ci - TK-899M	
75	33450-B4-075	Cyan Toner for FS 8525ci - TK-899Y	
76	33450-B4-076	Black Drum Kit for FS 8525ci - Maintenance kIt MK-896A	
77	33450-B4-077	Colour Drum Kit for FS 8525ci - Maintenance kIt MK-896B	
78	33450-B4-078	Transfer Belt for FS 8525ci - TR-896A	
79	33450-B4-079	Fuser Unit for FS 8525ci - FK-896	
80	33450-B4-080	Developing Unit for FS 8525ci - DV-896K	
81	33450-B4-081	Toner for Canon iR2006n/ iR 2004n/ iR2002n - NPG 59	
82	33450-B4-082	Drum Kit for Canon iR2006n/ iR 2004n/ iR2002n - NPG 59	
83	33450-B4-083	Toner for Canon iR 2525w/ iR 2520/ iR2530 - NPG 51	
84	33450-B4-084	Drum Kit for Canon iR 2525w/ iR 2520/ iR2530 - NPG 51	
85	33450-B4-085	Toner for Canon iR 2625/ iR 2630/ iR 2645 - NPG 84	
86	33450-B4-086	Drum Kit for Canon iR 2625/ iR 2630/ iR 2645 - NPG 84	
87	33450-B4-087	Black Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	
88	33450-B4-088	Cyan Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	
89	33450-B4-089	Yellow Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	
90	33450-B4-090	Magenta Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	
91	33450-B4-091	Black Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	

92	33450-B4-092	Cyan Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	
93	33450-B4-093	Yellow Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	
94	33450-B4-094	Magenta Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	
95	33450-B4-095	Black Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	
96	33450-B4-096	Cyan Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	
97	33450-B4-097	Yellow Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	
98	33450-B4-098	Magenta Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	
99	33450-B4-099	Black Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	
100	33450-B4-100	Cyan Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	
101	33450-B4-101	Yellow Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	
102	33450-B4-102	Magenta Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	
103	33450-B4-103	Toner for Canon iR adv 6575i/ iR adv 6565i/ iR adv 6555i - NPG 54	
104	33450-B4-104	Drum Kit for Canon iR adv 6575i/iR adv 6565i/ iR adv 6555i - NPG 54	
105	33450-B4-105	Toner for Canon iR adv 4525/ iR adv 4535/ iR adv 4545/ iR adv 4551 - NPG 73	
106	33450-B4-106	Drum Kit for Canon iR adv4525/ iR adv 4535/ iR adv 4545/ iR adv 4551 - NPG 73	
107	33450-B4-107	Toner Cartridge for Canon 6230DN - 326	

108	33450-B4-108	Toner Cartridge for Canon MF246DN/ Canon LBP 151DW / Canon MF241D/ Canon MF237w - 337	
109	33450-B4-109	Toner Cartridge for Canon L170/ MF4720W/ MF4820D/ MF4750 - 328	
110	33450-B4-110	Toner Cartridge for Canon MF266DN/ Canon MF 269DN/ Canon LBP 161dn/ Canon LBP 162dw - 051	
111	33450-B4-111	Drum Cartridge for Canon MF266DN/ Canon MF 269DN/ Canon LBP 161dn/ Canon LBP 162dw - 051	
112	33450-B4-112	Toner Cartridge for Canon LBP 214DW - 052	
113	33450-B4-113	Black Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046	
114	33450-B4-114	Cyan Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046	
115	33450-B4-115	Magenta Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046	
116	33450-B4-116	Yellow Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046	
117	33450-B4-117	Black Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045	
118	33450-B4-118	Cyan Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045	
119	33450-B4-119	Magenta Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045	
120	33450-B4-120	Yellow Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045	
121	33450-B4-121	Toner Cartridge for Canon LBP 8100N/ Canon LBP 8780CX - 333	
122	33450-B4-122	Black Toner Cartridge for Canon LBP 841 CDN - 333E	
123	33450-B4-123	Cyan Toner Cartridge for Canon LBP 841 CDN - 333E	
124	33450-B4-124	Magenta Toner Cartridge for Canon LBP 841 CDN - 333E	
125	33450-B4-125	Yellow Toner Cartridge for Canon LBP 841 CDN - 333E	

126	33450-B4-126	Black Toner Cartridge for Canon MF746CX - 055	
127	33450-B4-127	Cyan Toner Cartridge for Canon MF746CX - 055	
128	33450-B4-128	Magenta Toner Cartridge for Canon MF746CX - 055	
129	33450-B4-129	Yellow Toner Cartridge for Canon MF746CX - 055	
130	33450-B4-130	Toner Cartridge for Canon LBP 312x - 041	
131	33450-B4-131	Toner Cartridge for CanonLBP351x/ CanonLBP352x - 039	
132	33450-B4-132	Toner cartridge for digital copier Ricoh MP2014D / MP2014AD - 2014HS	
133	33450-B4-133	Toner cartridge for digital copier RICOH MP 2001SP / MP2501SP - 2501S	
134	33450-B4-134	Toner for Ricoh Aficio 2000L /2000LE/2020D Photo Copier - 1230D	
135	33450-B4-135	Toner Cartridges for Ricoh Aficio MP 3350 Photo Copier - 23230D	
136	33450-B4-136	Developer for digital copier Ricoh MP2014D / MP2014AD / MP 2001SP / MP2501SP / Aficio 2000L / Aficio 2000LE/ Aficio 2020D / Afficio MP 3350SP	
137	33450-B4-137	OPC Drum for digital copier Ricoh MP2014D / MP2014AD / MP 2001SP / MP2501SP / Aficio 2000L / Aficio 2000LE/ Aficio 2020D / Afficio MP 3350SP	
138	33450-B4-138	Hot Roller for digital copier Ricoh MP2014D / MP2014AD	
139	33450-B4-139	Hot Roller for digital copier RICOH MP 2001SP / MP2501SP	
140	33450-B4-140	Charge Roller for digital copier Ricoh MP2014D / MP2014AD / RICOH MP 2001SP / MP2501SP	
141	33450-B4-141	Cleaning blade for digital copier Ricoh MP2014D / MP2014AD	
142	33450-B4-142	Cleaning Blade for digital copier RICOH MP 2001SP / MP2501SP	

143	33450-B4-143	Photoconductor unit for digital copier RICOH MP 2001SP / MP2501SP	
144	33450-B4-144	Photoconductor Development unit for digital copier Ricoh MP2014D / MP2014AD	
145	33450-B4-145	Toner Cartridges for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	
146	33450-B4-146	Developer for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	
147	33450-B4-147	Drum for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	
148	33450-B4-148	Cleaning blade for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	
149	33450-B4-149	Fusing Unit for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	
150	33450-B4-150	Fusing Sleeve for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	
151	33450-B4-151	Toner (black) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S Black	
152	33450-B4-152	Toner (cyan) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S cyan	
153	33450-B4-153	Toner (yellow) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S yellow	
154	33450-B4-154	Toner (magenta) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S Magenta	
155	33450-B4-155	Development Unit (black) cartridge RICOH MPC 2503SP / MPC 2504SP	
156	33450-B4-156	Development Unit (cyan) cartridge RICOH MPC 2503SP / MPC 2504SP	
157	33450-B4-157	Development Unit (yellow) cartridge RICOH MPC 2503SP / MPC 2504SP	
158	33450-B4-158	Development Unit (magenta) cartridge RICOH MPC 2503SP / MPC 2504SP	
159	33450-B4-159	Drum kit for RICOH MPC 2503SP / MPC 2504SP (K, C, Y & M)	
160	33450-B4-160	Toner for Ricoh Aficio MPC 2550 / MPC 2551Colour Photo Copier - C2551S Black	
161	33450-B4-161	Toner for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier - C2551S Cyan	

162	33450-B4-162	Toner for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier - C2551S Yellow	
163	33450-B4-163	Toner for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier - C2551S Magenta	
164	33450-B4-164	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Black	
165	33450-B4-165	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-yellow	
166	33450-B4-166	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Meganta	
167	33450-B4-167	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Cyan	
168	33450-B4-168	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Black	
169	33450-B4-169	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-yellow	
170	33450-B4-170	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Magenta	
171	33450-B4-171	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Cyan	
172	33450-B4-172	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Black	
173	33450-B4-173	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Cyan	
174	33450-B4-174	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Yellow	
175	33450-B4-175	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Magenta	
176	33450-B4-176	Drum Kit for Ricoh Aficio MPC 3002 Colour Photo Copier-Black	
177	33450-B4-177	Drum Kit for Ricoh Aficio MPC 3002 Colour Photo Copier-Cyan / Yellow / Magenta	

178	33450-B4-178	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Black	
179	33450-B4-179	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Cyan	
180	33450-B4-180	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Yellow	
181	33450-B4-181	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Magenta	
182	33450-B4-182	Black Toner Cartridge for Samsung - ML 2161/SCX 3401/ML 2166W/SCX 3046W - Samsung MLT-D101S Black	
183	33450-B4-183	Black Toner Cartridge for Samsung - ML 1666/ML 1866/1676/SCX 3201 - Samsung MLT-D1043S	
184	33450-B4-184	Black Toner Cartridge for Samsung - ML 2951ND/XIP,SCX 4728FD,SCX 4728D / SCX 4701ND - Samsung MLT-D103S	
185	33450-B4-185	Black Toner Cartridge (High Yield) for Samsung - SL-M2071 / 2071W / 2071FW / SL-M2021 / 2021W / 2020W/ 2022W / 2070 / 2070W / 2078W - Samsung MLT-D111L H- Yield	
186	33450-B4-186	Black Toner Cartridge for Samsung - ML-3312ND, SCX-4835FR, SCX-5639FR/SCX-5739FW,ML-3310ND,ML- 3710ND , Black Toner Std	
187	33450-B4-187	Black Toner Cartridge for Samsung - SL-M3320ND/SL-M2820ND/SL-M4020ND/SL- M3370FD/SL-M3870FD - Samsung MLT- D203S	
188	33450-B4-188	Black Toner Cartridge (High Yield) for Samsung - ML 2830W, ML 2830DW - Samsung MLT-D115L H-Yield	
189	33450-B4-189	Black Toner Cartridge for (High Yield) Samsung - SL-M2626/SL-2826ND/SL-2876ND/SL-2876FD	

190	33450-B4-190	Black Toner Cartridge for Samsung - ML 2851ND	
191	33450-B4-191	Black Toner Cartridge for Samsung - ML 1610/ML-2010/ML-2571N - Samsung MLT- D119S	
192	33450-B4-192	Black Toner Cartridge for Samsung - 1911/ML 2581N/SCX-4601/SCX4623FH/FN/SF651P - Samsung MLT-D1053S	
193	33450-B4-193	Black Toner Cartridge for Samsung - ML 1640/ML 2240 SERIES - Samsung MLT-D108S	
194	33450-B4-194	Black Toner Cartridge for Samsung - SCX 4725/SCX-4021S/XIP,SCX-4321NS/XIP,SCX-4521FS/XIP,SCX 4521NS/XIP - Samsung SCX-D4725A	
195	33450-B4-195	Black Toner Cartridge (High Yield) Samsung - ML 2951ND/XIP,SCX 4728FD,SCX 4728D / SCX 4701ND - Samsung MLT-D103L H- Yield	
196	33450-B4-196	Black Toner Cartridge (High Yield) for Samsung - SL-K2200/K2200ND - Samsung MLT-D707L H-Yield	
197	33450-B4-197	Black Toner Cartridge for Samsung - S-IN-SCX 8128NA /XIP - Samsung MLT-D709S	
198	33450-B4-198	Black Toner Cartridge for Samsung - SL-K3250NR/XIP - Samsung MLT-D704S	
199	33450-B4-199	Black Toner Cartridge for Samsung - SL-K4350LX/XIP - Samsung MLT-D708S	
200	33450-B4-200	Black Toner Cartridge(High Yield) for Samsung - SL-K4350LX/XIP - Samsung MLT-D708L H-Yield	
201	33450-B4-201	Black Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT-K506S	
202	33450-B4-202	Cyan Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT-C506S	

203	33450-B4-203	Magenta Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT-M506S	
204	33450-B4-204	Yellow Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT-Y506S	
205	33450-B4-205	Black Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT-K609S	
206	33450-B4-206	Yellow Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT-Y609S	
207	33450-B4-207	Cyan Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT-C609S	
208	33450-B4-208	Magenta Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT- M609S	
209	33450-B4-209	Black Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-K406S	
210	33450-B4-210	Yellow Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-Y406S	
211	33450-B4-211	Magenta Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-M406S	
212	33450-B4-212	Cyan Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-C406S	
213	33450-B4-213	Black Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT-K409S	
214	33450-B4-214	Cyan Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT-C409S	
215	33450-B4-215	Magenta Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT- M409S	

216	33450-B4-216	Yellow Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT-Y409S	
217	33450-B4-217	Black Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung CLT-K809S	
218	33450-B4-218	Yellow Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung CLT-Y809S	
219	33450-B4-219	Cyan Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung CLT-C809S	
220	33450-B4-220	Magenta Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung CLT-M809S	
221	33450-B4-221	Black Toner Cartridge for Samsung - SL-X3220NR/SL-X3280NR - Samsung CLT-K804S	
222	33450-B4-222	Cyan Toner Cartridge for Samsung - SL-X3220NR/SL-X3280NR - Samsung CLT-C804S	
223	33450-B4-223	Yellow Toner Cartridge for Samsung - SL-X3220NR/SL-X3280NR - Samsung CLT-Y804S	
224	33450-B4-224	Magenta Toner Cartridge for Samsung - SL- X3220NR/SL-X3280NR - Samsung CLT- M804S	
225	33450-B4-225	Imaging Unit for Samsung - SL-M2626/SL-2826ND/SL-2876ND/SL-2876FD	
226	33450-B4-226	Imaging Unit for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-R406	
227	33450-B4-227	Imaging Unit for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT-R409	
228	33450-B4-228	Imaging Unit for Samsung - SL-K2200/K2200ND - Samsung MLT-R707	
229	33450-B4-229	Imaging Unit for Samsung - S-IN-SCX 8128NA /XIP , Imaging Unit - Samsung MLT -R709	

230	33450-B4-230	Imaging Unit for Samsung - SL-K3250NR/XIP - Samsung MLT-R704	
231	33450-B4-231	Imaging Unit for Samsung - SCX-8128NA/XIP - Samsung CLT-R809	
232	33450-B4-232	Imaging Unit for Samsung - SL-X3220NR/XIP - Samsung CLT-R804	
233	33450-B4-233	Imaging Unit for Samsung - SL-K4350LX/XIP - Samsung MLT-R708	
234	33450-B4-234	Cyan Imaging Unit for Samsung - CLX-9250ND/9350ND - Samsung CLT-R607C	
235	33450-B4-235	Black Imaging Unit for Samsung - CLX-9250ND/9350ND - Samsung CLT-R607K	
236	33450-B4-236	Magenta Imaging Unit for Samsung - CLX-9250ND/9350ND - Samsung CLT-R607M	
237	33450-B4-237	Yellow Imaging Unit for Samsung - CLX-9250ND/9350ND - Samsung CLT-R607Y	
238	33450-B4-238	WASTE TONER BOX for Samsung - SCX-8128NA/XIP, SCX-8123NA - Samsung MLT-W709	
239	33450-B4-239	Paper Transfer Belt for Samsung - CLP 620/CLP 670/CLX 6220 - Samsung CLT-T508	
240	33450-B4-240	Toner Collection Unit for Samsung - SL-X3220NR/XIP - Samsung CLT-W808	
241	33450-B4-241	Paper Transfer Belt for Samsung - CLP 610 ND / 660 / CLX 6210 / CLX 6240 - Samsung CLP-T660B	
242	33450-B4-242	Toner Collection Unit for Samsung - CLP-680ND/XIP - Samsung CLT-W506	
243	33450-B4-243	Ribbon Cartridge for Lipi Line Matrix Printer Model 6306/6215/6218 Yield - 4 Million Characters	
244	33450-B4-244	Ribbon Cartridge for LIPI Line matrix Printer Model -6605/6610/6620/ 6805/6810/681/6820 Yield - 9000 Pages	

245	33450-B4-245	Ribbon Cartridge for LIPI Line matrix Printer Model -6605/6610/6620/ 6805/6810/681/6820 Yield - 17000 Pages	
246	33450-B4-246	Ribbon Cartridge for LIPI Line matrix Printer Model RIBBON STANDARD OPEN PRINT HD 1 PACK 03H/06H/08H/HD –P-8000 HD Printer Yield – 18000 Pages	
247	33450-B4-247	Ribbon Cartridge for Lipi High Speed Dot matrix printer Model-T2155/T2170/T2265+/2280+ Yield - 20 Million Characters	
248	33450-B4-248	Ribbon Cartridge for Lipi High Speed Dot matrix Printer Model T2610 – 5 Million Characters	
249	33450-B4-249	Ribbon Cartridge for Lipi High Speed Dot matrix printer Model-T2155/T2170/T2265+/2280+ -15 Million Characters	
250	33450-B4-250	Ribbon Cartridge for Lipi Pass Book Printer Model PB2	
251	33450-B4-251	Toner for Brother Printer - HL-L2321D, HL-L2361DN, HL-2366DW, DCP-L2520D, DCP-L2541DW, MFC-L2701D, MFC-2701DW, Model TN-2365, Yeild - 2500 Pages	
252	33450-B4-252	Drum for Brother Printer - HL-L2321D, HL-L2361DN, HL-2366DW, DCP-L2520D, DCP-L2541DW, MFC-L2701D, MFC-2701DW, Model DR-2365, Yeild - 12000 Pages	
253	33450-B4-253	Toner for Brother Printer - HL-L2351DW, DCP-L2531DW, Model TN-2465, Yeild - 3000 Pages	
254	33450-B4-254	Toner for Brother Printer - HL-L2351DW, DCP-L2531DW, Model TN-2469, Yeild - 4000 PGS	
255	33450-B4-255	Drum for Brother Printer - HL-L2351DW, DCP-L2531DW, Model DR-2465, Yeild - 12000 Pages	

256	33450-B4-256	Toner for Brother Printer - HL-B2000D, HL-B2080DW, DCP-B7500D, DCP-B7535DW, MFC-B7715DW, Model TN-B021, Yeild -2600 Pages	
257	33450-B4-257	Drum for Brother Printer - HL-B2000D, HL-B2080DW, DCP-B7500D, DCP-B7535DW, MFC-B7715DW, Model DR-B021, Yeild -12000 Pages	
258	33450-B4-258	Toner for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model TN-3428, Yeild -3000 Pages	
259	33450-B4-259	Toner for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model TN-3448, Yeild -8000 PGS	
260	33450-B4-260	Toner for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model TN-3478, Yeild -12000 PGS	
261	33450-B4-261	Drum for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model DR-3455, Yeild -30000 Pages	
262	33450-B4-262	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model TN-267BK, Yeild -3000 PGS	
263	33450-B4-263	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model TN-267C, Yeild -2300 PGS	
264	33450-B4-264	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model TN-267M, Yeild -2300 PGS	
265	33450-B4-265	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model TN-267Y, Yeild -2300 PGS	

266	33450-B4-266	Black Drum for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Yeild - 30000 Pages	
267	33450-B4-267	Yellow Drum for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Composite Yeild -18000 Pages Each	
268	33450-B4-268	Cyan Drum for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Yeild - 18000 Pages Each	
269	33450-B4-269	Megenta for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Yeild - 18000 Pages Each	
270	33450-B4-270	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-261BK, Yeild -2500 Pages	
271	33450-B4-271	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-261C, Yeild -1400 PGS	
272	33450-B4-272	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-261M, Yeild -1400 PGS	
273	33450-B4-273	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-261Y, Yeild -1400 PGS	
274	33450-B4-274	Black Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each	
275	33450-B4-275	Cyan Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each	
276	33450-B4-276	Megenta Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each	

277	33450-B4-277	Yellow Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each	
278	33450-B4-278	Toner for Brother Printer - HL-5440D,HL-5450DN,MFC-8910DW, Model TN-3220, Yeild -3000 Pages	
279	33450-B4-279	Toner for Brother Printer - HL-5440D,HL-5450DN,MFC-8910DW, Model TN-3350, Yeild -8000 PGS	
280	33450-B4-280	Toner for Brother Printer - HL-5440D,HL-5450DN,MFC-8910DW, Model TN-3370, Yeild -12000 PGS	
281	33450-B4-281	Toner for Brother Printer - FAX-2840, Model TN-2260, Yeild -1200 Pages	
282	33450-B4-282	Toner for Brother Printer - FAX-2840, Model TN-2280, Yeild -2600 PGS	
283	33450-B4-283	Drum for Brother Printer - FAX-2840, Model DR-2255, Yeild -12000 Pages	
284	33450-B4-284	Toner for Brother Printer - HL-1111,1201,1211w,1511,1514,1601,1811,1911,1616 Model TN-1020, Yeild -1500 PGS	
285	33450-B4-285	Drum for Brother Printer - HL-1111,,1201,1211w,1511,1514,1601,1811,1911,1616 Model DR-1020, Yeild -10000 PGS	
286	33450-B4-286	Black Ink for Epson Printer Model - M100 / M105,Yeild-6000 Pages	
287	33450-B4-287	Black Ink for Epson Printer Model - M1100, M1120, M1140, M1170, M1180, M2110, M2120, M2140, M2170, M3140, M3170, M3180 - Yeild-6000 Pages	
288	33450-B4-288	Black Ink for Epson Printer Model - L130 - Yeild-4500 pages	
289	33450-B4-289	Cyan Ink for Epson Printer Model - L130 - Yeild-7500 pages	
290	33450-B4-290	Megenta Ink for Epson Printer Model - L130 - Yeild-7500 pages	

291	33450-B4-291	Yellow Ink for Epson Printer Model - L130 - Yeild-7500 pages	
292	33450-B4-292	Black Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150, L3156, L5190 - Yeild-4500 pages	
293	33450-B4-293	Cyan Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150, L3156, L5190 - Composite Yeild-7500 pages	
294	33450-B4-294	Megenta Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150, L3156, L5190 - Composite Yeild-7500 pages	
295	33450-B4-295	Yellow Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150, L3156, L5190 - Composite Yeild-7500 pages	
296	33450-B4-296	Black Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Yeild-7500 pages	
297	33450-B4-297	Cyan Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Composite Yeild-6000 pages	
298	33450-B4-298	Megenta Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Composite Yeild-6000 pages	
299	33450-B4-299	Yellow Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Composite Yeild-6000 pages	
300	33450-B4-300	Black Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Yeild-7500 pages	
301	33450-B4-301	Cyan Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Composite Yeild-6000 pages	
302	33450-B4-302	Megenta Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Composite Yeild-6000 pages	
303	33450-B4-303	Yellow Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Composite Yeild-6000 pages	

304	33450-B4-304	Black Ink for Epson Printer Model - L1300,Yeild-7100 pages (A4)	
305	33450-B4-305	Cyan Ink for Epson Printer Model - L1300,Composite Yeild-5500 pages (A4)	
306	33450-B4-306	Megenta Ink for Epson Printer Model- L1300,Composite Yeild-5500 pages (A4)	
307	33450-B4-307	Yellow Ink for Epson Printer Model- L1300,Composite Yeild-5500 pages (A4)	
308	33450-B4-308	Black Ink for Epson Printer Model- L1455,Yeild-7500 pages (A4)	
309	33450-B4-309	Cyan Ink for Epson Printer Model- L1455,Composite Yeild-6000 pages (A4)	
310	33450-B4-310	Megenta Ink for Epson Printer Model- L1455,Composite Yeild-6000 pages (A4)	
311	33450-B4-311	Yellow Ink for Epson Printer Model- L1455,Composite Yeild-6000 pages (A4)	
312	33450-B4-312	Black Ink for Epson Printer Model-WF-M5298, WF-M5799,Yeild-XL Pack: 40,000 Pages	
313	33450-B4-313	Maintanence Box Ink Epson Printer Model-WF-M5298, WF-M5799	
314	33450-B4-314	Black Ink for Epson Printer Model-WF-C5790,Yeild-XL Pack: 10,000 Pages	
315	33450-B4-315	Cyan Ink for Epson Printer Model-WF-C5790,Composite Yeild-XL Pack: 5000 Pages	
316	33450-B4-316	Megenta Ink for Epson Printer Model-WF-C5790,Composite Yeild-XL Pack: 5000 Pages	
317	33450-B4-317	Yellow Ink for Epson Printer Model-WF-C5790,Composite Yeild-XL Pack: 5000 Pages	
318	33450-B4-318	Maintanence Box for Epson Printer Model-WF-C5790	
319	33450-B4-319	Black Ink for Epson Printer Model-WF-C579R,Yeild-50,000 pages	
320	33450-B4-320	CYan Ink for Epson Printer Model-WF-C579R,Composite Yeild-20,000 pages	
321	33450-B4-321	Megenta Ink for Epson Printer Model-WF-C579R,Composite Yeild-20,000 pages	

322	33450-B4-322	Yellow Ink for Epson Printer Model-WF-C579R,Composite Yeild-20,000 pages	
323	33450-B4-323	Maintanence Box for Epson Printer Model-WF-C579R	
324	33450-B4-324	Black Ink for Epson Printer Model-WF-C869R,Yeild-86,000 pages (A4)	
325	33450-B4-325	Cyan Ink for Epson Printer Model-WF-C869R,Composite Yeild-84,000 pages	
326	33450-B4-326	Megenta Ink for Epson Printer Model-WF-C869R,Composite Yeild-84,000 pages	
327	33450-B4-327	Yelow Ink for Epson Printer Model-WF-C869R,Composite Yeild-84,000 pages	
328	33450-B4-328	Maintanence Ink for Epson Printer Model-WF-C869R	
329	33450-B4-329	Black Ink for Epson Printer Model-WF-C878R, WF-C879R,Yeild-86,000 pages (A4)	
330	33450-B4-330	Cyan Ink for Epson Printer Model-WF-C878R, WF-C879R,Composite Yeild-20,000 pages	
331	33450-B4-331	Megenta Ink for Epson Printer Model-WF-C878R, WF-C879R,Composite Yeild-20,000 pages	
332	33450-B4-332	Yellow Ink for Epson Printer Model-WF-C878R, WF-C879R,Composite Yeild-20,000 pages	
333	33450-B4-333	Maintanence Boxfor Epson Printer Model-WF-C878R, WF-C879R	
334	33450-B4-334	Black Ink for Epson Printer Model-WF-M20590,Yeild-60,000 pages(A4) x 2 nos	
335	33450-B4-335	Cyan Ink for Epson Printer Model-WF-M20590,Composite Yeild-20,000 pages	
336	33450-B4-336	Megenta Ink for Epson Printer Model-WF-M20590,Composite Yeild-20,000 pages	
337	33450-B4-337	Yellow Ink for Epson Printer Model-WF-M20590,Composite Yeild-20,000 pages	
338	33450-B4-338	Maintanence Box for Epson Printer Model-WF-M20590	
339	33450-B4-339	Black Ink for Epson Printer Model-WF-C17590,Yeild-50,000 Pages(A4) x 2 nos	

340	33450-B4-340	Cyan Ink for Epson Printer Model-WF-C17590,Composite Yeild-50,000 Pages	
341	33450-B4-341	Megenta Ink for Epson Printer Model-WF-C17590,Composite Yeild-50,000 Pages	
342	33450-B4-342	Yellow Ink for Epson Printer Model-WF-C17590,Composite Yeild-50,000 Pages	
343	33450-B4-343	Maintanence Box for Epson Printer Model-WF-C17590	
344	33450-B4-344	Black Ink for Epson Printer Model-WF-C20590,Yeild-50,000 Pages(A4) x 2 nos	
345	33450-B4-345	Cyan Ink for Epson Printer Model-WF-C20590,Composite Yeild-50,000 Pages	
346	33450-B4-346	Megenta Ink for Epson Printer Model-WF-C20590,Composite Yeild-50,000 Pages	
347	33450-B4-347	Yellow Ink for Epson Printer Model-WF-C20590,Composite Yeild-50,000 Pages	
348	33450-B4-348	Maintanence Box for Epson Printer Model-WF-C20590	
349	33450-B4-349	Black Ink for Epson Printer Model-WF-C20600,Yeild-50,000 Pages(A4) x 2 nos	
350	33450-B4-350	Cyan Ink for Epson Printer Model-WF-C20600,Composite Yeild-50,000 Pages	
351	33450-B4-351	Megenta Ink for Epson Printer Model-WF-C20600,Composite Yeild-50,000 Pages	
352	33450-B4-352	Yellow Ink for Epson Printer Model-WF-C20600,Composite Yeild-50,000 Pages	
353	33450-B4-353	Maintanence Box for Epson Printer Model-WF-C20600	
354	33450-B4-354	Black Ink for Epson Printer Model-WF-C20750,Yeild-50,000 Pages(A4) x 2 nos	
355	33450-B4-355	Cyan Ink for Epson Printer Model-WF-C20750,Composite Yeild-50,000 Pages	
356	33450-B4-356	Yellow Ink for Epson Printer Model-WF-C20750,Composite Yeild-50,000 Pages	
357	33450-B4-357	Megenta Ink for Epson Printer Model-WF-C20750,Composite Yeild-50,000 Pages	
358	33450-B4-358	Maintanence Box for Epson Printer Model-WF-C20750	
359	33450-B4-359	Black Ink for Epson Printer Model-WF-C21000,Yeild-50,000 Pages(A4) x 2 nos	

360	33450-B4-360	Cyan Ink for Epson Printer Model-WF-C21000,Composite Yeild-50,000 Pages	
361	33450-B4-361	Megenta Ink for Epson Printer Model-WF-C21000,Composite Yeild-50,000 Pages	
362	33450-B4-362	Yellow Ink for Epson Printer Model-WF-C21000,Composite Yeild-50,000 Pages	
363	33450-B4-363	Epson - Black Fabric Ribbon Cartridge (17.7 Metres) Ribbon Life - 3 Million Characters for printer-LX 310	
364	33450-B4-364	Epson - Black Fabric Ribbon Cartridge (17.7 Metres) Ribbon Life - 3 Million Characters for printer-LQ 310	
365	33450-B4-365	Epson - Black Fabric Ribbon Cartridge (16.75 Metres) Ribbon Life - 9 Million Characters for printer-DLQ-3000/3000+/3500	
366	33450-B4-366	Epson - Black – Fabric Ribbon Cartridge (17.0 Meters) Ribbon Life – 7.50 Million Characters for printer-FX-890/FX-890II/N	
367	33450-B4-367	Epson - Fabric Ribbon Cartridge (32 Metres) Ribbon Life - 12 Million Characters (14 dpc) for printer-FX-2175/FX-2175II/N	
368	33450-B4-368	Epson - Fabric Ribbon Cartridge (32 Metres) Ribbon Life - 12 Million Characters (14 dpc) for printer-FX-2190/FX-2190II/N	
369	33450-B4-369	Epson - Fabric Ribbon Cartridge, (70 Metres) Ribbon Life - 15 Million Characters (48 dpc) for printer-DFX-9000	
370	33450-B4-370	Epson - 24 Pin 1.3 cm / 1/2" Fabric Ribbon Cartridge (12.40 Metres/40.68 Feet) Ribbon Life - 2 Million Characters (48 dpc) for printer-LQ-670/N	
371	33450-B4-371	Epson - 24 Pin Narrow Fabric Ribbon Cartridge (10 Metres) Ribbon Life - 2.5 Million Characters (48 dpc) for printer-LQ-1310	

372	33450-B4-372	Epson - Fabric Ribbon Cartridge (32 Metres) Ribbon Life - 8 Million Characters (48 dpc) for printer-LQ-2090/LQ-2090II/N	
373	33450-B4-373	Epson - Black - Ribbon Cartridge, (60 Metres) Ribbon Life - 8 Million Characters (48 dpc) for printer-LQ-2190	
374	33450-B4-374	Printronix P7 EC Ribbon Cartridges	
375	33450-B4-375	HP LaserJet Pro MFP M128fn,M128fw,M126nw, M226dw,M202dw,M1108,M1106 - HP CC388A Blk Contr LJ Toner Cartridge	
376	33450-B4-376	HP LaserJet ProMFP M138FNW,M136NW - HP 110A Blk Original Laser Toner Crtg	
377	33450-B4-377	HP LaserJet ProM403dn,M427fdw - HP 28A Black Original LaserJet Toner Cartridge	
378	33450-B4-378	HP LaserJet ProM429fdw,M405dn - HP 77A Black LaserJet Toner Cartridge	
379	33450-B4-379	HP LaserJet Pro M104a Printer - HP 18A Blk Contract LJ Toner Cartridge	
380	33450-B4-380	HP LaserJet Pro M104a Printer - HP 19A Original LaserJet Imaging Drum	
381	33450-B4-381	HP LaserJet Pro M203, M227 - HP 30A Black LaserJet Toner Cartridge	
382	33450-B4-382	HP LaserJet Pro M203, M228 - HP 32A LaserJet Imaging Drum	
383	33450-B4-383	HP LaserJet Pro M436dn,M436nda - HP 56A Black Original LaserJet Toner Cartridge	
384	33450-B4-384	HP LaserJet Pro M436dn,M436nda - HP 56X Black Original LaserJet Toner Cartridge	
385	33450-B4-385	HP LaserJet Pro M436dn,M436nda - HP 57A Original LaserJet Imaging Drum	
386	33450-B4-386	HP LaserJet Pro M440dn.M440nda - HP 57A Original LaserJet Imaging Drum	
387	33450-B4-387	HP LaserJet Pro M440dn.M440nda - HP 335A Black Original LaserJet Toner Cartridge	

388	33450-B4-388	HP LaserJet Pro M440dn.M440nda - HP 335X Black Original LaserJet Toner Cartridge	
389	33450-B4-389	HP Color LaserJet Pro MFP M479dw - HP 416A Black LaserJet Toner Cartridge	
390	33450-B4-390	HP Color LaserJet Pro MFP M479dw - HP 416A Cyan LaserJet Toner Cartridge	
391	33450-B4-391	HP Color LaserJet Pro MFP M479dw - HP 416A Yellow LaserJet Toner Cartridge	
392	33450-B4-392	HP Color LaserJet Pro MFP M479dw - HP 416A Magenta LaserJet Toner Cartridge	
393	33450-B4-393	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Black LaserJet Toner Cartridge	
394	33450-B4-394	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Cyan LaserJet Toner Cartridge	
395	33450-B4-395	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Yellow LaserJet Toner Cartridge	
396	33450-B4-396	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Magenta LaserJet Toner Cartridge	
397	33450-B4-397	HP Color LaserJet Pro M254dw - HP 202A Original Black LaserJet Toner Cartridge	
398	33450-B4-398	HP Color LaserJet Pro M254dw - HP 202A Original Cyan LaserJet Toner Cartridge	
399	33450-B4-399	HP Color LaserJet Pro M254dw - HP 202A Original Yellow LaserJet Toner Cartridge	
400	33450-B4-400	HP Color LaserJet Pro M254dw - HP 202A Original Magenta LaserJet Toner Cartridge	
401	33450-B4-401	HP Color LaserJet Pro MFP M377dw - HP 410A Black Original LaserJet Cartridge	
402	33450-B4-402	HP Color LaserJet Pro MFP M377dw - HP 410A Cyan Original LaserJet Cartridge	
403	33450-B4-403	HP Color LaserJet Pro MFP M377dw - HP 410A Yellow Original LaserJet Cartridge	
404	33450-B4-404	HP Color LaserJet Pro MFP M377dw - HP 410A Magenta Original LaserJet Cartridge	

405	33450-B4-405	HP Color LaserJet Pro M452dw,M477fdw - HP 410A Black Original LaserJet Cartridge	
406	33450-B4-406	HP Color LaserJet Pro M452dw ,M477fdw - HP 410A Cyan Original LaserJet Cartridge	
407	33450-B4-407	HP Color LaserJet Pro M452dw,M477fdw - HP 410A Yellow Original LaserJet Cartridge	
408	33450-B4-408	HP Color LaserJet Pro M452dw,M477fdw - HP 410A Magenta Original LaserJet Cartridge	
409	33450-B4-409	HP LaserJet Pro MFP M72625dn,M72630dn - HP Black Contract LaserJet Toner	
410	33450-B4-410	HP LaserJet Pro E72535dn - HP W9005MC Black Managed LaserJet Tone	
411	33450-B4-411	HP LaserJet Pro E72535dn,72625dn,72630dn - HP W9006MC Black Managed LaserJet Imaging Drum	
412	33450-B4-412	HP Color LaserJet Pro CP5225dn - HP 307A Black Original LaserJet Cartridge	
413	33450-B4-413	HP Color LaserJet Pro CP5225dn - HP 307A Cyan Original LaserJet Cartridge	
414	33450-B4-414	HP Color LaserJet Pro CP5225dn - HP 307A Yellow Original LaserJet Cartridge	
415	33450-B4-415	HP Color LaserJet Pro CP5225dn - HP 307A Magenta Original LaserJet Cartridge	
416	33450-B4-416	HP LaserJet Pro M700,M712 - HP 14A Black LaserJet Toner Cartridge	
417	33450-B4-417	HP LaserJet M1566,,1606 - HP 78A Black LaserJet Toner Cartridge	
418	33450-B4-418	HP LaserJet M1020,M1005,M3015, - HP 12A Black LaserJet Toner Cartridge	
419	33450-B4-419	HP LaserJet M607,M608 - HP 37A Black LaserJet Toner Cartridge	
420	33450-B4-420	HP Laser jet MFP 82560dn - HP Black Managed LaserJet Toner	

421	33450-B4-421	HP Laser jet MFP 82560dn - HP Black Managed LaserJet Imaging Drum	
422	33450-B4-422	HP Laser jet MFP E77830dn - HP W9040MC Black Managed LaserJet Toner	
423	33450-B4-423	HP Laser jet MFP E77830dn - HP W9041MC Cyan Managed LaserJet Toner	
424	33450-B4-424	HP Laser jet MFP E77830dn - HP W9042MC Yellow Managed LaserJet Toner	
425	33450-B4-425	HP Laser jet MFP E77830dn - HP W9043MC Magenta Managed LaserJet Toner	
426	33450-B4-426	HP Laser jet MFP E87640dn,E87660 - HP W9050MC Black Managed LaserJet Toner	
427	33450-B4-427	HP Laser jet MFP E87640dn,E87660 - HP W9051MC Cyan Managed LaserJet Toner	
428	33450-B4-428	HP Laser jet MFP E87640dn,E87660 - HP W9052MC Yellow Managed LaserJet Toner	
429	33450-B4-429	HP Laser jet MFP E87640dn,E87660 - HP W9053MC Magenta Managed LaserJet Toner	
430	33450-B4-430	HP Laser jet M551 - HP 507A Black Managed LaserJet Toner	
431	33450-B4-431	DVD-R Media 4.7 GB, Jewel Box	
432	33450-B4-432	DVD- R/W Media, 4.7 GB, Jewel Box	
433	33450-B4-433	External DVD Writer (1year warranty)	
434	33450-B4-434	1 TB External Hard Disk Drive (1year warranty)	
435	33450-B4-435	2 TB External Hard Disk Drive (1year warranty)	
436	33450-B4-436	4 TB External Hard Disk Drive (1year warranty)	
437	33450-B4-437	500 GB SSD External Hard Drive (1year warranty)	
438	33450-B4-438	1 TB SSD External Hard Drive (1year warranty)	
439	33450-B4-439	16 GB Pen Drive (1year warranty) Class 10	
440	33450-B4-440	32 GB Pen Drive (1year warranty) Class	

		10	
441	33450-B4-441	64 GB Pen Drive (1year warranty) Class 10	
442	33450-B4-442	128 GB Pen drive (1year warranty) Class 10	
443	33450-B4-443	16 GB Pen Drive With Type C and USB2.0	
444	33450-B4-444	32 GB Pen drive With Type C and USB2.0	
445	33450-B4-445	64 GB Pendrive With Type C and USB2.0	
446	33450-B4-446	128 GB Pendrive With Type C and USB2.0	
447	33450-B4-447	USB Mouse with pad (1 year warranty)	
448	33450-B4-448	Membrane Keyboard (1 year warranty)	
449	33450-B4-449	Mechanical Keyboard (1 year warranty)	
450	33450-B4-450	Wireless Keyboard and Mouse Combo (1 year warranty)	
451	33450-B4-451	Wireless Keyboard (1 year warranty)	
452	33450-B4-452	Wireless mouse (1year warranty)	
453	33450-B4-453	Mic with Stand (Table top for conference room)	
454	33450-B4-454	Head Phone With Mike	
455	33450-B4-455	Wireless Head Phone	
456	33450-B4-456	Speaker 2.1	
457	33450-B4-457	Bluetooth Speaker 20W with USB ports	
458	33450-B4-458	USB Speaker 5W	
459	33450-B4-459	VGA Cable 1.5 Meter	
460	33450-B4-460	VGA Cable 5 Meter	
461	33450-B4-461	VGA Cable 10 Meter	
462	33450-B4-462	VGA Cable 15 Meter	
463	33450-B4-463	HDMI Cable 1.5 Meter	
464	33450-B4-464	HDMI Cable 5 Meter	
465	33450-B4-465	HDMI Cable 10 Meter	
466	33450-B4-466	HDMI Cable 15 Meter	
467	33450-B4-467	Power Cable 10 Meter	
468	33450-B4-468	Power Cable 15 Meter	
469	33450-B4-469	Monitor 19 inch (1 year warranty)	
470	33450-B4-470	Monitor 21 inch (1 year warranty)	
471	33450-B4-471	Monitor 24 inch (1 year warranty)	
472	33450-B4-472	Monitor 27 inch (1 year warranty)	
473	33450-B4-473	Wifi Modem 150Mbps or above	

474	33450-B4-474	Wifi Modem 300Mbps or above	
475	33450-B4-475	Wifi Modem 1200Mbps or above	
476	33450-B4-476	10,000 mah Power Bank for Android Tablets (1 year warranty)	
477	33450-B4-477	2 Port VGA Splitter	
478	33450-B4-478	2 Port HDMI Splitter	
479	33450-B4-479	4 Port USB Hub	
480	33450-B4-480	PCI Ethernet Card for Wifi	
481	33450-B4-481	Wifi External Adapter	
482	33450-B4-482	MY book 2 TB Extrenal	
483	33450-B4-483	MY book 4 TB Extrenal	
484	33450-B4-484	MY book 6 TB Extrenal	
485	33450-B4-485	MY book 8 TB Extrenal	
486	33450-B4-486	Branded Laptop Carry Case	
487	33450-B4-487	Branded Sling Bag for Tablets	

A1.4.5 Category B5 – Apple Products

S.N	Product Code	Description	Item Quoted details along with Make & Model
		iPad	
1	33450-B5-001	iPad 10.2" Wifi + Cellular 128GB Storage	
2	33450-B5-002	iPad Air 10.9" Wifi + Cellular 256GB Storage	
3	33450-B5-003	iPad Pro 11" Wifi + Cellular 512GB Storage	
4	33450-B5-004	iPad Pro 12.9" Wifi + Cellular 512GB Storage	
		Laptop	
5	33450-B5-005	Mac Book Air 13" with 256 GB SSD	
6	33450-B5-006	Mac Book Air 13" with 512 GB SSD	
7	33450-B5-007	Mac Book Pro 13" with 256 GB SSD	
8	33450-B5-008	MacBook Pro 13" with 512 GB SSD	
		iMac (Desktop)	
9	33450-B5-009	iMac 24" (Desktop)	
		Accessories	
10	33450-B5-010	Apple Pencil (1st Gen) for iPad	
11	33450-B5-011	Apple Pencil (2nd Gen) for iPad Air and iPad Pro	
12	33450-B5-012	Smart Keyboard for iPad (8th generation)	
13	33450-B5-013	Smart Keyboard Folio for iPad Pro 11-inch (3rd generation) and iPad Air (4th generation) - US English	
14	33450-B5-014	AirPods with Charging Case	
15	33450-B5-015	Honeywell Type-C Ultra Doc	
16	33450-B5-016	MS office Home and Student for Mac	
17	33450-B5-017	Brief - 13" bag	
18	33450-B5-018	Flip Cases for i-pad (10.2"/10.9"/11"/12.9")	
19	33450-B5-019	Rugged Cases for i-pad (10.2"/10.9"/11"/12.9")	

A1.4.6 Category B6- Server and related items

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B6-001	Desktop server	
2	33450-B6-002	Tower Server Model : 1	
3	33450-B6-003	Tower Server Model : 2	
4	33450-B6-004	Rack 1U Model : 1	
5	33450-B6-005	Rack 2U Model : 1	
6	33450-B6-006	Rack 2U Model : 2	
7	33450-B6-007	Rack 4U Model:1	
8	33450-B6-008	Rack 1U (AMD)	
9	33450-B6-009	Rack 2U (AMD)	
10	33450-B6-010	High End Server Model:1	
11	33450-B6-011	High End Server Model:2	
12	33450-B6-012	High End Server Model:3	
13	33450-B6-013	High End Server Model:4	
14	33450-B6-014	Rack 4U Model:1 - T	
15	33450-B6-015	Rack 2U Model 2 - T	
16	33450-B6-016	RACK - 2U- 4 Processor -T	
17	33450-B6-017	Rack 4U Model : 2 - T	
18	33450-B6-018	Rack 2U Model : 1 - AT	
19	33450-B6-019	Rack 2U Model : 1 - BT	

		Addon items	
20	33450-B6-020	Intel Xeon Silver 4208 Processor	
21	33450-B6-021	Intel® Xeon® Silver 4110 Processor	
22	33450-B6-022	Intel® Xeon® Gold 5115 Processor	
23	33450-B6-023	Intel® Xeon® Gold 5215 Processor	
24	33450-B6-024	Intel® Xeon® Gold 6138 Processor	
25	33450-B6-025	Intel® Xeon® Gold 6148 Processor	
26	33450-B6-026	Intel® Xeon® Gold 6240 Processor	
27	33450-B6-027	AMD EPYC 72F3 Processor	
28	33450-B6-028	AMD EPYC 7262 Processor	
29	33450-B6-029	AMD EPYC 7313 Processor	
30	33450-B6-030	AMD EPYC 7413 Processor	
31	33450-B6-031	AMD EPYC 7513 Processor	
32	33450-B6-032	AMD EPYC 7713 Processor	
33	33450-B6-033	16 GB DDR4 RDIMM ECC Memory	
34	33450-B6-034	32 GB DDR4 ECC RDIMM Memory	
35	33450-B6-035	64 GB DDR4 ECC RDIMM Memory	
36	33450-B6-036	128GB DDR ECC LRDIMM Memory	
37	33450-B6-037	600GB SAS 12G 15K	
38	33450-B6-038	900GB SAS 12G 15K	
39	33450-B6-039	1.2TB SAS 12G 10K	
40	33450-B6-040	2.4TB SAS 12G 10K	

41	33450-B6-041	480GB SATA 6G SSD	
42	33450-B6-042	960GB SATA 6G Mixed UseSSD	
43	33450-B6-043	1.6TB SSD SAS Mix Use 12Gbps SSD	
44	33450-B6-044	3.84TB SSD SATA Read Intensive 6Gbps SSD	
45	33450-B6-045	3.84TB SSD SAS Read Intensive 12Gbps	
46	33450-B6-046	7.68TB SSD SAS Read Intensive 12Gbps	
47	33450-B6-047	1.6TB Enterprise NVMe Mixed Use AG Drive	
48	33450-B6-048	6.4TB Enterprise NVMe Mixed Use AG Drive	
49	33450-B6-049	2TB 7.2K RPM NLSAS 12Gbps Hot-Plug Hard Drive	
50	33450-B6-050	4TB 7.2K RPM NLSAS 12Gbps Hot-Plug Hard Drive	
51	33450-B6-051	8TB 7.2K RPM SAS 12Gbps Hot-plug Hard Drive	
52	33450-B6-052	12TB 7.2K RPM SAS 12Gbps Hot-plug Hard Drive	
53	33450-B6-053	16TB 7.2K RPM SAS 12Gbps Hot-plug Hard Drive	
54	33450-B6-054	16Gb Single Port Fibre Channel Host Bus Adapter	
55	33450-B6-055	16Gb Dual Port Fibre Channel Host Bus Adapter	
56	33450-B6-056	Ethernet 10Gb 2 port Adapter	
57	33450-B6-057	Ethernet 10Gb - 4 port Adapter	
58	33450-B6-058	Ethernet 1Gb 2 port Adapter	
59	33450-B6-059	Ethernet 1Gb - 4 port Adapter	
60	33450-B6-060	Ethernet 10Gb 2 port SFP+ Adapter	
61	33450-B6-061	10G SFP+ LC SR Transceiver	
62	33450-B6-062	10G SFP+ LC LR Transceiver	

63	33450-B6-063	2m Multimode OM3 LC/LC Optical Cable	
64	33450-B6-064	5m Multimode OM3 LC/LC Optical Cable	
65	33450-B6-065	15m Multimode OM3 LC/LC Optical Cable	
66	33450-B6-066	1x4 USB/PS2 KVM Console Switch	
67	33450-B6-067	1x4 KVM Console 6ft PS2 cable	
68	33450-B6-068	1x4 KVM Console 6ft USB cable	
69	33450-B6-069	0X1X8 G3 KVM Console Switch	
70	33450-B6-070	0X2X16 G3 KVM Console Switch	
71	33450-B6-071	1x1x8 G4 KVM IP Console Switch	
72	33450-B6-072	1x2x16 G4 KVM IP Console Switch	
73	33450-B6-073	KVM SFF USB Adapter	
74	33450-B6-074	8 Pack KVM SFF USB Adapter	
75	33450-B6-075	3ft Qty 4 KVM Cat5 cable	
76	33450-B6-076	6ft Qty 4 KVM Cat5 cable	
77	33450-B6-077	12ft Qty 4 KVM Cat5 cable	
78	33450-B6-078	20ft Qty 4 KVM Cat5 cable	
79	33450-B6-079	KVM SFF USB Interface Adapter	
80	33450-B6-080	KVM Console USB 2.0 Virtual Media CAC Interface Adapter	
81	33450-B6-081	KVM Console USB/Display Port Interface adapter	
82	33450-B6-082	KVM Console USB Interface adapter	
83	33450-B6-083	Membrane keyboard	
84	33450-B6-084	Mechanical keyboard	

85	33450-B6-085	Billingual keyboard	
86	33450-B6-086	Wireless keyboard	
87	33450-B6-087	USB Mouse	
88	33450-B6-088	HDD Enclosure	
89	33450-B6-089	GPU Riser Kit	
90	33450-B6-090	TCO-07 certified 18.5" / 19" TFT Monitor	
91	33450-B6-091	10GbE Optical Transceivers SFP+ 10Gb SR	
92	33450-B6-092	Intel Omni-Path Host Fabric Adapter 100 Series 1 Port PClex16	
93	33450-B6-093	Omni Path Cable, Passive Copper 2 Mtr	
94	33450-B6-094	Omni Path Cable, Passive Copper 5 Mtr	
95	33450-B6-095	NVIDIA® Tesla™ M10 32GB, Passive, Double Wide, Full Height GPU	
96	33450-B6-096	NVIDIA Ampere A100, PCIe, 250W, 40GB Passive, Double Wide, Full Height GPU	
		Inlieu Items	
97	33450-B6-097	Intel Xeon Silver 4214 Processor inlieu of Silver 4208 processor	
98	33450-B6-098	Intel Xeon Silver 4216 Processor inlieu of Silver 4208 processor	
99	33450-B6-099	Intel Xeon Gold 6248 Processor inlieu of Gold 6240 processor	
100	33450-B6-100	Intel Gold 5115 Inlieu of Silver 4110	
101	33450-B6-101	Intel Gold 6138 inlieu of Silver 4110	
102	33450-B6-102	Intel Gold 6148 In lieu of Silver 4110	
103	33450-B6-103	Intel Gold 6138 inlieu of Gold 5115	
104	33450-B6-104	Intel Gold 6148 inlieu of Gold 5115	
105	33450-B6-105	Intel Gold 6148 inlieu of Gold 6138	

106	33450-B6-106	Intel Gold 6338 in lieu of Gold 6330	
107	33450-B6-107	Intel Platinum 8352M in lieu of Gold 6330	
108	33450-B6-108	Intel Platinum 8380 in lieu of Gold 6330	
109	33450-B6-109	Intel Platinum 8352M in lieu of Gold 6338	
110	33450-B6-110	Intel Platinum 8380 in lieu of Gold 6338	
111	33450-B6-111	Intel Platinum 8380 in lieu of Platinum 8352M	
112	33450-B6-112	Intel Gold 5215 in lieu of Intel Silver 4208	
113	33450-B6-113	Intel Gold 6240 in lieu of Intel Silver 5215	
114	33450-B6-114	Intel Gold 6240 in lieu of Intel Gold 5215	
115	33450-B6-115	Intel Xeon Gold 6248 Processor in lieu of Gold 6240 Processor	
116	33450-B6-116	Intel Xeon Gold 6252 Processor in lieu of Gold 6240 Processor	
117	33450-B6-117	Intel Xeon Platinum 8270 Processor in lieu of Gold 6240 Processor	
118	33450-B6-118	Intel Xeon Platinum 8276 Processor in lieu of Gold 6240 Processor	
119	33450-B6-119	AMD EPYC 7313 in lieu of EPYC 7262	
120	33450-B6-120	AMD EPYC 7413 in lieu of EPYC 7262	
121	33450-B6-121	AMD EPYC 7513 in lieu of EPYC 7262	
122	33450-B6-122	AMD EPYC 7713 in lieu of EPYC 7262	
123	33450-B6-123	AMD EPYC 7313 in lieu of EPYC 72F3	
124	33450-B6-124	AMD EPYC 7413 in lieu of EPYC 72F3	
125	33450-B6-125	AMD EPYC 7513 in lieu of EPYC 72F3	
126	33450-B6-126	AMD EPYC 7713 in lieu of EPYC 72F3	
127	33450-B6-127	32GB Ram inlieu of 16Gb Ram	

| 128 | 33450-B6-128 | 64GB Ram inlieu of 16Gb ram | |
| 129 | 33450-B6-129 | 64GB ram inlieu of 32Gb ram | |

A1.4.7 Category B7- Biometric Systems

S.N	Product Code	Description	Item Quoted details along with Make & Model
		(Aadhaar Based)	
1	33450-B7-001	Android Tablet based Aadhaar Enabled Biometric Attendance Systems integrated with STQC Certified Finger Print Scanner	
2	33450-B7-002	Linux based Aadhaar Enabled Biometric Attendance Systems integrated with STQC Certified Finger Print Scanner	
3	33450-B7-003	Finger Print Enrolment Device (4+4+2 Fingers) with STQC Certified	
4	33450-B7-004	PALM Print Device Specification (Palm and 10 Fingers) with STQC Certified	
5	33450-B7-005	Single Fingerprint reader with STQC certified	
6	33450-B7-006	Single IRIS Scanner with STQC Certified	
7	33450-B7-007	Dual IRIS Scanner with with STQC Certified	
		(Non- Aadhaar Based)	
8	33450-B7-008	Linux based Biometric Attendance Systems(Non Aadhaar) (500 Users) with Battery Backup and Proximity Card Reader	
9	33450-B7-009	Linux Based Biometric Attendance Systems (Non Aadhaar) (1000 Users) with Battery Backup and Proximity Card Reader	
10	33450-B7-010	Linux Based Biometric Attendance Systems (Non Aadhaar) (2000 Users) with Battery Backup and Proximity Card Reader	

11	33450-B7-011	Linux Based Biometric Attendance Systems (Non Aadhaar) (10000 Users) with Battery Backup and Proximity Card Reader	
12	33450-B7-012	Linux Based Bio Metric System (Non Aadhaar) - with Face Recognition 500 User	
13	33450-B7-013	Linux Based Bio Metric System (Non Aadhaar) - with Face Recognition 1000 User	
14	33450-B7-014	Linux Based Bio Metric System (Non Aadhaar) - with Face Recognition 2000 User	
15	33450-B7-015	LINUX Tablet based Biometric Attendance Systems Long range Face 3000 User (2 meters)	
16	33450-B7-016	LINUX Tablet based Biometric Attendance Systems Long range Face 1000 User	
17	33450-B7-017	Multi Door Access Controller - Finger + Card (up to 4 Doors)	
18	33450-B7-018	Mifare Smart Card Based Door Controller for Access Control and Time Attendance (for Enrolment)	
19	33450-B7-019	Finger Print and Card Based Door Controller for Access Control and time Attendance with STQC Certified fingerprint sensor	
20	33450-B7-020	Single Fingerprint Device	
21	33450-B7-021	ID Card Printer	
	ADD ON		
22	33450-B7-022	Multi Door Access Controller - USB Single Finger Print Scanner for Enrolment (ADD ON For 032)	
23	33450-B7-023	Multi Door Access Controller - USB Card reader for Enrolment (ADD ON For 032)	
24	33450-B7-024	Finger Print Reader for Entry and Exit (ADD ON For 032)	
25	33450-B7-025	Proximity Card Reader for Entry and Exit (ADD ON For 032)	
26	33450-B7-026	Fingerprint and Mifare card based exit reader (ADD ON For 038)	
27	33450-B7-027	Wifi Facility for Linux Based Bio Metric Attendance System	

28	33450-B7-028	GPRS for Linux Based Bio Metric Attendance System	
29	33450-B7-029	Metal Enclosure with Lock and key (Linux Based Biometric Attendance System)	
30	33450-B7-030	Electronic Magnetic Lock (for Single Door) with suitable bracket and standard accessories	
31	33450-B7-031	Electronic Magnetic Lock (for Double Door) with suitable bracket and standard accessories	
32	33450-B7-032	Exit Manual Switch	
33	33450-B7-033	Finger Print Reader Optical (Non Aadhar based ADD ON)	
34	33450-B7-034	RFID Reader (proximity Card)	
35	33450-B7-035	RFID Reader (HID Card)	
36	33450-B7-036	RFID reader (Mifare Card)	
37	33450-B7-037	RFID Reader (HID Card) with Finger Print	
38	33450-B7-038	RFID reader (Mifare Card) with finger Print	
39	33450-B7-039	RFID reader (proximity Card) with finger Print	
40	33450-B7-040	USB Mifare card Reader for Enrolment	
41	33450-B7-041	USB HID card Reader for Enrolment	
42	33450-B7-042	Metal Enclosure with Lock and Key (Tablet based Biometric Attendance system)	
		INLIEU ITEMS	
43	33450-B7-043	HID Card Reader in lieu of Proximity card reader.	
44	33450-B7-044	Mifare Card reader in lieu of Proximity Card Reader	

A1.4.8 Category B8 – SSL, Digital Signature Certificates

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B8-001	Class-3 Digital Signature Certificates	
2	33450-B8-002	Cryptographic Token	

3	33450-B8-003	Server Certificate (Secure Sockets Layer-SSL	
4	33450-B8-004	Form Signing SDK and Encryption SDK	
5	33450-B8-005	Form Signing SDK	
6	33450-B8-006	Encryption SDK	
7	33450-B8-007	Class-3 Digital Signature Certificate for Signature - Individual	
8	33450-B8-008	Class-3 Digital Signature Certificate for Encryption - Individual	
9	33450-B8-009	Class-3 Digital Signature Certificate for Signature - Organisation	
10	33450-B8-010	Class-3 Digital Signature Certificate for Encryption - Organisation	
11	33450-B8-011	Class-3 Digital Signature Certificate COMBO for Organisation (Signature + Encryption)	
12	33450-B8-012	Server Certificate (Secure Sockets Layer-SSL) Single Server Single Domain	
13	33450-B8-013	Server Certificate (Secure Sockets Layer-SSL) Single Server Multi Domain	
14	33450-B8-014	Wildcard SSL Certificate	

A1.4.9 Category B9 – Cisco or Equivalent Products

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B9-001	Core Switch – Type 1 -Cisco Catalyst 9400 or Equivalent	
2	33450-B9-002	Core Switch – Type 2 - Cisco Catalyst 9600 or Equivalent	
3	33450-B9-003	Distribution Switch - Type 1 Cisco 9300 or Equivalent	
4	33450-B9-004	Distribution Switch - Type 2 Cisco 9300 or Equivalent	
5	33450-B9-005	Access Switch - Type 1- 24 Port (PoE) Cisco 9200 or Equivalent	
6	33450-B9-006	Access Switch - Type 2- 24 Port (Non-PoE) Cisco 9200 or Equivalent	

7	33450-B9-007	Access Switch - Type 3- 48 Port (PoE) Cisco 9200 or Equivalent	
8	33450-B9-008	Access Switch - Type 4- 48 Port (Non-PoE) Cisco 9200 or Equivalent	
9	33450-B9-009	Wireless LAN Controller Cisco 9800 (Up to 500 Access Point)	
10	33450-B9-010	Wireless LAN Controller Cisco 9800 (Up to 2000 Access Point)	
11	33450-B9-011	Access Point – Type 1 Cisco 9100 or Equivalent	
12	33450-B9-012	Access Point – Type 2 Cisco 9100 or Equivalent	
13	33450-B9-013	Access Point – Type 3 Cisco 9100 or Equivalent	
14	33450-B9-014	Access Point – Type 4 (Cloud Managed) Cisco Meraki MR36 or Equivalent	
15	33450-B9-015	Access Point – Type 5 (Cloud Managed) Cisco Meraki MR46 or Equivalent	
16	33450-B9-016	Access Switch - Type 1 (Cloud Managed) 24 Port (Non-PoE) Cisco Meraki MR125 or Equivalent	
17	33450-B9-017	Access Switch - Type 2 (Cloud Managed) 48 Port (Non-PoE) Cisco Meraki MR125 or Equivalent	
18	33450-B9-018	Access Switch - Type 3 (Cloud Managed) 24 Port (PoE) Cisco Meraki MR125 or Equivalent	
19	33450-B9-019	Access Switch - Type 4 (Cloud Managed) 48 Port (PoE) Cisco Meraki MR125 or Equivalent	
20	33450-B9-020	Access Switch - Type 5 (Cloud Managed) 8 Port (PoE) Cisco Meraki MR 120 or Equivalent	
21	33450-B9-021	Router Type 1 : CISCO 4451 Series or Equivalent	
22	33450-B9-022	Router Type 2 : CISCO 4331 Series or Equivalent	
23	33450-B9-023	Router Type 3 : CISCO 4321 Series or Equivalent	
24	33450-B9-024	Cisco Firepower Small Office (Model FPR-2130 or equivalent)	

25	33450-B9-025	Cisco Firepower Medium Office (Model FPR-4112 or equivalent)	
26	33450-B9-026	Cisco Firepower Large Office (Model FPR-4115 or equivalent)	
27	33450-B9-027	Rack Server - C220M5 or Equivalent/higher	
28	33450-B9-028	Cisco Blade Chassis 5108	
29	33450-B9-029	Cisco Blade server B220M5 or Equivalent/Higher	
30	33450-B9-030	Cisco Webex Meeting Suites	
32	33450-B9-031	Cisco Desk Pro	
33	33450-B9-032	Cisco Video Conference for small and Medium Room (Cisco WebEx Kit Mini)	
34	33450-B9-033	Cisco WebEx Room Kit	
35	33450-B9-034	Cisco Video Conference for Medium Conference Room Cisco WebEx Kit+ with 1 Nos of PTZ camera	
36	33450-B9-035	Cisco WebEx Desk USB Camera	
37	33450-B9-036	Cisco Meeting Server (Multiparty Conference Unit)	
38	33450-B9-037	Cisco IP PABX for 1000 Users	
39	33450-B9-038	Cisco IP Phone 7821	
40	33450-B9-039	Cisco IP Phone 8841	
41	33450-B9-040	Access Point (CISCO 9120 or equivalent)	
42	33450-B9-041	Firewall Cisco FPR4112-NGFW-K9 or equivalent	
43	33450-B9-042	Core Switch – Type 1 - Specification (Model : CISCO Catalyst 9400 or Equivalent)	
44	33450-B9-043	Router Type 1 : Specification (Model : ISR4451-X/K9 or Equivalent)	
45	33450-B9-044	Wireless LAN Controller Cisco 9800 (Up to 2000 Access Point) - Specification (Model : CISCO Catalyst 9800-40 or Equivalent)	
46	33450-B9-045	Distribution Switch - Type 1 Cisco 9300	

		or Equivalent	
47	33450-B9-046	Access Switch - Type 4- 48 Port (Non-PoE) Cisco 9200 or Equivalent	

A1.4.10 Category B10 – Linux Products

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B10-001	Red Hat Enterprise Linux for Virtual Datacenters, Premium - 1 Year	
2	33450-B10-002	Red Hat Enterprise Linux for Virtual Datacenters, Premium - 3 Years	
3	33450-B10-003	Red Hat Enterprise Linux for Virtual Datacenters, Standard - 1 Year	
4	33450-B10-004	Red Hat Enterprise Linux for Virtual Datacenters, Standard - 3 Years	
5	33450-B10-005	Red Hat Enterprise Linux Server, Premium (Physical or Virtual Nodes) - 1 year	
6	33450-B10-006	Red Hat Enterprise Linux Server, Premium (Physical or Virtual Nodes) - 3 years	
7	33450-B10-007	Red Hat Enterprise Linux Server, Standard (Physical or Virtual Nodes) - 1 year	
8	33450-B10-008	Red Hat Enterprise Linux Server, Standard (Physical or Virtual Nodes) -3 years	
9	33450-B10-009	Red Hat Enterprise Linux Server with Smart Management, Premium (Physical or Virtual Nodes) - 1 year	
10	33450-B10-010	Red Hat Enterprise Linux Server with Smart Management, Premium (Physical or Virtual Nodes) - 3 years	

11	33450-B10-011	Red Hat Enterprise Linux Server with Smart Management, Standard (Physical or Virtual Nodes) - 1 Year	
12	33450-B10-012	Red Hat Enterprise Linux Server with Smart Management, Standard (Physical or Virtual Nodes) - 3 Years	
13	33450-B10-013	Red Hat Enterprise Linux Extended Life Cycle Support (Physical or Virtual Nodes)	
14	33450-B10-014	Red Hat Enterprise Linux Extended Life Cycle Support (Unlimited Guests)	
15	33450-B10-015	Red Hat Enterprise Linux for SAP Applications, Premium (Physical or Virtual Nodes) - 1 Year	
16	33450-B10-016	Red Hat Enterprise Linux for SAP Applications, Premium (Physical or Virtual Nodes) - 3 Years	
17	33450-B10-017	Red Hat Enterprise Linux for SAP Applications, Standard (Physical or Virtual Nodes) - 1 Year	
18	33450-B10-018	Red Hat Enterprise Linux for SAP Applications, Standard (Physical or Virtual Nodes) - 3 Years	
19	33450-B10-019	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Premium - 1 Year	
20	33450-B10-020	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Premium - 3 Years	
21	33450-B10-021	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Standard - 1 Year	
22	33450-B10-022	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Standard - 3 Years	
23	33450-B10-023	Red Hat Enterprise Linux for SAP Solutions, Premium (Physical or Virtual Nodes) - 1 Year	

24	33450-B10-024	Red Hat Enterprise Linux for SAP Solutions, Premium (Physical or Virtual Nodes) - 3 Years	
25	33450-B10-025	Red Hat Enterprise Linux for SAP Solutions, Standard (Physical or Virtual Nodes) - 1 Year	
26	33450-B10-026	Red Hat Enterprise Linux for SAP Solutions, Standard (Physical or Virtual Nodes) - 3 Years	
27	33450-B10-027	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Premium - 1 Year	
28	33450-B10-028	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Premium - 3 Years	
29	33450-B10-029	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Standard - 1 Year	
30	33450-B10-030	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Standard - 3 Years	
31	33450-B10-031	High Availability -1 year	
32	33450-B10-032	High Availability -3 years	
33	33450-B10-033	High Availability for Unlimited Guests -1 year	
34	33450-B10-034	High Availability for Unlimited Guests -3 years	
35	33450-B10-035	Resilient Storage -1 year	
36	33450-B10-036	Resilient Storage -3 years	
37	33450-B10-037	Resilient Storage for Unlimited Guests -1 year	
38	33450-B10-038	Resilient Storage for Unlimited Guests -3 years	
39	33450-B10-039	Smart Management -1 year	
40	33450-B10-040	Smart Management -3 years	
41	33450-B10-041	Smart Management for Unlimited Guests -1 year	
42	33450-B10-042	Smart Management for Unlimited Guests -3 years	

43	33450-B10-043	Red Hat Enterprise Virtualization (2- sockets), Premium -1 year	
44	33450-B10-044	Red Hat Enterprise Virtualization (2- sockets), Premium -1 year	
45	33450-B10-045	Red Hat JBoss Enterprise Application Platform, 4-Core Premium - 1 Year	
46	33450-B10-046	Red Hat JBoss Enterprise Application Platform, 4-Core Premium - 3 Years	
47	33450-B10-047	Red Hat JBoss Enterprise Application Platform, 4-Core Standard - 1 Year	
48	33450-B10-048	Red Hat JBoss Enterprise Application Platform, 4-Core Standard - 3 Years	
49	33450-B10-049	Red Hat JBoss Enterprise Application Platform, 16-Core Premium -1 year	
50	33450-B10-050	Red Hat JBoss Enterprise Application Platform, 16-Core Premium -3 years	
51	33450-B10-051	Red Hat JBoss Enterprise Application Platform, 16-Core Standard -1 year	
52	33450-B10-052	Red Hat JBoss Enterprise Application Platform, 16-Core Standard -3 years	
53	33450-B10-053	Red Hat JBoss Enterprise Application Platform, 64-Core Premium -1 year	
54	33450-B10-054	Red Hat JBoss Enterprise Application Platform, 64-Core Premium -3 years	
55	33450-B10-055	Red Hat JBoss Enterprise Application Platform, 64-Core Standard -1 year	
56	33450-B10-056	Red Hat JBoss Enterprise Application Platform, 64-Core Standard -3 years	
57	33450-B10-057	Red Hat JBoss Enterprise Application Platform, Extended Life Cycle Support Add-On, 4-Core Premium	

58	33450-B10-058	Red Hat JBoss Enterprise Application Platform, Extended Life Cycle Support Add-On, 4-Core Standard	
59	33450-B10-059	Red Hat JBoss Enterprise Application Platform ELS Program, 16-Core Standard	
60	33450-B10-060	Red Hat JBoss Enterprise Application Platform ELS Program, 16-Core Premium	
61	33450-B10-061	Red Hat JBoss Enterprise Application Platform ELS Program, 64-Core Standard	
62	33450-B10-062	Red Hat JBoss Enterprise Application Platform ELS Program, 64-Core Premium	
63	33450-B10-063	Red Hat JBoss Web Server, 16-Core Premium - 1 year	
64	33450-B10-064	Red Hat JBoss Web Server, 16-Core Premium - 3 years	
65	33450-B10-065	Red Hat JBoss Web Server, 16-Core Standard - 1 year	
66	33450-B10-066	Red Hat JBoss Web Server, 16-Core Standard - 3 years	
67	33450-B10-067	Red Hat JBoss Web Server Plus, 16-Core Premium -1 year	
68	33450-B10-068	Red Hat JBoss Web Server Plus, 16-Core Premium -3 years	
69	33450-B10-069	Red Hat JBoss Web Server Plus, 16-Core Standard -1 year	
70	33450-B10-070	Red Hat JBoss Web Server Plus, 16-Core Standard -3 years	
71	33450-B10-071	Red Hat Process Automation Manager, Premium (16 Cores) - 1 Year	
72	33450-B10-072	Red Hat Process Automation Manager, Premium (16 Cores) - 3 Years	

73	33450-B10-073	Red Hat Process Automation Manager, Standard (16 Cores) - 1 Year	
74	33450-B10-074	Red Hat Process Automation Manager, Standard (16 Cores) - 3 Years	
75	33450-B10-075	Red Hat Decision Manager, Premium (16 Cores) - 1 Year	
76	33450-B10-076	Red Hat Decision Manager, Premium (16 Cores) - 3 Years	
77	33450-B10-077	Red Hat Decision Manager, Standard (16 Cores) - 1 Year	
78	33450-B10-078	Red Hat Decision Manager, Standard (16 Cores) - 3 Years	
79	33450-B10-079	Red Hat Fuse, 4-Core Premium - 1 Year	
80	33450-B10-080	Red Hat Fuse, 4-Core Premium - 3 Years	
81	33450-B10-081	Red Hat Fuse, Premium (16 Cores) - 1 Year	
82	33450-B10-082	Red Hat Fuse, Premium (16 Cores) -3 Years	
83	33450-B10-083	Red Hat Fuse, 4-Core Standard - 1 Year	
84	33450-B10-084	Red Hat Fuse, 4-Core Standard - 3 Years	
85	33450-B10-085	Red Hat Fuse, Standard (16 Cores) - 1 Year	
86	33450-B10-086	Red Hat Fuse, Standard (16 Cores) - 3 Years	
87	33450-B10-087	Red Hat Fuse, Extended Lifecycle Support Add-On, Premium (4 Cores)	
88	33450-B10-088	Red Hat Fuse, Extended Life Cycle Support Add-On, Standard (4 Cores)	
89	33450-B10-089	Red Hat Fuse ELS Program, Premium (16 Cores)	
90	33450-B10-090	Red Hat Fuse ELS Program, Standard (16 Cores)	

91	33450-B10-091	Red Hat 3scale API Management, Premium (4 Cores) - 1 Year	
92	33450-B10-092	Red Hat 3scale API Management, Premium (4 Cores) - 3 Years	
93	33450-B10-093	Red Hat 3scale API Management, Standard (4 Cores) - 1 Year	
94	33450-B10-094	Red Hat 3scale API Management, Standard (4 Cores) - 3 Years	
95	33450-B10-095	Red Hat 3scale API Management, Premium (16 Cores) - 1 Year	
96	33450-B10-096	Red Hat 3scale API Management, Premium (16 Cores) - 3 Years	
97	33450-B10-097	Red Hat 3scale API Management, Standard (16 Cores) - 1 Year	
98	33450-B10-098	Red Hat 3scale API Management, Standard (16 Cores) - 3 Years	
99	33450-B10-099	Red Hat OpenShift Container Platform, Premium (2 Cores or 4 vCPUs, for Windows) - 1 Year	
100	33450-B10-100	Red Hat OpenShift Container Platform, Premium (2 Cores or 4 vCPUs, for Windows) - 3 Years	
101	33450-B10-101	Red Hat OpenShift Container Platform (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 1 Year	
102	33450-B10-102	Red Hat OpenShift Container Platform (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 3 Years	
103	33450-B10-103	Red Hat OpenShift Container Platform (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 1 Year	
104	33450-B10-104	Red Hat OpenShift Container Platform (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 3 Years	
105	33450-B10-105	Red Hat OpenShift Container Platform Premium (2 Cores or 4 vCPUs) - 1 Year	

106	33450-B10-106	Red Hat OpenShift Container Platform Premium (2 Cores or 4 vCPUs) - 3 Years	
107	33450-B10-107	Red Hat OpenShift Container Platform Standard (2 Cores or 4 vCPUs) - 1 Year	
108	33450-B10-108	Red Hat OpenShift Container Platform Standard (2 Cores or 4 vCPUs) - 3 Years	
109	33450-B10-109	Red Hat Ansible Automation, Standard (100 Managed Nodes) - 1 Year	
110	33450-B10-110	Red Hat Ansible Automation, Standard (100 Managed Nodes) - 3 Years	
111	33450-B10-111	Red Hat Ansible Automation, Premium (100 Managed Nodes) - 1 Year	
112	33450-B10-112	Red Hat Ansible Automation, Premium (100 Managed Nodes) - 3 Years	
113	33450-B10-113	Red Hat OpenStack Platform, Premium (2-sockets) - 1 Year	
114	33450-B10-114	Red Hat OpenStack Platform, Premium (2-sockets) - 3 Years	
115	33450-B10-115	Red Hat OpenStack Platform, Standard (2-sockets) - 1 Year	
116	33450-B10-116	Red Hat OpenStack Platform, Standard (2-sockets) - 3 Years	
117	33450-B10-117	Red Hat OpenStack Platform (without guest OS), Premium (2-sockets) - 1 Year	
118	33450-B10-118	Red Hat OpenStack Platform (without guest OS), Premium (2-sockets) - 3 Years	
119	33450-B10-119	Red Hat OpenStack Platform (without guest OS), Standard (2-sockets) - 1 Year	

120	33450-B10-120	Red Hat OpenStack Platform (without guest OS), Standard (2-sockets) - 3 Years	
121	33450-B10-121	Red Hat OpenShift Kubernetes Engine, Premium (2 Cores or 4 vCPUs) - 1 Year	
122	33450-B10-122	Red Hat OpenShift Kubernetes Engine, Premium (2 Cores or 4 vCPUs) - 3 Years	
123	33450-B10-123	Red Hat OpenShift Kubernetes Engine, Standard (2 Cores or 4 vCPUs) - 1 Year	
124	33450-B10-124	Red Hat OpenShift Kubernetes Engine, Standard (2 Cores or 4 vCPUs) - 3 Years	
125	33450-B10-125	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 1 Year	
126	33450-B10-126	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 3 Years	
127	33450-B10-127	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 1 Year	
128	33450-B10-128	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 3 Years	
129	33450-B10-129	Consulting : Consulting Unit	
130	33450-B10-130	Training : Training Unit	
131	33450-B10-131	Red Hat Learning Subscription Standard	
132	33450-B10-132	Red Hat Enterprise Linux Automation with Ansible Classroom Training	
133	33450-B10-133	Red Hat System Administration I Classroom Training	
134	33450-B10-134	Red Hat JBoss Application Administration I Classroom Training	

| 135 | 33450-B10-135 | Red Hat OpenStack Administration I: Core Operations for Domain Operators Classroom Training | |
| 136 | 33450-B10-136 | Containers, Kubernetes, and Red Hat OpenShift Administration II Classroom Training | |

A1.4.11 Category B11 – Information Kiosks

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B11-001	Kiosk	
2	33450-B11-002	Intel Core i5 processor inlieu of i3 processor	

A1.4.12 Category B12 – High End Plotters & Scanners

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B12-SP001	A4 ADF 8ppm Portable Scanner	
2	33450-B12-SP002	A4 Flatbed with ADF 20 PPM Scanner	
3	33450-B12-SP003	A4 ADF 30PPM Scanner	
4	33450-B12-SP004	A4 Flatbed with ADF 40 PPM Scanner	
5	33450-B12-SP005	A4 ADF 60PPM Scanner	
6	33450-B12-SP006	A4 ADF 60 PPM Scanner with CCD	
7	33450-B12-SP007	A4 ADF 70PPM Scanner	
8	33450-B12-SP008	A3 ADF 60 PPM Scanner with network	

9	33450-B12-SP009	A3 Flatbed with ADF 70 PPM Scanner	
10	33450-B12-SP010	A3 ADF 120PPM Scanner	
11	33450-B12-SP011	A0 – 36 "LED Monocrome Plotter & Color Scanner	
12	33450-B12-SP012	A1 24" inch Plotter (color)	
13	33450-B12-SP013	A0 – 36 " Inkjet Plotter & Color Scanner	
14	33450-B12-SP014	A4 Flatbed Scanner	

A1.4.13 Category B13 – IP Camera

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B13-CAM-001	2 MP Fixed Lens Dome Camera	
2	33450-B13-CAM-002	2 MP Fixed Lens Bullet Camera	
3	33450-B13-CAM-003	5 MP Fixed Lens Bullet Camera	
4	33450-B13-CAM-004	2 MP MVF Dome Camera	
5	33450-B13-CAM-005	2 MP MVF Bullet Camera	
6	33450-B13-CAM-006	5 MP MVF Bullet Camera with Analytics	
7	33450-B13-CAM-007	5 MP Box Camera	
8	33450-B13-CAM-008	5 MP MVF Dome Camera	
9	33450-B13-CAM-009	5 MP MVF Bullet Camera	
10	33450-B13-CAM-010	8 MP MVF Dome Camera	
11	33450-B13-CAM-011	8 MP MVF Bullet Camera	
12	33450-B13-CAM-012	2 MP 20x PTZ Camera	

13	33450-B13-CAM-013	2 MP 30x Auto Tracking PTZ Camera	
14	33450-B13-CAM-014	5 MP 30x PTZ Camera	
15	33450-B13-NVR-015	Network Video Recorder 8 Channels 1 HDD	
16	33450-B13-NVR-016	Network Video Recorder 16 Channels 2 HDD	
17	33450-B13-NVR-017	Network Video Recorder 32 Channels 4 HDD	
18	33450-B13-NVR-018	Network Video Recorder 64 Channels 8 HDD	
19	33450-B13-NVR-019	Network Video Recorder 128 Channels 16 HDD	
20	33450-B13-NVR-020	Network Attached Storage 4 Bays - Tower Type	
21	33450-B13-NVR-021	Network Attached Storage Bays-16 with dual controller	
22	33450-B13-IP-022	Video Management Software	
23	33450-B13-IP-023	Video Analytics Software with ANPR features	
24	33450-B13-IP-024	Video Analytics Software with Face Recognition features	
25	33450-B13-IP-025	8 Port Switch 10/100/1000 MbpsSemi Managed Switch with 2 SFP Ports	
26	33450-B13-IP-026	24 Port Switch 10/100/1000 MbpsSemi Managed Switch with 4 SFP Ports	
27	33450-B13-IP-027	6U Rack	
28	33450-B13-IP-028	9U Rack	
29	33450-B13-IP-029	24U Rack	
30	33450-B13-IP-030	32" LED Display	
31	33450-B13-IP-031	43" LED Display	
32	33450-B13-IP-032	55" LED Display	
33	33450-B13-IP-033	Cat 6 Cable 23AWG	
34	33450-B13-IP-034	Cat 6 Cable Armored Cable	
35	33450-B13-IP-035	OFC 6 Core Single Mode Fibre Cable	

36	33450-B13-IP-036	OFC 12 Core Single Mode Fibre Cable	
37	33450-B13-IP-037	1" / 2" PVC Conduit with laying Charges	
38	33450-B13-IP-038	2" HDPE Conduit with Laying Charges	
39	33450-B13-IP-039	13 Feet GI Pole	
40	33450-B13-IP-040	15 Feet GI Pole	
41	33450-B13-IP-041	Outdoor weather proof Junction Box	
42	33450-B13-IP-042	4 TB AV Hard Disk	
43	33450-B13-IP-043	6TB AV Hard Disk	
44	33450-B13-IP-044	8 TB AV Hard Disk	
45	33450-B13-IP-045	10 TB AV Hard Disk	
46	33450-B13-IP-046	12 TB AV Hard Disk	
47	33450-B13-IP-047	6 Port LIU Loaded with adapter & SC PigTail	
48	33450-B13-IP-048	12 Port LIU Loaded with adapter & SC PigTail	
49	33450-B13-IP-049	Patch Cord SC-LC	
50	33450-B13-IP-050	10GBPS Module	
51	33450-B13-IP-051	Digging and Refilling of Soil/Tar/ Concrete road with 3FT Depth Per Meter	
52	33450-B13-IP-052	Fibre Splicing	
53	33450-B13-IP-053	Indoor Microphone	
54	33450-B13-IP-054	Outdoor Microphone	
55	33450-B13-IP-055	HDMI Splitter 1 in and 2 Out	
56	33450-B13-IP-056	64GB SD card class 10	
57	33450-B13-IP-057	128GB SD card class 10	
58	33450-B13-IP-058	HDMI Cable per Meter	
59	33450-B13-IP-059	VGA Cable Per Meter	
60	33450-B13-IP-060	Site Survey per site	

A1.4.14 Category B14 –Firewall

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B14-001	Next Generation Firewall cum SDWAN Router - Category -1 (Suitable for upto 300 Users)	
2	33450-B14-002	Next Generation Firewall cum SDWAN Router - Category -2 (Suitable for upto 100 Users)	
3	33450-B14-003	Next Generation Firewall cum SDWAN Router - Category -3 (Suitable for upto 50 Users)	
4	33450-B14-004	Next Generation Firewall cum SDWAN Router - Category -4 (Suitable for upto 25 Users)	
5	33450-B14-005	Data Center Firewall cum SDWAN Core Router - Category -1 (Suitable for upto 5000 Users)	
6	33450-B14-006	Data Center Firewall cum SDWAN Core Router - Category -2 (Suitable for upto 2500 Users)	
7	33450-B14-007	SD-WAN Manager for Central Management and Monitoring	
8	33450-B14-008	Web Application Firewall (Category-1)	
9	33450-B14-009	Web Application Firewall (Category-2)	

A1.4.15 Category B15 – Laptop

S.N	Product Code	Description	Item Quoted details along with Make & Model
1	33450-B15-001	Laptop Intel Pentium / AMD	
2	33450-B15-002	13.3" Laptop with i5 G series Processor, SSD	
3	33450-B15-003	13.3" Laptop with i7 G series Processor, SSD	
4	33450-B15-004	14" Laptop with i3 G series Processor	
5	33450-B15-005	14" Laptop with i5 G series Processor, SSD	
6	33450-B15-006	14" Laptop with i5 G series Processor, FHD, SSD	
7	33450-B15-007	14" Laptop with i5 G series Processor, 1 TB SATA HDD with 8 GB	
8	33450-B15-008	14" Laptop with i7 G series Processor , 1 TB SATA HDD with 16GB	
9	33450-B15-009	14" Laptop with i7 G series Processor SSD with 16GB	
10	33450-B15-010	14" Laptop with i7 G series Processor, FHD, m2 SSD with 16GB	
11	33450-B15-011	14" Laptop with AMD Ryzen 3 Processor	
12	33450-B15-012	14" Laptop with AMD Ryzen 5 Processor	
13	33450-B15-013	14" Laptop with AMD Ryzen 7 Processor	
14	33450-B15-014	15.6" Laptop with i3 G series Processor, SSD with 8 GB	
15	33450-B15-015	15.6" Laptop with i5 G series Processor, SSDwith 8 GB	
16	33450-B15-016	15.6" Laptop with i7 G series Processor, FHD, SSDwith 16GB	
17	33450-B15-017	Convertible 360 Degree Laptop - i5 G series Processor, SSD	
18	33450-B15-018	2 in 1 Laptop - i5 G series Processor, SSD	
19	33450-B15-019	Light weight Laptop with i5 G series Processor	
20	33450-B15-020	Surface Laptop with 256 GB SSD	
21	33450-B15-021	Surface Laptop with 512 GB SSD	

		Add on Items	
22	33450-B15-022	4 GB DDR4 RAM	
23	33450-B15-023	8 GB DDR4 RAM	
24	33450-B15-024	16 GB DDR4 RAM	
25	33450-B15-025	500 GB HDD SATA 5400 RPM	
26	33450-B15-026	1TB HDD SATA 5400 RPM	
27	33450-B15-027	2TB HDD SATA 5400 RPM	
28	33450-B15-028	500GB HDD SATA 7200 RPM	
29	33450-B15-029	1 TB HDD SATA 7200 RPM	
30	33450-B15-030	2 TB HDD SATA 7200 RPM	
31	33450-B15-031	256 GB SSD	
32	33450-B15-032	512 GB SSD	
33	33450-B15-033	1 TB SSD	
34	33450-B15-034	256 GB M.2 SSD	
35	33450-B15-035	512 GB M.2 SSD	
36	33450-B15-036	1 TB M.2 SSD	
37	33450-B15-037	2 GB Graphics Card	
38	33450-B15-038	4 GB Graphics Card	
39	33450-B15-039	Li-On Battery (35 WHr) with minimum 5 hours backup	
40	33450-B15-040	Li-On Battery (40 WHr) with minimum 5 hours backup	
41	33450-B15-041	Li-On Battery (45 WHr) with minimum 7 hours backup	
42	33450-B15-042	DVD RW (External Drive)	
43	33450-B15-043	Wireless Keyboard(OEM)	
44	33450-B15-044	Wireless Mouse(OEM)	
45	33450-B15-045	Wireless keyboard & Mouse (Combo)(OEM)	
46	33450-B15-046	Pre-Loaded Windows 10 Pro, 64bit with 1 year antivirus software	
47	33450-B15-047	Pre-Loaded Windows 10 Home, 64bit with 1 year antivirus software	

48	33450-B15-048	Pre-Loaded Windows 10 Pro National Academic Edition	
49	33450-B15-049	Active pen (OEM Make) for Convertible 360 Degree Laptop	
50	33450-B15-050	Active pen (OEM Make) for 2 in 1 Laptop	
		In lieu items	
51	33450-B15-051	16 GB DDR4 RAM in lieu of 8 GB RAM	
52	33450-B15-052	1 TB HDD in lieu of 500GB SATA HDD	
53	33450-B15-053	2 TB HDD in lieu of 1TB SATA HDD	
54	33450-B15-054	512 GB SSD in lieu of 256 GB SSD	
55	33450-B15-055	1 TB SSD in lieu of 256 GB SSD	
56	33450-B15-056	1 TB SSD in lieu of 512 GB SSD	
57	33450-B15-057	512 GB M.2 SSD in lieu of 256 GB M.2 SSD	
58	33450-B15-058	1 TB M.2 SSD in lieu of 256 GB M.2 SSD	
59	33450-B15-059	256 GB M.2 SSD in lieu of 256 GB SSD	
60	33450-B15-060	512 GB M.2 SSD in lieu of 256 GB SSD	
61	33450-B15-061	1 TB M.2 SSD in lieu of 256 GB SSD	
62	33450-B15-062	Pre-Loaded Windows 10 Pro, 64bit with 1 year antivirus software in lieu of Linux OS	
63	33450-B15-063	Pre-Loaded Windows 10 Home, 64bit with 1 year antivirus software in lieu of Linux OS	
64	33450-B15-064	Pre-Loaded Linux OS in lieu of Windows OS	

A1.5   BIDDER COMPLIANCE

A1.5.1 Category B1 – Microsoft Software

S.N	Product Code	Description	Bidder Compliance (Yes/No)
1	33450-B1-001	Office Standard 2019	
2	33450-B1-002	Office Professional Plus 2019	
3	33450-B1-003	Office 365 E1	
4	33450-B1-004	Office 365 E3	
5	33450-B1-005	Exchange Online Kiosk	
6	33450-B1-006	Exchange Online (Plan 1)	
7	33450-B1-007	Exchange Online (Plan 2)	
8	33450-B1-008	Exchange Online Archiving for Exchange Online	
9	33450-B1-009	Exchange Online Protection	
10	33450-B1-010	Microsoft 365 Apps for enterprise	
11	33450-B1-011	Microsoft 365 Business Standard	
12	33450-B1-012	Microsoft 365 Apps for business	

13	33450-B1-013	M365 F1	
14	33450-B1-014	Power BI Pro	
15	33450-B1-015	Power BI Premium P1	
16	33450-B1-016	Power BI Premium P3	
17	33450-B1-017	Power BI Premium P5	
18	33450-B1-018	Project Plan 3	
19	33450-B1-019	Project Plan 5	
20	33450-B1-020	Project Online Essentials	
21	33450-B1-021	SQL Server 2019 Enterprise Core - 2 Core License Pack	
22	33450-B1-022	SQL Server 2019 Standard Core - 2 Core License Pack	
23	33450-B1-023	SQL Server 2019 Standard Edition	
24	33450-B1-024	SQL Server 2019 - 1 Device CAL	
25	33450-B1-025	Windows Server 2019 Remote Desktop Server CAL - 1 Device CAL	
26	33450-B1-026	Windows Server 2019 Remote Desktop Services External Connector	
27	33450-B1-027	Windows Server 2019 External Connector	
28	33450-B1-028	Windows Server 2019 Datacenter Core - 16 Core License Pack	
29	33450-B1-029	Windows Server 2019 Datacenter Core - 2 Core License Pack	

30	33450-B1-030	Windows Server 2019 Standard - 16 Core License Pack	
31	33450-B1-031	Windows Server 2019 Standard - 2 Core License Pack	
32	33450-B1-032	Windows Server 2019 Client Access License - 1 Device CAL	
33	33450-B1-033	Available in AZURE pricelist and filter the Meter Category column to Visual Studio	
34	33450-B1-034	Windows GGWA - Windows 10 Professional	
35	33450-B1-035	Visual Studio Professional 2019	
36	33450-B1-036	Dynamics 365 Team Members	
37	33450-B1-037	Azure Monetary Commitment	

A1.5.2 Category B2- Anti-Virus

S.N	Product Code	Description	Specification	Bidder Compliance (Yes/No)
1	33450-B2-001	Anti Virus for Desktop and laptop-Single User-One Year Subscription	Core Protecion: Ransomware Protection,Email protection,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode.	
2	33450-B2-002	Anti Virus for Desktop and LaptopSingle User-Three Year Subscription	Core Protecion: Ransomware Protection,Email protection,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive	

			protection,RDM,Track my Laptop,Silent mode,	
3	33450-B2-003	Anti Virus for Desktop and LaptopThree User-one Year Subscription	Core Protecion: Ransomware Protection,Email protection,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,	
4	33450-B2-004	Anti Virus for Desktop and Laptop Three User Three Year Subscription	Core Protecion: Ransomware Protection,Email protection,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,	
5	33450-B2-005	Anti Virus for Desktop and Laptop Five User One Year Subscription	Core Protecion: Ransomware Protection,Email protection,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,	
6	33450-B2-006	Anti Virus for Desktop and Laptop Five User Three Year Subscription	Core Protecion: Ransomware Protection,Email protection,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,	
7	33450-B2-007	Anti Virus for Desktop and Laptop Ten User One Year Subscription	Core Protecion: Ransomware Protection,Email protection,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,	

8	33450-B2-008	Anti Virus for Desktop and Laptop Ten User Three Year Subscription	Core Protecion: Ransomware Protection,Email protection,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,	
9	33450-B2-009	Anti Virus for Desktop and Laptop Total Security-Single User-One Year Subscription	Core Protecion: Ransomware Protection,Email protechtion,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,Parental Control,Application Control,	
10	33450-B2-010	Anti Virus for Desktop and Laptop Total Security-Single User-Three Year Subscription	Core Protecion: Ransomware Protection,Email protechtion,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,Parental Control,Application Control,	
11	33450-B2-011	Anti Virus for Desktop and Laptop Total Security-Two User-One Year Subscription	Core Protecion: Ransomware Protection,Email protechtion,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,Parental Control,Application Control,	
12	33450-B2-012	Anti Virus for Desktop and Laptop Total Security-Two User- Three Year Subscription	Core Protecion: Ransomware Protection,Email protechtion,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,Parental Control,Application Control,	

13	33450-B2-013	Anti Virus for Desktop and Laptop Total Security-Three User-One Year Subscription	Core Protecion: Ransomware Protection,Email protechtion,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,Parental Control,Application Control,	
14	33450-B2-014	Anti Virus for Desktop and Laptop Total Security-Three User-Three Year Subscription	Core Protecion: Ransomware Protection,Email protechtion,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,Parental Control,Application Control,	
15	33450-B2-015	Anti Virus for Desktop and Laptop Total Security-Five User-One Year Subscription	Core Protecion: Ransomware Protection,Email protechtion,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,Parental Control,Application Control,	
16	33450-B2-016	Anti Virus for Desktop and Laptop Total Security-Five User-Three Year Subscription	Core Protecion: Ransomware Protection,Email protechtion,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,Parental Control,Application Control,	
17	33450-B2-017	Anti Virus for Desktop and Laptop Total Security-Ten User-One Year Subscription	Core Protecion: Ransomware Protection,Email protechtion,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,Parental Control,Application Control,	

18	33450-B2-018	Anti Virus for Desktop and Laptop Total Security-Ten User-ThreeYear Subscription	Core Protecion: Ransomware Protection,Email protechtion,Browser sandbox,websecurity,Datatheft protection,firewall,Antivirus/Antimalware/Antirootkit,Anti spyware,Malware protection,Antikey logger,Flash Drive protection,RDM,Track my Laptop,Silent mode,Parental Control,Application Control,	
		End Point Security		
19	33450-B2-019	End point Security Business -Single User-One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control	
20	33450-B2-020	End point Security Business -Single User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control	
21	33450-B2-021	End point Security Business -Five User-One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device	

			Control	
22	33450-B2-022	End point Security Business -Five User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control	
23	33450-B2-023	End point Security Business -Ten User-One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control	
24	33450-B2-024	End point Security Business -Ten User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control	

25	33450-B2-025	End point Security Business -Fifty User-One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control	
26	33450-B2-026	End point Security Business -Fifty User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control	
27	33450-B2-027	End point Security Business - Hundred user -One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control	

28	33450-B2-028	End point Security Business - Hundred user - Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control	
29	33450-B2-029	End point Security Total - Single User-One Year Subscription	Antivirus,Antimalware,Email proteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment	
30	33450-B2-030	End point Security Total - Single User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment	

31	33450-B2-031	End point Security Total - Five User-One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment	
32	33450-B2-032	End point Security Total - Five User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment	
33	33450-B2-033	End point Security Total - Ten User-One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment	

34	33450-B2-034	End point Security Total - Ten User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment	
35	33450-B2-035	End point Security Total - Fifty User-One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment	
36	33450-B2-036	End point Security Total - Fifty User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment	

37	33450-B2-037	End point Security Total - Hundred User-One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment	
38	33450-B2-038	End point Security Total - Hundred User Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment	
39	33450-B2-039	End point Security Enterprise Suite -Single User-One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment,DLP(Data lossPrevention)	

40	33450-B2-040	End point Security Enterprise Suite -Single User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment,DLP(Data lossPrevention)	
41	33450-B2-041	End point Security Enterprise Suite -Five User-One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment,DLP(Data lossPrevention)	
42	33450-B2-042	End point Security Total - Five User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment,DLP(Data lossPrevention)	

43	33450-B2-043	End point Security Enterprise Suite -Ten User - One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment,DLP(Data lossPrevention)	
44	33450-B2-044	End point Security Enterprise Suite -Ten User- Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment,DLP(Data lossPrevention)	
45	33450-B2-045	End point Security Enteprise Suite -Fifty User One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment,DLP(Data lossPrevention)	

46	33450-B2-046	End point Security Total - Fifty User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment,DLP(Data lossPrevention)	
47	33450-B2-047	End point Security Total - Hundred User-One Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment,DLP (Data lossPrevention)	
48	33450-B2-048	End point Security Total - Hundred User-Three Year Subscription	Antivirus,Antimalware,Emailproteciton,Attachement control,Behaviour detection,Spam protection,Autorun,Safemode,Self protection,removal of Conficting softwae,Ransomware protection,Backup and restore.IDS/IPS/Firewall/Phising protection/Browsing protection,SMS/Notifications,Vulnerability scan,Roaming Platform,Asset Management,Spam,Web filtering/Device Control,Application control,Tuneup,File Activity Monitor,Patch Managment,DLP (Data lossPrevention)	

A1.5.3 Category B3 – Computer Stationery

S.N	Product Code	Description	Bidder Compliance (Yes/No)
1	33450-B3-001	10" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
2	33450-B3-002	10" x 12"x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
3	33450-B3-003	10" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
4	33450-B3-004	11" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 os.)	
5	33450-B3-005	11" x 12"x 1 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
6	33450-B3-006	11" x 12"x 2 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
7	33450-B3-007	11" x 12"x 3 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
8	33450-B3-008	11" x 12"x 4 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
9	33450-B3-009	11" x 12"x 1 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
10	33450-B3-010	11" x 12 "x 2 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
11	33450-B3-011	11" x 12"x 3 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
12	33450-B3-012	11" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
13	33450-B3-013	11" x 12 "x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
14	33450-B3-014	11" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
15	33450-B3-015	12" x 12"x 1 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
16	33450-B3-016	12" x 12"x 2 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
17	33450-B3-017	12" x 12"x 3 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
18	33450-B3-018	12" x 12"x 4 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
19	33450-B3-019	12" x 12"x 1 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
20	33450-B3-020	12" x 12"x 2 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
21	33450-B3-021	12" x 12"x 3 70 GSM Cream Wove (1 Unit = 1000 Nos.)	

22	33450-B3-022	12" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
23	33450-B3-023	12" x 12"x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
24	33450-B3-024	12" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
25	33450-B3-025	15" x 12"x 1 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
26	33450-B3-026	15" x 12"x 2 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
27	33450-B3-027	15" x 12"x 3 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
28	33450-B3-028	15" x 12"x 4 60 GSM Cream Wove (1 Unit = 1000 Nos.)	
29	33450-B3-029	15" x 12"x 1 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
30	33450-B3-030	15" x 12"x 2 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
31	33450-B3-031	15" x 12"x 3 70 GSM Cream Wove (1 Unit = 1000 Nos.)	
32	33450-B3-032	15" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
33	33450-B3-033	15" x 12"x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
34	33450-B3-034	15" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	
35	33450-B3-035	Single colour single side printing (1 Unit = 1000 Nos.)	
36	33450-B3-036	With One serial number in one page (1 Unit = 1000 Nos. of sheets)	
37	33450-B3-037	70 GSM Copier Paper - (A4 Size) (1 Ream - 500 Nos.of sheets)	
38	33450-B3-038	75 GSM Copier Paper - (A4 Size) (1 Ream - 500 Nos. of sheets)	
39	33450-B3-039	80 GSM Copier Paper - (A3 Size) (1 Ream - 500 Nos.of sheets)	
40	33450-B3-040	80 GSM Copier Paper - (A4 Size) (1 Ream - 500 Nos. of sheets)	
41	33450-B3-041	80 GSM Copier Paper - (Legal Size) (1 Ream - 500 Nos. of sheets)	
42	33450-B3-042	White Window Covers size 11.5 X 26.5 cm, with ELCOT Logo & Address	
43	33450-B3-043	Brown Craft Covers - size 26.5 X 31 cm, with ELCOT Logo & Address	
44	33450-B3-044	Brown Craft Covers - size 43.5 X 29 cm, with ELCOT Logo & Address	
45	33450-B3-045	Covers:- Brown Craft Covers - size 30 X 12.5 cm, 11.5" X 4.75" with ELCOT Logo & Address	
46	33450-B3-046	Cloth Covers - size 37 X 28 cm, with ELCOT Logo & Address	
47	33450-B3-047	Cloth Covers - size 30 X 25 cm, with ELCOT Logo & Address	

48	33450-B3-048	Continuation sheet (Executive Bond Paper) (100 sheets in each pad)	
49	33450-B3-049	Scribbling pad – size 21.5 X 13 cm (20 sheets per pad) with ELCOT Logo in the top of the right corner in each sheet and in the front cover.	
50	33450-B3-050	Voucher pads - size 22 X 14 cm, with ELCOT Logo in the top of the right corner in each sheet and in the front cover. (100 sheets in each pad)	
51	33450-B3-051	Leave Application Form size 22 x 14cm (100 sheets in each pad)	
52	33450-B3-052	ON Duty Slip 18 x 13cm (100 Sheets in each pad)	
53	33450-B3-053	Visitors pass (22 X 14 cm)	
54	33450-B3-054	Telephone Message 18 x 13cm (100 Sheets in each pad)	
55	33450-B3-055	CPL /OT Form size 22 x 14cm (100 sheets in each pad)	
56	33450-B3-056	Vehicle Requisition Form size 22 x 14cm (100 sheets in each pad)	
57	33450-B3-057	Permission Slip size 22 x 14cm (100 sheets in each pad)	
58	33450-B3-058	Petrol Coupon of size 22 x 14cm (100 sheets in each pad) (Colour)	
59	33450-B3-059	A4 size MD's letter heads multi colour printing with logo for Plastic Pollution Free, Tamil Nadu, Executive Bond 100 GSM Paper (100 sheets in each pad)	
60	33450-B3-060	A4 size letter heads with Logo for Plastic Pollution Free Tamil Nadu (Executive Bond Paper) (100 sheets in each pad)	
61	33450-B3-061	Synthetic Visiting Cards (Executive Double Colour)	
62	33450-B3-062	ELCOT Brown Folder with tag (Procurement) with Printing	
63	33450-B3-063	ELCOT Folder with Printing (Legal Size)	
64	33450-B3-064	ELCOT Folder with Printing (A4 Size)	
65	33450-B3-065	Office Tag File with printing	
66	33450-B3-066	Urgent / Ordinary Pad	
67	33450-B3-067	Preprinted OP Slip 120 GSM Parchment paper with Logo 3"X4"x1 slip- (1 Unit = 500 slips)	
68	33450-B3-068	Preprinted OP case Record 80 GSM TNPL paper with Logo 9"X8"x1 part - (1 Unit =	

		500 Nos)	
69	33450-B3-069	Preprinted Lab Report 80 GSM TNPL paper with Logo 9"X8"x1 part - (1 Unit = 500 Nos)	

NOTE:
- **Logo and Page numbers should be printed on either side or single side for item codes 33450-B3-035,33450-B3-036as applicable.**
- **Delivery challan certified by the officials concerned should be obtained from all the offices, for receiving the articles in good condition.**
- **The quality of the papers at any cost should not be changed with sample produced. The perforations on the side should be equal and should not affect the printing.**
- **The quality of the carbon should be good and if any discrepancies in supply of stationery are found with respect to quantity / quality, the payment for the same shall be adjusted accordingly.**
- **Excess and shortage in the supply should be strictly avoided. However, if any defects found in the quality of papers, it should be replaced immediately.**
- **"TNPL Mill Paper or any other "A" Grade Mill Paper only shall be supplied".**

A1.5.4 Category B4 – IT Consumables

S.N	Product Code	Description	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
1	33450-B4-001	Toner for (KYOCERA FS 6525/ FS 6530) - TK-479			
2	33450-B4-002	Drum Kit for (KYOCERA FS 6525/ FS 6530) - MK-479			
3	33450-B4-003	Fixing Kit for (KYOCERA FS 6525/ FS 6530) - FK-475			
4	33450-B4-004	DP HINGE for (KYOCERA FS 6525/ FS6530/ FS 8525) - LEFT HINGE			
5	33450-B4-005	DP BASE for (KYOCERA FS 6525/ FS6530/ FS 8525) - BASE DP			
6	33450-B4-006	Power Supply PCB for (KYOCERA FS 6525/ FS6530) - PART LOW VOLTAGE PCB 230V			
7	33450-B4-007	Power Supply Sub board (KYOCERA FS 6525/ FS 6530) - PART LOW SUB VOLTAGE PCB 230			
8	33450-B4-008	Toner Cartridge for (KYOCERA TASKalfa 1800/ 1801) - TK-4109			
9	33450-B4-009	Drum Kit for (KYOCERA TASKalfa 1800/ 1801) - MK-4105			
10	33450-B4-010	Fixing Kit for (KYOCERA TASKalfa 1800/ 1801) - FK-4105			
11	33450-B4-011	Black Toner for (KYOCERA TASKalfa 2551ci) - TK-8329K			
12	33450-B4-012	Yellow Toner for (KYOCERA TASKalfa 2551ci) - TK-8329Y			
13	33450-B4-013	Magenta Toner for (KYOCERA TASKalfa 2551ci) - TK-8329M			
14	33450-B4-014	Cyan Toner for (KYOCERA TASKalfa 2551ci) - TK-8329C			
15	33450-B4-015	Black Drum Kit for (KYOCERA TASKalfa 2551ci) - Maintenance kit MK-8325A			
16	33450-B4-016	Colour Drum Kit for (KYOCERA TASKalfa 2551ci) - Maintenance kit MK-8325B			

17	33450-B4-017	Toner Cartridge for (KYOCERA ECOSYS M4125idn/ M4132idn) - TK-6110			
18	33450-B4-018	Drum kit for (KYOCERA ECOSYS M4125idn/ M4132idn) - Maintenance kit MK-6119			
19	33450-B4-019	Fixing Kit for (KYOCERA ECOSYS M4125idn/ M4132idn) - FK-6115			
20	33450-B4-020	DP HINGE for (KYOCERA ECOSYS M4125idn/ M4132idn) - LEFT HINGE			
21	33450-B4-021	DP BASE for (KYOCERA ECOSYS M4125idn/ M4132idn) - BASE DP			
22	33450-B4-022	Toner Cartridge for (KYOCERA TASKalfa 3212i) - TK-7120			
23	33450-B4-023	Toner Cartridge for (KYOCERA TASKalfa 4012i) - TK-7220			
24	33450-B4-024	Drum kit for (KYOCERA TASKalfa 3212i/ 4012i) - Maintenance kit MK-7125			
25	33450-B4-025	Wireless Kit for (KYOCERA TASKalfa 3212i/ 4012i) - IB-36			
26	33450-B4-026	Fixing Kit for (KYOCERA TASKalfa 3212i/ 4012i) - FK-7125			
27	33450-B4-027	Developing Unit for (KYOCERA TASKalfa 3212i/ 4012i) - DV-7125			
28	33450-B4-028	Main Charge Roller (KYOCERA TASKalfa 3212i/ 4012i) - MC-7125			
29	33450-B4-029	Toner Cartridge for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - TK-6329			
30	33450-B4-030	Drum Kit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - Maintenance kit MK-6335			
31	33450-B4-031	Fixing Kit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - FK-8560			

32	33450-B4-032	Transfer Unit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - TR-6500			
33	33450-B4-033	Developing Unit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - DV-8560K			
34	33450-B4-034	Wireless Kit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - IB-36			
35	33450-B4-035	Main Charge Roller (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - MC-8550			
36	33450-B4-036	Black Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110K			
37	33450-B4-037	Cyan Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110C			
38	33450-B4-038	Yellow Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110M			
39	33450-B4-039	Magenta Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110Y			
40	33450-B4-040	Black Drum Kit for (KYOCERA ECOSYS M8124cidn) - Maintenance kit MK-8115A			
41	33450-B4-041	Colour Drum Kit for (KYOCERA ECOSYS M8124cidn) - Maintenance kit MK-8115B			
42	33450-B4-042	Transfer Belt for (KYOCERA ECOSYS M8124cidn) - TR-8115A			
43	33450-B4-043	Fuser Unit for (KYOCERA ECOSYS M8124cidn) - FK-8115			
44	33450-B4-044	Developing Unit for (KYOCERA ECOSYS M8124cidn) - DV-8115K			
45	33450-B4-045	Black Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339K			

46	33450-B4-046	Cyan Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339C			
47	33450-B4-047	Yellow Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339M			
48	33450-B4-048	Magenta Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339Y			
49	33450-B4-049	Black Drum Kit for (KYOCERA TASKalfa 3252ci) - Maintenance kit MK-8335A			
50	33450-B4-050	Colour Drum Kit for (KYOCERA TASKalfa 3252ci) - Maintenance kit MK-8335B			
51	33450-B4-051	Transfer Belt for (KYOCERA ECOSYS 3252ci) - TK-8550			
52	33450-B4-052	Fuser Unit for (KYOCERA ECOSYS 3252ci) - FK-8530			
53	33450-B4-053	Developing Unit for (KYOCERA ECOSYS 3252ci) - Maintenance kit MK-8335D			
54	33450-B4-054	Black Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529K			
55	33450-B4-055	Cyan Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529C			
56	33450-B4-056	Yellow Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529M			
57	33450-B4-057	Magenta Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529Y			
58	33450-B4-058	Black Drum Kit for (KYOCERA TASKalfa 4052ci) - Maintenace kit MK-8515A			
59	33450-B4-059	Colour Drum Kit for (KYOCERA TASKalfa 4052ci) - Maintenace kit MK-8515B			
60	33450-B4-060	Transfer Belt for (KYOCERA TASKalfa 4052ci) - TR-8550			

61	33450-B4-061	Fuser Unit for (KYOCERA TASKalfa 4052ci) - FK-8550			
62	33450-B4-062	Developing Unit for (KYOCERA TASKalfa 4052ci) - DV-8560K			
63	33450-B4-063	Black Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349K			
64	33450-B4-064	Cyan Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349C			
65	33450-B4-065	Yellow Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349M			
66	33450-B4-066	Magenta Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349Y			
67	33450-B4-067	Black Drum Kit for (KYOCERA TASKalfa 2552ci/ 2553ci) - Maintenance kit MK-8335A			
68	33450-B4-068	Colour Drum Kit for (KYOCERA TASKalfa 2552ci/ 2553ci) - Maintenance kit MK-8335B			
69	33450-B4-069	Transfer Belt for (KYOCERA TASKalfa 2552ci/ 2553ci) - TR-8550			
70	33450-B4-070	Fuser Unit for (KYOCERA TASKalfa 2552ci/ 2553ci) - FK-8350			
71	33450-B4-071	Developing Unit for (KYOCERA TASKalfa 2552ci/ 2553ci) - Maintenance kit MK-8335D			
72	33450-B4-072	Black Toner for FS 8525ci - TK-899K			
73	33450-B4-073	Yellow Toner for FS 8525ci - TK-899C			
74	33450-B4-074	Magenta Toner for FS 8525ci - TK-899M			
75	33450-B4-075	Cyan Toner for FS 8525ci - TK-899Y			
76	33450-B4-076	Black Drum Kit for FS 8525ci - Maintenance kIt MK-896A			
77	33450-B4-077	Colour Drum Kit for FS 8525ci - Maintenance kIt MK-896B			
78	33450-B4-078	Transfer Belt for FS 8525ci - TR-896A			
79	33450-B4-079	Fuser Unit for FS 8525ci - FK-896			
80	33450-B4-080	Developing Unit for FS 8525ci - DV-896K			

81	33450-B4-081	Toner for Canon iR2006n/ iR 2004n/ iR2002n - NPG 59			
82	33450-B4-082	Drum Kit for Canon iR2006n/ iR 2004n/ iR2002n - NPG 59			
83	33450-B4-083	Toner for Canon iR 2525w/ iR 2520/ iR2530 - NPG 51			
84	33450-B4-084	Drum Kit for Canon iR 2525w/ iR 2520/ iR2530 - NPG 51			
85	33450-B4-085	Toner for Canon iR 2625/ iR 2630/ iR 2645 - NPG 84			
86	33450-B4-086	Drum Kit for Canon iR 2625/ iR 2630/ iR 2645 - NPG 84			
87	33450-B4-087	Black Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67			
88	33450-B4-088	Cyan Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67			
89	33450-B4-089	Yellow Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67			
90	33450-B4-090	Magenta Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67			
91	33450-B4-091	Black Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67			
92	33450-B4-092	Cyan Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67			
93	33450-B4-093	Yellow Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67			
94	33450-B4-094	Magenta Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67			
95	33450-B4-095	Black Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71			
96	33450-B4-096	Cyan Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71			
97	33450-B4-097	Yellow Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv			

		c5540i/ iR adv c5535i - NPG 71			
98	33450-B4-098	Magenta Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71			
99	33450-B4-099	Black Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71			
100	33450-B4-100	Cyan Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71			
101	33450-B4-101	Yellow Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71			
102	33450-B4-102	Magenta Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71			
103	33450-B4-103	Toner for Canon iR adv 6575i/ iR adv 6565i/ iR adv 6555i - NPG 54			
104	33450-B4-104	Drum Kit for Canon iR adv 6575i/iR adv 6565i/ iR adv 6555i - NPG 54			
105	33450-B4-105	Toner for Canon iR adv 4525/ iR adv 4535/ iR adv 4545/ iR adv 4551 - NPG 73			
106	33450-B4-106	Drum Kit for Canon iR adv4525/ iR adv 4535/ iR adv 4545/ iR adv 4551 - NPG 73			
107	33450-B4-107	Toner Cartridge for Canon 6230DN - 326			
108	33450-B4-108	Toner Cartridge for Canon MF246DN/ Canon LBP 151DW / Canon MF241D/ Canon MF237w - 337			
109	33450-B4-109	Toner Cartridge for Canon L170/ MF4720W/ MF4820D/ MF4750 - 328			
110	33450-B4-110	Toner Cartridge for Canon MF266DN/ Canon MF 269DN/ Canon LBP 161dn/ Canon LBP 162dw - 051			
111	33450-B4-111	Drum Cartridge for Canon MF266DN/ Canon MF 269DN/ Canon LBP 161dn/ Canon LBP 162dw - 051			
112	33450-B4-112	Toner Cartridge for Canon LBP 214DW - 052			

113	33450-B4-113	Black Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046			
114	33450-B4-114	Cyan Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046			
115	33450-B4-115	Magenta Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046			
116	33450-B4-116	Yellow Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046			
117	33450-B4-117	Black Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045			
118	33450-B4-118	Cyan Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045			
119	33450-B4-119	Magenta Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045			
120	33450-B4-120	Yellow Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045			
121	33450-B4-121	Toner Cartridge for Canon LBP 8100N/ Canon LBP 8780CX - 333			
122	33450-B4-122	Black Toner Cartridge for Canon LBP 841 CDN - 333E			
123	33450-B4-123	Cyan Toner Cartridge for Canon LBP 841 CDN - 333E			
124	33450-B4-124	Magenta Toner Cartridge for Canon LBP 841 CDN - 333E			
125	33450-B4-125	Yellow Toner Cartridge for Canon LBP 841 CDN - 333E			
126	33450-B4-126	Black Toner Cartridge for Canon MF746CX - 055			
127	33450-B4-127	Cyan Toner Cartridge for Canon MF746CX - 055			
128	33450-B4-128	Magenta Toner Cartridge for Canon MF746CX - 055			
129	33450-B4-129	Yellow Toner Cartridge for Canon MF746CX - 055			
130	33450-B4-130	Toner Cartridge for Canon LBP 312x - 041			
131	33450-B4-131	Toner Cartridge for CanonLBP351x/ CanonLBP352x - 039			
132	33450-B4-132	Toner cartridge for digital copier Ricoh MP2014D / MP2014AD - 2014HS			
133	33450-B4-133	Toner cartridge for digital copier RICOH MP 2001SP / MP2501SP - 2501S			

134	33450-B4-134	Toner for Ricoh Aficio 2000L /2000LE/2020D Photo Copier - 1230D			
135	33450-B4-135	Toner Cartridges for Ricoh Aficio MP 3350 Photo Copier - 23230D			
136	33450-B4-136	Developer for digital copier Ricoh MP2014D / MP2014AD / MP 2001SP / MP2501SP / Aficio 2000L / Aficio 2000LE/ Aficio 2020D / Afficio MP 3350SP			
137	33450-B4-137	OPC Drum for digital copier Ricoh MP2014D / MP2014AD / MP 2001SP / MP2501SP / Aficio 2000L / Aficio 2000LE/ Aficio 2020D / Afficio MP 3350SP			
138	33450-B4-138	Hot Roller for digital copier Ricoh MP2014D / MP2014AD			
139	33450-B4-139	Hot Roller for digital copier RICOH MP 2001SP / MP2501SP			
140	33450-B4-140	Charge Roller for digital copier Ricoh MP2014D / MP2014AD / RICOH MP 2001SP / MP2501SP			
141	33450-B4-141	Cleaning blade for digital copier Ricoh MP2014D / MP2014AD			
142	33450-B4-142	Cleaning Blade for digital copier RICOH MP 2001SP / MP2501SP			
143	33450-B4-143	Photoconductor unit for digital copier RICOH MP 2001SP / MP2501SP			
144	33450-B4-144	Photoconductor Development unit for digital copier Ricoh MP2014D / MP2014AD			
145	33450-B4-145	Toner Cartridges for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055			
146	33450-B4-146	Developer for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055			
147	33450-B4-147	Drum for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055			
148	33450-B4-148	Cleaning blade for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055			
149	33450-B4-149	Fusing Unit for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055			
150	33450-B4-150	Fusing Sleeve for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055			

151	33450-B4-151	Toner (black) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S Black			
152	33450-B4-152	Toner (cyan) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S cyan			
153	33450-B4-153	Toner (yellow) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S yellow			
154	33450-B4-154	Toner (magenta) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S Magenta			
155	33450-B4-155	Development Unit (black) cartridge RICOH MPC 2503SP / MPC 2504SP			
156	33450-B4-156	Development Unit (cyan) cartridge RICOH MPC 2503SP / MPC 2504SP			
157	33450-B4-157	Development Unit (yellow) cartridge RICOH MPC 2503SP / MPC 2504SP			
158	33450-B4-158	Development Unit (magenta) cartridge RICOH MPC 2503SP / MPC 2504SP			
159	33450-B4-159	Drum kit for RICOH MPC 2503SP / MPC 2504SP (K, C, Y & M)			
160	33450-B4-160	Toner for Ricoh Aficio MPC 2550 / MPC 2551Colour Photo Copier - C2551S Black			
161	33450-B4-161	Toner for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier - C2551S Cyan			
162	33450-B4-162	Toner for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier - C2551S Yellow			
163	33450-B4-163	Toner for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier - C2551S Magenta			

164	33450-B4-164	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Black			
165	33450-B4-165	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-yellow			
166	33450-B4-166	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Meganta			
167	33450-B4-167	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Cyan			
168	33450-B4-168	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Black			
169	33450-B4-169	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-yellow			
170	33450-B4-170	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Magenta			
171	33450-B4-171	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Cyan			
172	33450-B4-172	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Black			
173	33450-B4-173	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Cyan			
174	33450-B4-174	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Yellow			
175	33450-B4-175	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Magenta			
176	33450-B4-176	Drum Kit for Ricoh Aficio MPC 3002 Colour Photo Copier-Black			
177	33450-B4-177	Drum Kit for Ricoh Aficio MPC 3002 Colour Photo Copier-Cyan / Yellow / Magenta			

178	33450-B4-178	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Black			
179	33450-B4-179	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Cyan			
180	33450-B4-180	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Yellow			
181	33450-B4-181	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Magenta			
182	33450-B4-182	Black Toner Cartridge for Samsung - ML 2161/SCX 3401/ML 2166W/SCX 3046W - Samsung MLT-D101S Black			
183	33450-B4-183	Black Toner Cartridge for Samsung - ML 1666/ML 1866/1676/SCX 3201 - Samsung MLT-D1043S			
184	33450-B4-184	Black Toner Cartridge for Samsung - ML 2951ND/XIP,SCX 4728FD,SCX 4728D / SCX 4701ND - Samsung MLT-D103S			
185	33450-B4-185	Black Toner Cartridge (High Yield) for Samsung - SL-M2071 / 2071W / 2071FW / SL-M2021 / 2021W / 2020W/ 2022W / 2070 / 2070W / 2078W - Samsung MLT-D111L H- Yield			
186	33450-B4-186	Black Toner Cartridge for Samsung - ML-3312ND, SCX-4835FR, SCX- 5639FR/SCX-5739FW,ML-3310ND,ML- 3710ND , Black Toner Std			
187	33450-B4-187	Black Toner Cartridge for Samsung - SL- M3320ND/SL-M2820ND/SL-M4020ND/SL- M3370FD/SL-M3870FD - Samsung MLT- D203S			

188	33450-B4-188	Black Toner Cartridge (High Yield) for Samsung - ML 2830W, ML 2830DW - Samsung MLT-D115L H-Yield			
189	33450-B4-189	Black Toner Cartridge for (High Yield) Samsung - SL-M2626/SL-2826ND/SL-2876ND/SL-2876FD			
190	33450-B4-190	Black Toner Cartridge for Samsung - ML 2851ND			
191	33450-B4-191	Black Toner Cartridge for Samsung - ML 1610/ML-2010/ML-2571N - Samsung MLT- D119S			
192	33450-B4-192	Black Toner Cartridge for Samsung - 1911/ML 2581N/SCX-4601/SCX4623FH/FN/SF651P - Samsung MLT-D1053S			
193	33450-B4-193	Black Toner Cartridge for Samsung - ML 1640/ML 2240 SERIES - Samsung MLT- D108S			
194	33450-B4-194	Black Toner Cartridge for Samsung - SCX 4725/SCX-4021S/XIP,SCX-4321NS/XIP,SCX-4521FS/XIP,SCX 4521NS/XIP - Samsung SCX-D4725A			
195	33450-B4-195	Black Toner Cartridge (High Yield) Samsung - ML 2951ND/XIP,SCX 4728FD,SCX 4728D / SCX 4701ND - Samsung MLT-D103L H- Yield			
196	33450-B4-196	Black Toner Cartridge (High Yield) for Samsung - SL-K2200/K2200ND - Samsung MLT-D707L H-Yield			
197	33450-B4-197	Black Toner Cartridge for Samsung - S-IN- SCX 8128NA /XIP - Samsung MLT-D709S			
198	33450-B4-198	Black Toner Cartridge for Samsung - SL- K3250NR/XIP - Samsung MLT-D704S			

199	33450-B4-199	Black Toner Cartridge for Samsung - SL- K4350LX/XIP - Samsung MLT-D708S			
200	33450-B4-200	Black Toner Cartridge(High Yield) for Samsung - SL-K4350LX/XIP - Samsung MLT-D708L H-Yield			
201	33450-B4-201	Black Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT-K506S			
202	33450-B4-202	Cyan Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT-C506S			
203	33450-B4-203	Magenta Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT- M506S			
204	33450-B4-204	Yellow Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT-Y506S			
205	33450-B4-205	Black Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT-K609S			
206	33450-B4-206	Yellow Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT-Y609S			
207	33450-B4-207	Cyan Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT-C609S			
208	33450-B4-208	Magenta Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT- M609S			
209	33450-B4-209	Black Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-K406S			
210	33450-B4-210	Yellow Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-Y406S			
211	33450-B4-211	Magenta Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-M406S			
212	33450-B4-212	Cyan Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-C406S			

213	33450-B4-213	Black Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT- K409S			
214	33450-B4-214	Cyan Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT- C409S			
215	33450-B4-215	Magenta Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT- M409S			
216	33450-B4-216	Yellow Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT- Y409S			
217	33450-B4-217	Black Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung CLT-K809S			
218	33450-B4-218	Yellow Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung CLT-Y809S			
219	33450-B4-219	Cyan Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung CLT-C809S			
220	33450-B4-220	Magenta Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung CLT-M809S			
221	33450-B4-221	Black Toner Cartridge for Samsung - SL- X3220NR/SL-X3280NR - Samsung CLT- K804S			
222	33450-B4-222	Cyan Toner Cartridge for Samsung - SL- X3220NR/SL-X3280NR - Samsung CLT- C804S			
223	33450-B4-223	Yellow Toner Cartridge for Samsung - SL- X3220NR/SL-X3280NR - Samsung CLT- Y804S			
224	33450-B4-224	Magenta Toner Cartridge for Samsung - SL- X3220NR/SL-X3280NR - Samsung CLT- M804S			
225	33450-B4-225	Imaging Unit for Samsung - SL-M2626/SL-2826ND/SL-2876ND/SL-2876FD			
226	33450-B4-226	Imaging Unit for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-R406			

227	33450-B4-227	Imaging Unit for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT-R409			
228	33450-B4-228	Imaging Unit for Samsung - SL- K2200/K2200ND - Samsung MLT-R707			
229	33450-B4-229	Imaging Unit for Samsung - S-IN-SCX 8128NA /XIP , Imaging Unit - Samsung MLT -R709			
230	33450-B4-230	Imaging Unit for Samsung - SL- K3250NR/XIP - Samsung MLT-R704			
231	33450-B4-231	Imaging Unit for Samsung - SCX-8128NA/XIP - Samsung CLT-R809			
232	33450-B4-232	Imaging Unit for Samsung - SL- X3220NR/XIP - Samsung CLT-R804			
233	33450-B4-233	Imaging Unit for Samsung - SL- K4350LX/XIP - Samsung MLT-R708			
234	33450-B4-234	Cyan Imaging Unit for Samsung - CLX-9250ND/9350ND - Samsung CLT-R607C			
235	33450-B4-235	Black Imaging Unit for Samsung - CLX-9250ND/9350ND - Samsung CLT-R607K			
236	33450-B4-236	Magenta Imaging Unit for Samsung - CLX-9250ND/9350ND - Samsung CLT-R607M			
237	33450-B4-237	Yellow Imaging Unit for Samsung - CLX-9250ND/9350ND - Samsung CLT-R607Y			
238	33450-B4-238	WASTE TONER BOX for Samsung - SCX-8128NA/XIP, SCX-8123NA - Samsung MLT -W709			

239	33450-B4-239	Paper Transfer Belt for Samsung - CLP 620/CLP 670/CLX 6220 - Samsung CLT- T508			
240	33450-B4-240	Toner Collection Unit for Samsung - SL- X3220NR/XIP - Samsung CLT-W808			
241	33450-B4-241	Paper Transfer Belt for Samsung - CLP 610 ND / 660 / CLX 6210 / CLX 6240 - Samsung CLP-T660B			
242	33450-B4-242	Toner Collection Unit for Samsung - CLP-680ND/XIP - Samsung CLT-W506			
243	33450-B4-243	Ribbon Cartridge for Lipi Line Matrix Printer Model 6306/6215/6218 Yield - 4 Million Characters			
244	33450-B4-244	Ribbon Cartridge for LIPI Line matrix Printer Model - 6605/6610/6620/ 6805/6810/681/6820 Yield - 9000 Pages			
245	33450-B4-245	Ribbon Cartridge for LIPI Line matrix Printer Model - 6605/6610/6620/ 6805/6810/681/6820 Yield - 17000 Pages			
246	33450-B4-246	Ribbon Cartridge for LIPI Line matrix Printer Model RIBBON STANDARD OPEN PRINT HD 1 PACK 03H/06H/08H/HD –P-8000 HD Printer Yield – 18000 Pages			
247	33450-B4-247	Ribbon Cartridge for Lipi High Speed Dot matrix printer Model-T2155/T2170/T2265+/2280+ Yield - 20 Million Characters			
248	33450-B4-248	Ribbon Cartridge for Lipi High Speed Dot matrix Printer Model T2610 – 5 Million Characters			
249	33450-B4-249	Ribbon Cartridge for Lipi High Speed Dot matrix printer Model-T2155/T2170/T2265+/2280+ -15 Million Characters			
250	33450-B4-250	Ribbon Cartridge for Lipi Pass Book Printer Model PB2			
251	33450-B4-251	Toner for Brother Printer - HL-L2321D, HL-L2361DN, HL-2366DW, DCP-L2520D, DCP-L2541DW, MFC-L2701D, MFC-			

		2701DW, Model TN-2365, Yeild -2500 Pages			
252	33450-B4-252	Drum for Brother Printer - HL-L2321D, HL-L2361DN, HL-2366DW, DCP-L2520D, DCP-L2541DW, MFC-L2701D, MFC-2701DW, Model DR-2365, Yeild -12000 Pages			
253	33450-B4-253	Toner for Brother Printer - HL-L2351DW, DCP-L2531DW, Model TN-2465, Yeild -3000 Pages			
254	33450-B4-254	Toner for Brother Printer - HL-L2351DW, DCP-L2531DW, Model TN-2469, Yeild -4000 PGS			
255	33450-B4-255	Drum for Brother Printer - HL-L2351DW, DCP-L2531DW, Model DR-2465, Yeild -12000 Pages			
256	33450-B4-256	Toner for Brother Printer - HL-B2000D, HL-B2080DW, DCP-B7500D, DCP-B7535DW, MFC-B7715DW, Model TN-B021, Yeild -2600 Pages			
257	33450-B4-257	Drum for Brother Printer - HL-B2000D, HL-B2080DW, DCP-B7500D, DCP-B7535DW, MFC-B7715DW, Model DR-B021, Yeild -12000 Pages			
258	33450-B4-258	Toner for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model TN-3428, Yeild -3000 Pages			
259	33450-B4-259	Toner for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model TN-3448, Yeild -8000 PGS			
260	33450-B4-260	Toner for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model TN-3478, Yeild -12000 PGS			
261	33450-B4-261	Drum for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model DR-3455, Yeild -30000 Pages			
262	33450-B4-262	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW,			

		MFC-L3735CDW, Model TN-267BK, Yeild -3000 PGS			
263	33450-B4-263	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model TN-267C, Yeild -2300 PGS			
264	33450-B4-264	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model TN-267M, Yeild -2300 PGS			
265	33450-B4-265	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model TN-267Y, Yeild -2300 PGS			
266	33450-B4-266	Black Drum for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Yeild -30000 Pages			
267	33450-B4-267	Yellow Drum for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Composite Yeild -18000 Pages Each			
268	33450-B4-268	Cyan Drum for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Yeild -18000 Pages Each			
269	33450-B4-269	Megenta for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Yeild -18000 Pages Each			
270	33450-B4-270	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-261BK, Yeild -2500 Pages			
271	33450-B4-271	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-261C, Yeild -1400 PGS			
272	33450-B4-272	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-261M, Yeild -1400 PGS			
273	33450-B4-273	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-261Y, Yeild -1400 PGS			
274	33450-B4-274	Black Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each			

275	33450-B4-275	Cyan Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each			
276	33450-B4-276	Megenta Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each			
277	33450-B4-277	Yellow Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each			
278	33450-B4-278	Toner for Brother Printer - HL-5440D,HL-5450DN,MFC-8910DW, Model TN-3220, Yeild -3000 Pages			
279	33450-B4-279	Toner for Brother Printer - HL-5440D,HL-5450DN,MFC-8910DW, Model TN-3350, Yeild -8000 PGS			
280	33450-B4-280	Toner for Brother Printer - HL-5440D,HL-5450DN,MFC-8910DW, Model TN-3370, Yeild -12000 PGS			
281	33450-B4-281	Toner for Brother Printer - FAX-2840, Model TN-2260, Yeild -1200 Pages			
282	33450-B4-282	Toner for Brother Printer - FAX-2840, Model TN-2280, Yeild -2600 PGS			
283	33450-B4-283	Drum for Brother Printer - FAX-2840, Model DR-2255, Yeild - 12000 Pages			
284	33450-B4-284	Toner for Brother Printer - HL-1111,1201,1211w,1511,1514,1601,1811,1911,1616 Model TN-1020, Yeild -1500 PGS			
285	33450-B4-285	Drum for Brother Printer - HL-1111,,1201,1211w,1511,1514,1601,1811,1911,1616 Model DR-1020, Yeild -10000 PGS			
286	33450-B4-286	Black Ink for Epson Printer Model - M100 / M105,Yeild-6000 Pages			
287	33450-B4-287	Black Ink for Epson Printer Model - M1100, M1120, M1140, M1170, M1180, M2110, M2120, M2140, M2170, M3140, M3170, M3180 - Yeild-6000 Pages			

288	33450-B4-288	Black Ink for Epson Printer Model - L130 - Yeild-4500 pages			
289	33450-B4-289	Cyan Ink for Epson Printer Model - L130 - Yeild-7500 pages			
290	33450-B4-290	Megenta Ink for Epson Printer Model - L130 - Yeild-7500 pages			
291	33450-B4-291	Yellow Ink for Epson Printer Model - L130 - Yeild-7500 pages			
292	33450-B4-292	Black Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150, L3156, L5190 - Yeild-4500 pages			
293	33450-B4-293	Cyan Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150, L3156, L5190 - Composite Yeild-7500 pages			
294	33450-B4-294	Megenta Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150, L3156, L5190 - Composite Yeild-7500 pages			
295	33450-B4-295	Yellow Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150, L3156, L5190 - Composite Yeild-7500 pages			
296	33450-B4-296	Black Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Yeild-7500 pages			
297	33450-B4-297	Cyan Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Composite Yeild-6000 pages			
298	33450-B4-298	Megenta Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Composite Yeild-6000 pages			
299	33450-B4-299	Yellow Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Composite Yeild-6000 pages			
300	33450-B4-300	Black Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Yeild-7500 pages			
301	33450-B4-301	Cyan Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Composite Yeild-6000 pages			
302	33450-B4-302	Megenta Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Composite Yeild-6000 pages			
303	33450-B4-303	Yellow Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Composite Yeild-6000 pages			
304	33450-B4-304	Black Ink for Epson Printer Model - L1300,Yeild-7100 pages (A4)			

305	33450-B4-305	Cyan Ink for Epson Printer Model - L1300,Composite Yeild-5500 pages (A4)			
306	33450-B4-306	Megenta Ink for Epson Printer Model-L1300,Composite Yeild-5500 pages (A4)			
307	33450-B4-307	Yellow Ink for Epson Printer Model-L1300,Composite Yeild-5500 pages (A4)			
308	33450-B4-308	Black Ink for Epson Printer Model-L1455,Yeild-7500 pages (A4)			
309	33450-B4-309	Cyan Ink for Epson Printer Model-L1455,Composite Yeild-6000 pages (A4)			
310	33450-B4-310	Megenta Ink for Epson Printer Model-L1455,Composite Yeild-6000 pages (A4)			
311	33450-B4-311	Yellow Ink for Epson Printer Model-L1455,Composite Yeild-6000 pages (A4)			
312	33450-B4-312	Black Ink for Epson Printer Model-WF-M5298, WF-M5799,Yeild-XL Pack: 40,000 Pages			
313	33450-B4-313	Maintanence Box Ink Epson Printer Model-WF-M5298, WF-M5799			
314	33450-B4-314	Black Ink for Epson Printer Model-WF-C5790,Yeild-XL Pack: 10,000 Pages			
315	33450-B4-315	Cyan Ink for Epson Printer Model-WF-C5790,Composite Yeild-XL Pack: 5000 Pages			
316	33450-B4-316	Megenta Ink for Epson Printer Model-WF-C5790,Composite Yeild-XL Pack: 5000 Pages			
317	33450-B4-317	Yellow Ink for Epson Printer Model-WF-C5790,Composite Yeild-XL Pack: 5000 Pages			
318	33450-B4-318	Maintanence Box for Epson Printer Model-WF-C5790			
319	33450-B4-319	Black Ink for Epson Printer Model-WF-C579R,Yeild-50,000 pages			

320	33450-B4-320	CYan Ink for Epson Printer Model-WF-C579R,Composite Yeild-20,000 pages			
321	33450-B4-321	Megenta Ink for Epson Printer Model-WF-C579R,Composite Yeild-20,000 pages			
322	33450-B4-322	Yellow Ink for Epson Printer Model-WF-C579R,Composite Yeild-20,000 pages			
323	33450-B4-323	Maintanence Box for Epson Printer Model-WF-C579R			
324	33450-B4-324	Black Ink for Epson Printer Model-WF-C869R,Yeild-86,000 pages (A4)			
325	33450-B4-325	Cyan Ink for Epson Printer Model-WF-C869R,Composite Yeild-84,000 pages			
326	33450-B4-326	Megenta Ink for Epson Printer Model-WF-C869R,Composite Yeild-84,000 pages			
327	33450-B4-327	Yelow Ink for Epson Printer Model-WF-C869R,Composite Yeild-84,000 pages			
328	33450-B4-328	Maintanence Ink for Epson Printer Model-WF-C869R			
329	33450-B4-329	Black Ink for Epson Printer Model-WF-C878R, WF-C879R,Yeild-86,000 pages (A4)			
330	33450-B4-330	Cyan Ink for Epson Printer Model-WF-C878R, WF-C879R,Composite Yeild-20,000 pages			
331	33450-B4-331	Megenta Ink for Epson Printer Model-WF-C878R, WF-C879R,Composite Yeild-20,000 pages			
332	33450-B4-332	Yellow Ink for Epson Printer Model-WF-C878R, WF-C879R,Composite Yeild-20,000 pages			
333	33450-B4-333	Maintanence Boxfor Epson Printer Model-WF-C878R, WF-C879R			
334	33450-B4-334	Black Ink for Epson Printer Model-WF-M20590,Yeild-60,000 pages(A4) x 2 nos			

335	33450-B4-335	Cyan Ink for Epson Printer Model-WF-M20590,Composite Yeild-20,000 pages			
336	33450-B4-336	Megenta Ink for Epson Printer Model-WF-M20590,Composite Yeild-20,000 pages			
337	33450-B4-337	Yellow Ink for Epson Printer Model-WF-M20590,Composite Yeild-20,000 pages			
338	33450-B4-338	Maintanence Box for Epson Printer Model-WF-M20590			
339	33450-B4-339	Black Ink for Epson Printer Model-WF-C17590,Yeild-50,000 Pages(A4) x 2 nos			
340	33450-B4-340	Cyan Ink for Epson Printer Model-WF-C17590,Composite Yeild-50,000 Pages			
341	33450-B4-341	Megenta Ink for Epson Printer Model-WF-C17590,Composite Yeild-50,000 Pages			
342	33450-B4-342	Yellow Ink for Epson Printer Model-WF-C17590,Composite Yeild-50,000 Pages			
343	33450-B4-343	Maintanence Box for Epson Printer Model-WF-C17590			
344	33450-B4-344	Black Ink for Epson Printer Model-WF-C20590,Yeild-50,000 Pages(A4) x 2 nos			
345	33450-B4-345	Cyan Ink for Epson Printer Model-WF-C20590,Composite Yeild-50,000 Pages			
346	33450-B4-346	Megenta Ink for Epson Printer Model-WF-C20590,Composite Yeild-50,000 Pages			
347	33450-B4-347	Yellow Ink for Epson Printer Model-WF-C20590,Composite Yeild-50,000 Pages			
348	33450-B4-348	Maintanence Box for Epson Printer Model-WF-C20590			

349	33450-B4-349	Black Ink for Epson Printer Model-WF-C20600,Yeild-50,000 Pages(A4) x 2 nos			
350	33450-B4-350	Cyan Ink for Epson Printer Model-WF-C20600,Composite Yeild-50,000 Pages			
351	33450-B4-351	Megenta Ink for Epson Printer Model-WF-C20600,Composite Yeild-50,000 Pages			
352	33450-B4-352	Yellow Ink for Epson Printer Model-WF-C20600,Composite Yeild-50,000 Pages			
353	33450-B4-353	Maintanence Box for Epson Printer Model-WF-C20600			
354	33450-B4-354	Black Ink for Epson Printer Model-WF-C20750,Yeild-50,000 Pages(A4) x 2 nos			
355	33450-B4-355	Cyan Ink for Epson Printer Model-WF-C20750,Composite Yeild-50,000 Pages			
356	33450-B4-356	Yellow Ink for Epson Printer Model-WF-C20750,Composite Yeild-50,000 Pages			
357	33450-B4-357	Megenta Ink for Epson Printer Model-WF-C20750,Composite Yeild-50,000 Pages			
358	33450-B4-358	Maintanence Box for Epson Printer Model-WF-C20750			
359	33450-B4-359	Black Ink for Epson Printer Model-WF-C21000,Yeild-50,000 Pages(A4) x 2 nos			
360	33450-B4-360	Cyan Ink for Epson Printer Model-WF-C21000,Composite Yeild-50,000 Pages			
361	33450-B4-361	Megenta Ink for Epson Printer Model-WF-C21000,Composite Yeild-50,000 Pages			
362	33450-B4-362	Yellow Ink for Epson Printer Model-WF-C21000,Composite Yeild-50,000 Pages			

363	33450-B4-363	Epson - Black Fabric Ribbon Cartridge (17.7 Metres) Ribbon Life - 3 Million Characters for printer-LX 310			
364	33450-B4-364	Epson - Black Fabric Ribbon Cartridge (17.7 Metres) Ribbon Life - 3 Million Characters for printer-LQ 310			
365	33450-B4-365	Epson - Black Fabric Ribbon Cartridge (16.75 Metres) Ribbon Life - 9 Million Characters for printer-DLQ-3000/3000+/3500			
366	33450-B4-366	Epson - Black – Fabric Ribbon Cartridge (17.0 Meters) Ribbon Life – 7.50 Million Characters for printer-FX-890/FX-890II/N			
367	33450-B4-367	Epson - Fabric Ribbon Cartridge (32 Metres) Ribbon Life - 12 Million Characters (14 dpc) for printer-FX-2175/FX-2175II/N			
368	33450-B4-368	Epson - Fabric Ribbon Cartridge (32 Metres) Ribbon Life - 12 Million Characters (14 dpc) for printer-FX-2190/FX-2190II/N			
369	33450-B4-369	Epson - Fabric Ribbon Cartridge, (70 Metres) Ribbon Life - 15 Million Characters (48 dpc) for printer-DFX-9000			
370	33450-B4-370	Epson - 24 Pin 1.3 cm / 1/2" Fabric Ribbon Cartridge (12.40 Metres/40.68 Feet) Ribbon Life - 2 Million Characters (48 dpc) for printer-LQ-670/N			
371	33450-B4-371	Epson - 24 Pin Narrow Fabric Ribbon Cartridge (10 Metres) Ribbon Life - 2.5 Million Characters (48 dpc) for printer-LQ-1310			
372	33450-B4-372	Epson - Fabric Ribbon Cartridge (32 Metres) Ribbon Life - 8 Million Characters (48 dpc) for printer-LQ-2090/LQ-2090II/N			
373	33450-B4-373	Epson - Black - Ribbon Cartridge, (60 Metres) Ribbon Life - 8 Million Characters (48 dpc) for printer-LQ-2190			
374	33450-B4-374	Printronix P7 EC Ribbon Cartridges			
375	33450-B4-375	HP LaserJet Pro MFP M128fn,M128fw,M126nw, M226dw,M202dw,M1108,M1106 - HP CC388A Blk Contr LJ Toner Cartridge			

376	33450-B4-376	HP LaserJet ProMFP M138FNW,M136NW - HP 110A Blk Original Laser Toner Crtg			
377	33450-B4-377	HP LaserJet ProM403dn,M427fdw - HP 28A Black Original LaserJet Toner Cartridge			
378	33450-B4-378	HP LaserJet ProM429fdw,M405dn - HP 77A Black LaserJet Toner Cartridge			
379	33450-B4-379	HP LaserJet Pro M104a Printer - HP 18A Blk Contract LJ Toner Cartridge			
380	33450-B4-380	HP LaserJet Pro M104a Printer - HP 19A Original LaserJet Imaging Drum			
381	33450-B4-381	HP LaserJet Pro M203, M227 - HP 30A Black LaserJet Toner Cartridge			
382	33450-B4-382	HP LaserJet Pro M203, M228 - HP 32A LaserJet Imaging Drum			
383	33450-B4-383	HP LaserJet Pro M436dn,M436nda - HP 56A Black Original LaserJet Toner Cartridge			
384	33450-B4-384	HP LaserJet Pro M436dn,M436nda - HP 56X Black Original LaserJet Toner Cartridge			
385	33450-B4-385	HP LaserJet Pro M436dn,M436nda - HP 57A Original LaserJet Imaging Drum			
386	33450-B4-386	HP LaserJet Pro M440dn.M440nda - HP 57A Original LaserJet Imaging Drum			
387	33450-B4-387	HP LaserJet Pro M440dn.M440nda - HP 335A Black Original LaserJet Toner Cartridge			
388	33450-B4-388	HP LaserJet Pro M440dn.M440nda - HP 335X Black Original LaserJet Toner Cartridge			
389	33450-B4-389	HP Color LaserJet Pro MFP M479dw - HP 416A Black LaserJet Toner Cartridge			

390	33450-B4-390	HP Color LaserJet Pro MFP M479dw - HP 416A Cyan LaserJet Toner Cartridge			
391	33450-B4-391	HP Color LaserJet Pro MFP M479dw - HP 416A Yellow LaserJet Toner Cartridge			
392	33450-B4-392	HP Color LaserJet Pro MFP M479dw - HP 416A Magenta LaserJet Toner Cartridge			
393	33450-B4-393	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Black LaserJet Toner Cartridge			
394	33450-B4-394	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Cyan LaserJet Toner Cartridge			
395	33450-B4-395	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Yellow LaserJet Toner Cartridge			
396	33450-B4-396	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Magenta LaserJet Toner Cartridge			
397	33450-B4-397	HP Color LaserJet Pro M254dw - HP 202A Original Black LaserJet Toner Cartridge			
398	33450-B4-398	HP Color LaserJet Pro M254dw - HP 202A Original Cyan LaserJet Toner Cartridge			
399	33450-B4-399	HP Color LaserJet Pro M254dw - HP 202A Original Yellow LaserJet Toner Cartridge			
400	33450-B4-400	HP Color LaserJet Pro M254dw - HP 202A Original Magenta LaserJet Toner Cartridge			
401	33450-B4-401	HP Color LaserJet Pro MFP M377dw - HP 410A Black Original LaserJet Cartridge			
402	33450-B4-402	HP Color LaserJet Pro MFP M377dw - HP 410A Cyan Original LaserJet Cartridge			

403	33450-B4-403	HP Color LaserJet Pro MFP M377dw - HP 410A Yellow Original LaserJet Cartridge			
404	33450-B4-404	HP Color LaserJet Pro MFP M377dw - HP 410A Magenta Original LaserJet Cartridge			
405	33450-B4-405	HP Color LaserJet Pro M452dw,M477fdw - HP 410A Black Original LaserJet Cartridge			
406	33450-B4-406	HP Color LaserJet Pro M452dw ,M477fdw - HP 410A Cyan Original LaserJet Cartridge			
407	33450-B4-407	HP Color LaserJet Pro M452dw,M477fdw - HP 410A Yellow Original LaserJet Cartridge			
408	33450-B4-408	HP Color LaserJet Pro M452dw,M477fdw - HP 410A Magenta Original LaserJet Cartridge			
409	33450-B4-409	HP LaserJet Pro MFP M72625dn,M72630dn - HP Black Contract LaserJet Toner			
410	33450-B4-410	HP LaserJet Pro E72535dn - HP W9005MC Black Managed LaserJet Tone			
411	33450-B4-411	HP LaserJet Pro E72535dn,72625dn,72630dn - HP W9006MC Black Managed LaserJet Imaging Drum			
412	33450-B4-412	HP Color LaserJet Pro CP5225dn - HP 307A Black Original LaserJet Cartridge			
413	33450-B4-413	HP Color LaserJet Pro CP5225dn - HP 307A Cyan Original LaserJet Cartridge			
414	33450-B4-414	HP Color LaserJet Pro CP5225dn - HP 307A Yellow Original LaserJet Cartridge			
415	33450-B4-415	HP Color LaserJet Pro CP5225dn - HP 307A Magenta Original LaserJet Cartridge			

416	33450-B4-416	HP LaserJet Pro M700,M712 - HP 14A Black LaserJet Toner Cartridge			
417	33450-B4-417	HP LaserJet M1566,,1606 - HP 78A Black LaserJet Toner Cartridge			
418	33450-B4-418	HP LaserJet M1020,M1005,M3015, - HP 12A Black LaserJet Toner Cartridge			
419	33450-B4-419	HP LaserJet M607,M608 - HP 37A Black LaserJet Toner Cartridge			
420	33450-B4-420	HP Laser jet MFP 82560dn - HP Black Managed LaserJet Toner			
421	33450-B4-421	HP Laser jet MFP 82560dn - HP Black Managed LaserJet Imaging Drum			
422	33450-B4-422	HP Laser jet MFP E77830dn - HP W9040MC Black Managed LaserJet Toner			
423	33450-B4-423	HP Laser jet MFP E77830dn - HP W9041MC Cyan Managed LaserJet Toner			
424	33450-B4-424	HP Laser jet MFP E77830dn - HP W9042MC Yellow Managed LaserJet Toner			
425	33450-B4-425	HP Laser jet MFP E77830dn - HP W9043MC Magenta Managed LaserJet Toner			
426	33450-B4-426	HP Laser jet MFP E87640dn,E87660 - HP W9050MC Black Managed LaserJet Toner			
427	33450-B4-427	HP Laser jet MFP E87640dn,E87660 - HP W9051MC Cyan Managed LaserJet Toner			
428	33450-B4-428	HP Laser jet MFP E87640dn,E87660 - HP W9052MC Yellow Managed LaserJet Toner			
429	33450-B4-429	HP Laser jet MFP E87640dn,E87660 - HP W9053MC Magenta			

		Managed LaserJet Toner			
430	33450-B4-430	HP Laser jet M551 - HP 507A Black Managed LaserJet Toner			
431	33450-B4-431	DVD-R Media 4.7 GB, Jewel Box			
432	33450-B4-432	DVD- R/W Media, 4.7 GB, Jewel Box			
433	33450-B4-433	External DVD Writer (1year warranty)			
434	33450-B4-434	1 TB External Hard Disk Drive (1year warranty)			
435	33450-B4-435	2 TB External Hard Disk Drive (1year warranty)			
436	33450-B4-436	4 TB External Hard Disk Drive (1year warranty)			
437	33450-B4-437	500 GB SSD External Hard Drive (1year warranty)			
438	33450-B4-438	1 TB SSD External Hard Drive (1year warranty)			
439	33450-B4-439	16 GB Pen Drive (1year warranty) Class 10			
440	33450-B4-440	32 GB Pen Drive (1year warranty) Class 10			
441	33450-B4-441	64 GB Pen Drive (1year warranty) Class 10			
442	33450-B4-442	128 GB Pen drive (1year warranty) Class 10			
443	33450-B4-443	16 GB Pen Drive With Type C and USB2.0			
444	33450-B4-444	32 GB Pen drive With Type C and USB2.0			
445	33450-B4-445	64 GB Pendrive With Type C and USB2.0			
446	33450-B4-446	128 GB Pendrive With Type C and USB2.0			
447	33450-B4-447	USB Mouse with pad (1 year warranty)			
448	33450-B4-448	Membrane Keyboard (1 year warranty)			
449	33450-B4-449	Mechanical Keyboard (1 year warranty)			
450	33450-B4-450	Wireless Keyboard and Mouse Combo (1 year warranty)			
451	33450-B4-451	Wireless Keyboard (1 year warranty)			
452	33450-B4-452	Wireless mouse (1year warranty)			
453	33450-B4-453	Mic with Stand (Table top for conference room)			

454	33450-B4-454	Head Phone With Mike			
455	33450-B4-455	Wireless Head Phone			
456	33450-B4-456	Speaker 2.1			
457	33450-B4-457	Bluetooth Speaker 20W with USB ports			
458	33450-B4-458	USB Speaker 5W			
459	33450-B4-459	VGA Cable 1.5 Meter			
460	33450-B4-460	VGA Cable 5 Meter			
461	33450-B4-461	VGA Cable 10 Meter			
462	33450-B4-462	VGA Cable 15 Meter			
463	33450-B4-463	HDMI Cable 1.5 Meter			
464	33450-B4-464	HDMI Cable 5 Meter			
465	33450-B4-465	HDMI Cable 10 Meter			
466	33450-B4-466	HDMI Cable 15 Meter			
467	33450-B4-467	Power Cable 10 Meter			
468	33450-B4-468	Power Cable 15 Meter			
469	33450-B4-469	Monitor 19 inch (1 year warranty)			
470	33450-B4-470	Monitor 21 inch (1 year warranty)			
471	33450-B4-471	Monitor 24 inch (1 year warranty)			
472	33450-B4-472	Monitor 27 inch (1 year warranty)			
473	33450-B4-473	Wifi Modem 150Mbps or above			
474	33450-B4-474	Wifi Modem 300Mbps or above			
475	33450-B4-475	Wifi Modem 1200Mbps or above			
476	33450-B4-476	10,000 mah Power Bank for Android Tablets (1 year warranty)			
477	33450-B4-477	2 Port VGA Splitter			
478	33450-B4-478	2 Port HDMI Splitter			
479	33450-B4-479	4 Port USB Hub			

480	33450-B4-480	PCI Ethernet Card for Wifi			
481	33450-B4-481	Wifi External Adapter			
482	33450-B4-482	MY book 2 TB Extrenal			
483	33450-B4-483	MY book 4 TB Extrenal			
484	33450-B4-484	MY book 6 TB Extrenal			
485	33450-B4-485	MY book 8 TB Extrenal			
486	33450-B4-486	Branded Laptop Carry Case			
487	33450-B4-487	Branded Sling Bag for Tablets			

A1.5.5 Category B5 – Apple Products

Code	Item Description	Qty
33450-B5-001	iPad 10.2" Wifi + Cellular 128GB Storage	1 No.

Paramater	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	10.2-inch (diagonal) LED-backlit Multi-Touch display with IPS technology			
Resolution	2160x1620-pixels			
SIM Slots	Nano-SIM			
Operating System	iPad OS 14			
Processor	A12 Bionic chip with 64-bit architecture Neural Engine			
Memory	128 GB			
Camera	8-mega pixel camera			
	1.2MP FaceTime HD Camera			
Features	Built-in GPS, Wifi, Digital compass, iBeacon micro-location, Touch ID, Three-axis gyro, Accelerometer, Barometer, Ambient light sensor.			
Battery	Built-in 32.4-watt-hour rechargeable lithium-polymer battery			
Accessories	Lightning to USB-C Cable, USB-C Power Adapter			

Code	Item Description	Qty
33450-B5-002	iPad Air 10.9" Wifi + Cellular 256GB Storage	1 No.

Paramater	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	10.9-inch (diagonal) LED-backlit Multi-Touch display with IPS technology			
Resolution	2360x1640-pixels			
SIM Slots	Nano-SIM			
Operating System	iPadOS 14			
Processor	A14 Bionic chip with 64-bit architecture Neural Engine			
Memory	256 GB			
Camera	12MP Wide camera			
	7MP Face time Camera			
Features	Built-in GPS, Wifi, Digital compass, iBeacon micro-location, Touch ID, Three-axis gyro, Accelerometer, Barometer, Ambient light sensor.			
Battery	Built-in 28.6-watt-hour rechargeable lithium-polymer battery			
Accessories	USB-C Charging Cable (1 metre), 20W USB-C Power Adapter			

Code	Item Description	Qty
33450-B5-003	iPad Pro 11" Wifi + Cellular 512GB Storage	1 No.

Parameter	Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	11-inch (diagonal) Liquid Retina display, LED-backlit Multi-Touch display with IPS technology			
Resolution	2388x1668-pixels			
SIM Slots	Nano-SIM			
Operating System	iPad OS 14			
Processor	Apple M1 chip, 8-core CPU with 4 performance cores and 4 efficiency cores, 8-core GPU and16-core Neural Engine			
Memory	512GB			
Camera	12-megapixel camera			
	TrueDepth Camera - 12MP Ultra Wide camera			
Features	Built-in GPS, Wifi, Digital compass, iBeacon micro-location, Face ID, LiDAR Scanner, Three-axis gyro, Accelerometer, Barometer, Ambient light sensor,			
Battery	Built-in 28.65-watt-hour rechargeable lithium-polymer battery			
Accessories	USB-C Charge Cable (1 metre), 20W USB-C Power Adapter			

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Code	Item Description	Qty
33450-B5-004	iPad Pro 12.9" Wifi + Cellular 512GB Storage	1 No.

Parameter	Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	12.9 inches Liquid Retina XDR display			
Resolution	2732x2048 -pixel resolution at 264 pixels			
SIM Slots	Nano-SIM			
Operating System	iPad OS			
Processor	Apple M1 chip, 8-core CPU with 4 performance cores and 4 efficiency cores, 8-core GPU, 16-core Neural Engine			
Memory	512GB			
Camera	12-megapixel camera			
	TrueDepth Camera - 12MP Ultra Wide camera			
Features	Built-in GPS, Wifi, Digital compass, iBeacon micro-location, Face ID, LiDAR Scanner, Three-axis gyro, Accelerometer, Barometer, Ambient light sensor,			
Battery	Built-in 40.88-watt-hour rechargeable lithium-polymer battery			
Accessories	USB-C Charge Cable (1 metre), 20W USB-C Power Adapter.			

Code	Item Description	Qty
33450-B5-005	Mac Book Air 13" with 256 GB SSD	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	13.3-inch (diagonal) LED-backlit display with IPS technology			
Processor	Apple M1 chip (8-core CPU with 4 performance cores and 4 efficiency cores) 7-core GPU 16-core Neural Engine			
Memory	8GB unified memory			
Hard Disk	256 GB SSD			
Battery Life	Built-in 49.9-watt-hour lithium-polymer battery			
Weight	1.29 kg (2.8 pounds)3			
Ports	Two Thunderbolt and one Head Phone jack Port			
Wireless	802.11ax Wi-Fi 6 wireless networking			
BlueTooth	Bluetooth 5.0 wireless technology			
Integrated Web Cam	720p FaceTime HD camera			
Key Board	Backlit Magic Keyboard			
Accessories	30W USB-C Power Adapter, USB-C Charge Cable (2 m)			
Operating System	macOS			

Code	Item Description	Qty
33450-B5-006	Mac Book Air 13" with 512 GB SSD	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	13.3-inch (diagonal) LED-backlit display with IPS technology			
Processor	Apple M1 chip (8-core CPU with 4 performance cores and 4 efficiency cores) 7-core GPU ⸢1⸣ 16-core Neural Engine			
Memory	8GB unified memory			
Hard Disk	512 GB SSD			
Battery Life	Built-in 49.9-watt-hour lithium-polymer battery			
Weight	1.29 kg (2.8 pounds)3			
Ports	Two Thunderbolt and one Head Phone jack Port			
Wireless	802.11ax Wi-Fi 6 wireless networking			
BlueTooth	Bluetooth 5.0 wireless technology			
Integrated Web Cam	720p FaceTime HD camera			
Key Board	Backlit Magic Keyboard			
Accessories	30W USB-C Power Adapter, USB-C Charge Cable (2 m)			
Operating System	macOS			

Code	Item Description	Qty
33450-B5-007	Mac Book Pro 13" with 256 GB SSD	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	13.3-inch (diagonal) LED-backlit display with IPS technology			
Processor	Apple M1 chip (8-core CPU with 4 performance cores and 4 efficiency cores) 8-core GPU 16-core Neural Engine			
Memory	8GB unified memory			
Hard Disk	256 GB SSD			
Battery Life	Built-in 58.2-watt-hour lithium-polymer battery			
Weight	1.4 kg (3.0 pounds)3			
Ports	Two Thunderbolt and one Head Phone jack Port			
Wireless	802.11ax Wi-Fi 6 wireless networking			
BlueTooth	Bluetooth 5.0 wireless technology			
Integrated Web Cam	720p FaceTime HD camera			
Key Board	Backlit Magic Keyboard			
Accessories	61W USB-C Power Adapter, USB-C Charge Cable (2 m)			
Operating System	macOS			

Code	Item Description	Qty
33450-B5-008	MacBook Pro 13" with 512 GB SSD	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	13.3-inch (diagonal) LED-backlit display with IPS technology			
Processor	Apple M1 chip (8-core CPU with 4 performance cores and 4 efficiency cores) 8-core GPU 16-core Neural Engine			
Memory	8GB unified memory			
Hard Disk	512 GB SSD			
Battery Life	Built-in 58.2-watt-hour lithium-polymer battery			
Weight	1.4 kg (3.0 pounds)3			
Ports	Two Thunderbolt and one Head Phone jack Port			
Wireless	802.11ax Wi-Fi 6 wireless networking			
BlueTooth	Bluetooth 5.0 wireless technology			
Integrated Web Cam	720p FaceTime HD camera			
Key Board	Backlit Magic Keyboard			
Accessories	61W USB-C Power Adapter, USB-C Charge Cable (2 m)			
Operating System	macOS			

Code	Item Description	Qty
33450-B5-009	iMac 24" (Desktop)	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	Apple M1 chip (8-core CPU with 4 performance cores and 4 efficiency cores) 8-core GPU, 16-core Neural Engine			
Memory	8GB unified memory			
Hard Disk	512 GB SSD			
Display	24-inches 4.5K Retina display, 4480x2520 resolution at 218 pixels per inch with support for 1 billion colours			
Keyboard	Magic Keyboard with Touch ID			
Mouse	Magic Mouse			
Ports	Two Thunderbolt, Two USB3, Gigabit Ethernet port.			
Audio	*High-fidelity six-speaker system with force-cancelling woofers, *Wide stereo sound, *Support for spatial audio when playing music or video with Dolby Atmos, *Studio-quality three-mic array with high signal-to-noise ratio and directional beamforming			
Web Camera	1080p FaceTime HD camera with M1 image signal processor			
Operating system	Mac OS			
Standard accessories	Magic Keyboard with Touch ID, Magic Mouse, 143W power adapter, Power cord (2 m), USB-C to Lightning Cable.			

A1.5.6 Category B6- Server and related items

Code	Item Description	Qty
33450-B6-001	Desktop server	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	INTEL E2100 series Processor or above			
Memory	1 x 16 GB DDR4 RDIMM with atleast one free slot scalable up to 64GB.Proposed memory should have ECC support			
Raid Controller	Onboard SATA controller which supports RAID: 0/1/5/10			
Hard Disk Drive	1X 1 TB 6G SATA 7.2K LFF or higher, expandable upto 4 nos or Higher			
Bays	4 bays or higher			
Form Factor / Cabinet Type	Tower			
Monitor	TCO-07 certified 18.5" / 19" Wide Monitor			
Keyboard	USB OEM Keyboard			
Mouse	Optical mouse			
System Fans	Required			
CD/DVD Drive	DVD-RW			
Interfaces/PCI Slots	Minimum 3 PCI-Express slots			
Network	1Gbps Dual Port Network Adapter.			

Interface				
Ports	USB – min 4 USB ports with atleast one with 3.0			
Power supply	Required			
Manageability	The Server Management Software should be of the same brand as of the server supplier.Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password ,Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another three years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-002	Tower Server Model : 1	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	1 x Intel® Silver 4208 2.1 Ghz (8 core) Processor or above			
Memory	2 x 16 GB DDR4 RDIMM scalable up to 192 GB .Proposed memory should have ECC support			
Raid Controller	Onboard SATA controller which supports RAID: 0/1/5/10			
Hard Disk Drive	3 x 1 TB 6G SATA 7.2K LFF or Higher, Server should also support additional SSD, SAS Drive			
Bays	4 bays or higher			
Form Factor / Cabinet Type	Tower			
Monitor	TCO-07 certified 18.5" / 19" Wide Monitor			
Keyboard	USB OEM Keyboard			
Mouse	Optical mouse			
System Fans	required			
CD/DVD Drive	DVD-RW			
Interfaces/PCI Slots	Minimum 3 PCI-Express slots			
Network Interface	1Gbps Dual Port Network Adapter.			
Ports	USB – min 4 USB ports with atleast one with 3.0			

Redundant Hot Plug Power supply	Required			
Manageability	The Server Management Software should be of the same brand as of the server supplier.Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0/3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another two years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-003	Tower Server Model : 2	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	1 x Intel® Xeon® Gold 6240 2.6G, 18C/36T, 10.4GT/s, 24.75M Cache Processor upgradable upto 2 Processor			
Memory	2 x 16 GB DDR4 RDIMM scalable up to 768 GB using RDIMM or 1.5 TB using LRDIMM with 2 Processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	3 x 1 TB 6G SATA 7.2K LFF or Higher, Server should also support additional SSD, SAS Drive			
Bays	4 bays or higher			
Form Factor / Cabinet Type	Tower			
Monitor	TCO-07 certified 18.5" / 19" Wide Monitor			
Keyboard	USB OEM Keyboard			
Mouse	Optical mouse			
System Fans	required			
Interfaces/PCI Slots	Minimum 3 PCIe slots			
Network Interface	1Gbps Quad Port Network Adapter.			

Ports	USB – min 4 nos			
Power Supply	hot-pluggable 1 + 1 redundancy			
Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0/3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another three years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-004	Rack 1U Model : 1	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	1 x Intel® Xeon® Silver 4208 8C or above, upgradable upto two processors			
Memory	2 x 16 GB DDR4 RDIMM scalable up to 512 GB using RDIMM or 1TB using LRDIMM with 2 Processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	Onboard SATA controller which supports RAID: 0/1/5/10 2GB Flash Cache			
Hard Disk Drive	3 x 1 TB 6G SATA 7.2K LFF or Higher, Server should also support additional SSD, SAS Drive			
Bays	8 bays or higher			
System Fans	Hotplug fan required			
Form Factor / Cabinet Type	1U Rack Mountable			
Interfaces/PCI Slots	Minimum 2 PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 3 nos			
Power Supply	hot-pluggable 1 + 1 redundancy			

Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0/3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another three years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Tender Ref: ELCOT/Proc/OT/33450/RC Tender -Group B/2021-22

Code	Item Description	Qty
33450-B6-005	Rack 2U Model : 1	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	1 x Intel® Xeon® Silver 4310 12C or above, upgradable upto two processors			
Memory	2 x 16 GB DDR4 RDIMM scalable up to 512 GB using RDIMM or 1 TB using LRDIMM with 2 Processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	Onboard SATA controller which supports RAID: 0/1/5/10 with 2GB RAID Cache			
Hard Disk Drive	3 x 1 TB 6G SATA 7.2K LFF or Higher, Server should also support additional SSD, SAS Drive			
Bays	8 bays or higher			
System Fans	Hotplug fan required			
Form Factor / Cabinet Type	2U Rack Mountable			
Interfaces/PCI Slots	Minimum 3 PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 4 nos			
Power Supply	hot-pluggable 1 + 1 redundancy			

Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0/3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another three years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-006	Rack 2U Model : 2	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance

				(Yes/No)
Processor	2x Intel® Xeon® Gold 6240 2.6G, 18C/36T, 10.4GT/s, 24.75M Cache Processor or above , upgradable upto Four processors			
Memory	4 x 16 GB DDR4 RDIMM scalable up to 1.5 TB using RDIMM or 3 TB using LRDIMM with 4 processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	Onboard SATA controller which supports RAID: 0/1/5/10 with 2GB Cache			
Hard Disk Drive	3 x 1.2 TB 12G SAS 10K RPM , Server should also support additional SATA, SSD Drive			
Bays	8 bays or higher			
System Fans	Hotplug fan required			
Form Factor / Cabinet Type	2U rack			
Interfaces/PCI Slots	Minimum 3 PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	Minimum 4 USB ports & min 1 SD slot& 1 Dedicated Management Port			
Power Supply	Hot-pluggable 1 + 1 redundancy			
Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image) , To be quoted with Advanced Management Software for Server management.			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux &			

	SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0/3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another three years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-007	Rack 4U Model:1	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	2 x Gold 5215, 2.5 Ghz, 10 core, or higher upgradeable to four processors			

Memory	4 x 16 GB DDR4 RDIMM memory scalable up to 1.5 TB using RDIMM or 3 TB using LRDIMM with 4 processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	3 x 1.2 TB 12G SAS 10K RPM , Server should also support additional SATA, SSD Drive			
Bays	8 bays or higher			
Form Factor / Cabinet Type	4U Rack Mountable			
System Fans	Hotplug fan required			
Interfaces/PCI Slots	Minimum 4PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 4 nos			
Power Supply	Hot-pluggable 1 + 1 redundancy			
Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0/3.0 Support			

Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another three years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-008	Rack 1U (AMD)	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	1 x EPYC 7252, 3.2 Ghz 8 core or or above, upgradable upto two processors			
Memory	2 x 16 GB DDR4 RDIMM scalable up to 1 TB using RDIMM. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			

Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	3 x 1 TB 6G SATA 7.2K LFF or Higher, Server should also support additional SSD, SAS Drive			
Bays	8 bays or higher			
Form Factor / Cabinet Type	1U Rack Mountable			
System Fans	Hotplug fan required			
Interfaces/PCI Slots	Minimum 3 PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 3 nos			
Power Supply	hot-pluggable 1 + 1 redundancy			
Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0/3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			

Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another three years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-009	Rack 2U (AMD)	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	1 x EPYC 7252 (8-Core) processor or above, upgradable upto two processors			
Memory	2 x 16 GB DDR4 RDIMM scalable up to 1 TB using RDIMM or 3 TB using LRDIMM with 2 Processors .Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	3 x 1 TB 6G SATA 7.2K LFF or Higher, Server should also support additional SSD, SAS Drive			
Bays	8 bays or higher			

Form Factor / Cabinet Type	2U Rack Mountable			
System Fans	Hotplug fan required			
Interfaces/PCI Slots	Minimum 3 PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 3 nos			
Power Supply	hot-pluggable 1 + 1 redundancy			
Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0/3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			

End Of Life & End Of Support	This server should not become End Of Life for another two years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-010	High End Server Model:1	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	2 x Intel Xeon Gold 63xx series 28 Core Processor or higher			
Memory	4 x 64 GB DDR4 RDIMM memory scalable up to 2TB using RDIMM or 8TB using LRDIMM with 2 processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	5 x 1.2 TB 12G SAS 10K RPM , Server should also support additional SATA, SSD Drive			
Form Factor / Cabinet Type	2U Rack Mountable			
System Fans	Redundant & 6 Hot Plug Fans			
Interfaces/PCI Slots	Minimum 4PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 4 nos			

Power Supply	Hot-pluggable 1 + 1 redundancy			
Manageability	The Server Management Software should be of the same brand as of the server supplier.Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0 Support or higher			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another three years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			
HBA Card	2 Nos HBA with 10Gbps or higher speed			
Insulated management console license (ILO / IDRAC/ IMC)	Required			

Code	Item Description	Qty
33450-B6-011	High End Server Model:2	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	2 x Intel Xeon Gold 63xx series 32 Core Processor or higher			
Memory	4 x 64 GB DDR4 RDIMM memory scalable up to 2TB using RDIMM or 8TB using LRDIMM with 2 processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	5 x 1.2 TB 12G SAS 10K RPM , Server should also support additional SATA, SSD Drive			
Form Factor / Cabinet Type	2U Rack Mountable			
System Fans	Redundant & 6 Hot Plug Fans			
Interfaces/PCI Slots	Minimum 4PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 4 nos			
Power Supply	Hot-pluggable 1 + 1 redundancy			
Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB			

	flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0 Support or higher			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another three years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			
HBA Card	2 Nos HBA with 10Gbps or higher speed			
Insulated management console license (ILO / IDRAC/ IMC)	Required			

Code	Item Description	Qty
33450-B6-012	High End Server Model:3	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	2 x Intel Xeon Platinum 83xx series 32 Core Processor or higher			
Memory	4 x 64 GB DDR4 RDIMM memory scalable up to 2TB using RDIMM or 8TB using LRDIMM with 2 processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	5 x 1.2 TB 12G SAS 10K RPM , Server should also support additional SATA, SSD Drive			
Form Factor / Cabinet Type	2U Rack Mountable			
System Fans	Redundant & 6 Hot Plug Fans			
Interfaces/PCI Slots	Minimum 4PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 4 nos			
Power Supply	Hot-pluggable 1 + 1 redundancy			
Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			

OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0 / 3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another two years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			
HBA Card	2 Nos HBA with 10Gbps or higher speed			
Insulated management console license (ILO / IDRAC/ IMC)	Required			

Code	Item Description	Qty
33450-B6-013	High End Server Model:4	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	2 x Intel Xeon Platinum 83xx series 40 Core Processor or higher			
Memory	4 x 64 GB DDR4 RDIMM memory scalable up to 2TB using RDIMM or 8TB using LRDIMM with 2 processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	5 x 1.2 TB 12G SAS 10K RPM , Server should also support additional SATA, SSD Drive			
Form Factor / Cabinet Type	2U Rack Mountable			
System Fans	Redundant & 6 Hot Plug Fans			
Interfaces/PCI Slots	Minimum 4PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 4 nos			
Power Supply	Hot-pluggable 1 + 1 redundancy			
Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB			

	flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 2.0 Support or higher			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another three years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			
HBA Card	2 Nos HBA with 10Gbps or higher speed			
Insulated management console license (ILO / IDRAC/ IMC)	Required			

Code	Item Description	Qty
33450-B6-014	Rack 4U Model:1 - T	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	2 X Intel Gold 5115 (10 Core) Processor or above , upgradable upto Four processors			
Memory	4 x 16 GB DDR4 RDIMM memory scalable up to 1.5 TB using RDIMM or 3 TB using LRDIMM with 4 processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	2X600GB 12G SAS 15K SFF Or Higher, Hot Plug expandable upto 8 Nos or Higher			
Form Factor / Cabinet Type	3U/4U Rack Mountable			
System Fans	Redundant & Hot Plug Fans			
Interfaces/PCI Slots	Minimum 4PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 4 nos			
HBA	16Gb Dual Port Fibre Channel Host Bus Adapter			
Power Supply	Hot-pluggable 1 + 1 redundancy			

Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another two years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-015	Rack 2U Model 2 - T	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	2xIntel® Gold 5115 (10 core) Processor or above Upgradable upto two processors			
Memory	2 x 16 GB DDR4 RDIMM scalable up to 768 GB using RDIMM or 1.5 TB using LRDIMM with 2 Processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	2X600GB 12G SAS 15K SFF Or Higher, Hot Plug expandable upto 8 Nos or Higher			
Form Factor / Cabinet Type	2U Rack Mountable			
System Fans	Redundant & Hot Plug Fans			
Interfaces/PCI Slots	Minimum 3 PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 4 nos			
HBA	16Gb Dual Port Fibre Channel Host Bus Adapter			
Power Supply	hot-pluggable 1 + 1 redundancy			

Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another two years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-016	RACK - 2U- 4 Processor -T	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	4 X Intel Gold 6148 (20 Core) Processor or above , upgradable upto Four processors			
Memory	16 x 32 GB DDR4 RDIMM memory scalable up to 1.5 TB Using RDIMM or 3 TB using LRDIMM with 4 processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	3X600GB 12G SAS 15K SFF Or Higher, Hot Plug expandable upto 8 Nos or Higher			
Form Factor / Cabinet Type	2U Rack Mountable			
System Fans	Redundant & Hot Plug Fans			
Interfaces/PCI Slots	Minimum 3 PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	Minimum 4 USB ports & min 1 SD slot& 1 Dedicated Management Port			
HBA	16Gb Dual Port Fibre Channel Host Bus Adapter			

Power Supply	Hot-pluggable 1 + 1 redundancy			
Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image) , To be quoted with Advanced Management Software for Server management.			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another two years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-017	Rack 4U Model : 2 - T	1 No.

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	2 X Intel Gold 6138 (20 Core) Processor or above , upgradable upto Four processors			
Memory	8 x 32 GB RDIMM scalability upto 1.5 TB using RDIMM or 3 TB using LRDIMM with 4 processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	12G SAS H/W Raid controller, which supports RAID: 0/1/5/10 with 2GB Flash Backed Cache			
Hard Disk Drive	2X600GB 12G SAS 15K SFF Or Higher, Hot Plug expandable upto 8 Nos or Higher			
Form Factor / Cabinet Type	3U/4U Rack Mountable			
System Fans	Redundant & Hot Plug Fans			
Interfaces/PCI Slots	Minimum 4 PCI slots			
Network Interface	4 * 1 Gbps Ethernet Ports 2 * 10 Gbps Ethernet Ports 2* 16 Gbps Dual port FC HBA Card			
Ports	Minimum 4 USB ports & min 1 SD slot& 1 Dedicated Management Port			
Power Supply	Hot-pluggable 2 + 2 redundancy			

Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware & Cent OS			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another two years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-018	Rack 2U Model : 1 - AT	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	1 x Intel® Silver 4110 (8 core) Processor or above, upgradable upto two processors			
Memory	1 x 16 GB DDR4 RDIMM scalable up to 768 GB using RDIMM or 1.5 TB using LRDIMM with 2 Processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	Onboard SATA controller which supports RAID: 0/1/5/10			
Hard Disk Drive	2X600GB 12G SAS 15K SFF Or Higher, Hot Plug expandable upto 8 Nos or Higher			
Form Factor / Cabinet Type	2U Rack Mountable			
System Fans	Redundant & Hot Plug Fans			
Interfaces/PCI Slots	Minimum 3 PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 4 nos			
HBA	16Gb Dual Port Fibre Channel Host Bus Adapter			
Power Supply	hot-pluggable 1 + 1 redundancy			

Manageability	The Server Management Software should be of the same brand as of the server supplier. Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another two years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

Code	Item Description	Qty
33450-B6-019	Rack 2U Model : 1 - BT	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	1 x Intel® Silver 4110 (8 core) Processor or above, upgradable upto two processors			
Memory	2 x 16 GB DDR4 RDIMM scalable up to 768 GB using RDIMM or 1.5 TB using LRDIMM with 2 Processors. Proposed memory should have ECC support. Selection of RDIMM or LRDIMM is based on customer preference.			
Raid Controller	Onboard SATA controller which supports RAID: 0/1/5/10			
Hard Disk Drive	2X600GB 12G SAS 15K SFF Or Higher, Hot Plug expandable upto 8 Nos or Higher			
Form Factor / Cabinet Type	2U Rack Mountable			
System Fans	Redundant & Hot Plug Fans			
Interfaces/PCI Slots	Minimum 3 PCI slots			
Network Interface	1Gbps Quad Port Network Adapter.			
Ports	USB – min 4 nos			
HBA	16Gb Dual Port Fibre Channel Host Bus Adapter			
Power Supply	hot-pluggable 1 + 1 redundancy			

Manageability	The Server Management Software should be of the same brand as of the server supplier.Virtual KVM / Graphical Console / Virtual Folders, Virtual Media (floppy, CD, USB flash drive and image)			
OS Support	Latest Microsoft Windows Server , Red Hat Enterprise Linux & SUSE Linux Enterprise Server, Vmware			
Pre-Failure Notification	Failure – Failure notification on HDD, Processor & Memory			
Industry Standard Compliance	PCIe3.0 Compliant, PXE Support, USB 3.0 Support			
Security	Power-on password / Keyboard password / Administrator's password, Hardware-based system security feature that can securely store information, such as passwords and encryption keys, which can be used to authenticate the platform.			
Benchmarks	SPEC int benchmark for the quoted processor models should be submitted either along with the bid or shall be submitted within 15 days from the date of submission of Bid.			
End Of Life & End Of Support	This server should not become End Of Life for another two years and End Of Support for another seven years from the date of LOA. In case end of support is announced, Equivalent or improved configuration should be provided without any additional cost			

A1.5.7 Category B7- Biometric Systems

Code	Item Description	Qty
33450-B7-001	Android Tablet based Aadhaar Enabled Biometric Attendance Systems integrated with STQC Certified Finger Print Scanner	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Type	Integrated Android Tablet based and Single Fingerprint Scanner Device			
Tablet	Android 9.0 operating system or above.			
Processor	Quad core 1.3 Ghz Processor or above			
RAM	2 GB or higher			
Internal Memory	16 GB or higher			
External Memory	Expandable upto 32 GB or higher			
USB Port	Micro USB v2.0 Port - " 2 Nos (with OTG support) or One Micro USB v2.0 port and one round pin DC Jack Adopter for charging on AC 100-240v, 50hz. Shall be provided with Inbuilt surge protection.			
Camera	Front facing Camera 5 MP (auto focus with flash) or better			
Audio	Microphone with High Amplitude Speakers.			
Display	7" Capacitive touch screen with minimum 1024 X 600 pixel resolution, (16 M colors) or better,			
GSM SIM Slot	Dual GSM sim slot			
Battery Backup	Minimum battery backup upto 120 minutes, with minimum 4000mAH battery or above			
Data Support	4G data support.			

Wi-Fi & Lan	Wi-Fi IEEE 802.11b/g/n, LAN 10/100/1000 Mbps			
Bluetooth	Bluetooth 4.0 or higher			
Certification / Compliance	a) Ingress Protection Rating for casing- IP54 compliance, b) CE/FCC certification for Fingerprint scanner, c) RoHS (OEM Declaration), d) BIS certification for Android tablet e) Biometric Systems scanner: STQC and UIDAI Registered Device Certification			
Application Compatibility	1) The device should be compatible with NIC's AEBAS attendance software application. The Device should be Listed in www.attendance.gov.in 2) Bidder should install Biometric Attendance System (BAS) Software (available for free download from NIC) at Bidder level before delivery. Bidder has to provide all necessary technical support for integration of AEBAS with NIC software.			
Fingerprint scanner	1) STQC Certified single fingerprint Bio-Metric device for Aadhaar authentication with driver, in-built template extractor software/SDK (mandatorily with license, if required) (STQC Certificate for the device must be submitted)2) The device should meet the UIDAI guidelines from time to time. The bidder has to submit a letter from OEM on OEM's letter head stating that FP Scanner is approved by UIDAI for Level 0/Level 1 compliance, as applicable.3) API and SDK for Android 6.0 operating system or latest version4) Device should be plug and play with any android (9.0 and above) tablet without need of any additional license to be deployed.5) Bidder has to provide all necessary technical support for integration of their device drivers with attendance software and associated UIDAI applications			

Casing	1) Android Tablet and Single Fingerprint Scanning Device should be housed in a rugged casing.2) The casing should be made of inflexible / metal /other tough material.3) Casing should be durable and should be able to withstand rough daily operational usage.4) Tablet should be vertically oriented in the casing as the attendance application to be deployed is designed to run in vertical mode only. 5) The casing should be designed to cover/hide the android task bar of the tablet. This is required to prevent misuse of any other functionality of the tablet.6) The casing should have provision to access the power on/off and /or reset function of the tablet through the secured casing.			
Response time	<5 seconds for an authentication transaction in Client-Server environment.			
Operating Temperature	0 C to 50 C			
Accessories	Power Adapter, USB cable			

Code	Item Description	Qty
33450-B7-002	Linux based Aadhaar Enabled Biometric Attendance Systems integrated with STQC Certified Finger Print Scanner	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	3.5 Inch Touch Screen TFT Color LCD with 320x240 pixels Virtual Keypad on LCD			
Micro Processor	ARM Cortex A8 at800Ghz or above			
Memory	512MB Ram Or above, 256MB Flash or above			

Operating System	LINUX OS (3.0.35) or above			
Keyboard	Touch Screen based or Physical integrated QWERTY Key pad, Alpha Numeric (A-Z:0- 9): Function keys (F1- F10)			
Interfaces/Connectors	a) 1x RS-232 (RJ45 connector for console/Serial port) b) USB Device -1 c) USB Host-1			
Speaker	1W Audio Speaker supporting MP3 and WAV file or Buzzer			
Finger Print Scanner	1) Inbuilt Finger Print Scanner , STQC Certified single fingerprint Bio-Metric device for Aadhaar authentication with driver, in-built template extractor software/SDK (mandatorily with license, if required) (STQC Certificate for the device must be submitted) 2) The device should meet the UIDAI guidelines from time to time. The bidder has to submit a letter from OEM on OEM's letter head stating that FP Scanner is approved by UIDAI for Level 0 compliance, as applicable. 3) API and SDK if required 4) Vendor has to provide all necessary technical support for integration of their device drivers with attendance software and associated UIDAI applications			
Contact less card reader	ISO1443, NFC Inbuilt proximity card/Mifare. Supports read and write.			
Communication Module	A) LAN 10/100/1000 BASE-T (Ethernet) B) DUAL SIM CARD with 3G & 4G data support. C) Wi-Fi IEEE 802.11b/g/n			
GPS	Optional			
Power Adaptor	AC input 10-240V,50/60Hz,DC output 9V.2.2A			
Battery	Minimum battery backup upto 4 hours, with minimum 2000 mAh battery or above			

Enclosure	Rugged casing made up of ABC+PC complyingto IP51 or IP65Standards and wall mount facility to be provided
Operating Temperature	0Â C to 55Â C
Safety	CE certified
Drop Test	3-4 Feet Drop test
Certifications	1) BIS 2) RoHS 3) IP 51 4) STQC certified 5) CE
SD Card Provision	Provision Micro SD Card Reader (upto 32GB)
Application Compatibility	1) The device should be compatible with NIC's AEBAS attendance software application. The Device should be Listed in www.attendance. gov.in 2) Bidder should install Biometric Attendance System (BAS) Software (available for free download from NIC) at Vendor level before delivery. Vendor has to provide all necessary technical support for integration of AEBAS with NIC software.
Accessories	Power Adapter, USB cable

Code	Item Description	Qty
33450-B7-003	Finger Print Enrolment Device (4+4+2 Fingers) with STQC Certified	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)

Scanner Resolution	500 dpi or above and 256 level grey scale, 8 bit			
Data and Power	USB 2.0 and above			
Active Platen Area	3.2 x 3.0 in. (81.28 x 76.2 mm)			
Time for Scanning a finger print	Maximum 4 sec for finger print			
Operating System	FED should be compatible with all Operating Systems (Windows and all OS) of the Desktops and all			
LED Indicators	Power, status and fingerprint image quality			
Capture Format	Single finger rolls, single finger flats, four finger slaps, two thumbs			
Fingerprint Image Format	Fingerprint image data shall be stored and interchanged using the data format specified in ANSI/NIST-2011 â€œ Data Format for the Interchange of Fingerprint Information â€ , WSQ, NIST, BMP, ISO Formats. The configuration of the data shall include Transaction information, User-Defined Text and Fingerprint image data (high-resolution grayscale) or the latest. FED must have capacity to perform local search at PS level of at least 10000 persons.			
Image Quality	Complies with FBI's IAFIS Image Quality. Electronic images must be of sufficient forensic quality to allow for: (i) Conclusive fingerprint comparisons (identification or non-identification decision); (ii) fingerprint Classification; (iii) automatic feature detection; and (iv) Overall National Automated Fingerprint Identification System (NAFIS) search reliability.			
Enrolment	If the quality of acquired finger print is lesser than 60% of the desired quality, the system should reject the fingerprint. Further, system should allow for a maximum of 3 attempts to capture fingerprint, and if still the quality level is lower than the desired, the system should prompt the operator to take manual prints.			

Mandatory Features	(i) Capture forensic grade high resolution fingerprints of all ten fingers (ii) Use latest technologies to minimize noise and capture high quality fingerprints (iii) The device should also have default fingerprint reader functionality for querying the FED (iv) FED software for ensuring instant data transfer and interoperability (NAFIS application for ensuring Interoperability and accurate data transfer from FED station to NAFIS via state/UT headquarter) (v) Fingerprint live-scan collection to confirm to the specification sets for performance standards on Fingerprint image scanners for resolution, geometric image accuracy, modulation transfer function, signal-to-noise ratio, grayscale range, grayscale linearity, an grayscale uniformity (vi) The fingerprint ridge pattern (nail to nail) shall be clearly visible (smudge-free) with differentiable ridges and valleys for the entire area around the core and delta			
Certifications	FBI IAFIS IQS Appendix-F, IP 54 compliance, FCC, CE, UL or equivalent certification from reputed Labs in India			
Compatible Software and SDK/API	SDK should work with existing applications used by the departments and also for the new applications. Bidder has to provide all necessary SDK / API / technical support for the integration of FED Device with the required software free of cost when ever required.			

Code	Item Description	Qty
33450-B7-004	PALM Print Device Specification (Palm and 10 Fingers) with STQC Certified	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance

				(Yes/No)
Image Resolution	500dpi			
Palm / Fingerprint Image Dimensions	Palm â€" 5.0 x 5.1 (127 mm x 130 mm) Rolled fingers â€" 1.5 x 1.6 (38 mm x 41 mm) ID Flats â€" 3.0 x 3.2 (76 mm x 81 mm)			
PC Interface	USB 2.0 or above			
Scanner Size	Tenderer as specify			
Capture Mechanism	Automatic, via foot pedal switch or capture button			
Palm / Fingerprint Image Format	Standard Output Formats creation of ANSI/NIST-2011 â€œData Format for the Interchange of Fingerprint Informationâ€ , WSQ, NIST, BMP, ISO Formats.			
Operating System	FED should be compatible with all Operating Systems (Windows and all OS) of the Desktops and all			
Minimum Hardware Requirements	Intel i3 Quad-Core Processor with 1.8 GHz, >= 4GB RAM			
Image Quality	FBI IAFIS IQS CJIS-RS-0010(V7) Appendix F certified			
Humidity	10-90% relative humidity, non-condensing			
Power Supply	100-240 V AC auto-adjusting; 50-60 Hz, 40 W maximum			
Certifications	FBI IAFIS IQS Appendix-F, IP 54 compliance, FCC, CE, UL, BIS / ISO-60950-1, RoHS			
Compatible Software and SDK/API	SDK should work with existing applications used by the departments and also for the new applications. Bidder has to provide all necessary SDK / API / technical support for the integration of Palm Device with the required software free of cost when ever required.			

Code	Item Description	Qty
33450-B7-005	Single Fingerprint reader with STQC certified	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
INTERFACE	USB 2.0			
OPERATING SYSTEM COMPATIBILITY	Android 4.5 or higher, windows 7.0 or higher, linux			
RESOLUTION	Optical 500 DPI and above			
ACTIVE PLATEN AREA	18 * 12.8 MM			
IMAGE SIZE	256 * 360			
Gray Scale	256 Levels			
SURFACE COATING	high durability top surface 9H hardness			
HUMIDITY	10 - 90 %			
OPERATING TEMPRATURE	0 C TO 45 Degree C			
VOLTAGE	5V			
CERTIFICATION	STQC Certified, CE, RoHS compliant			

Code	Item Description	Qty
33450-B7-006	ngle IRIS Scanner with STQC Certified	No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Spatial Resolution	>60% @ 1.0 LP/mm			
Pixel Resolution	>18 pixels/mm			
Pixel Depth	8 bits/pixel			
Image Margins Left & Right	>=0.6x iris radius			
Top & Bottom	>=0.2x iris radius			
Imaging Wave Length	700-900 nm			
Output Image	KIND1 to KIND7 with JPEG2000 Compression			
Capture Mode	Auto capture with built-in quality check			
Capture time	< 2 sec			
Safety Exempt Group	As per IEC 62471:2006-07			
Health - Safety	RoHS Complaint			
ESD Air discharge	+- 8KV,			
contact type	+-4KV			
Radiated Emission	FCC Part 15B/IEC: CISPR 22 CLASS B Standard			
Radiated Immunity	As per IEC/EN 61000-4 3:2006+A2:2010			
Connectivity	USB 2.0 and above			
Operating System	Support Windows, Android, Linux			
Power Consumption:	< 300 mA (Active Mode) &< 60 mA (Sleep Mode)			

Certification-	UIDAI Certified RD Compliant, BIS			

Code	Item Description	Qty
33450-B7-007	ual IRIS Scanner with with STQC Certified	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Iris Diameter	210 mm			
Spatial resolution @ 4.0 Lp/mm	60 % or higher			
Resolution	16 Pixels/mm or Higher			
No. of simultaneous captured eyes	2 nos.			
View finder	External with Capture Distance > 750mm, Capture volume (width/height/depth) > 250x500x500 mm, Exposure Time: 15 ms			
Special Spread - Power in any 100nm band	35 Watt or above			
Imaging wavelength	700-900 nm			
Scan type	Progressive			
Image margins -Left & right	0.50 x iris diameter mm			
Image margins -Top & bottom	0.25 x iris diameter mm			

Pixel Depth	8 bits/pixel			
Image evaluation frame rate	>= 5 frames/sec, continuous image capture			
Capture mode	Dual Optical System for simultaneous capture of both iris images. Auto capture with built-in quality check (incorporates NIST quality considerations).			
Sensor signal to noise ratio	<= 36 DB			
Connectivity	USB, USB-IF certified or Networked TCP/IP			
Operating System Compatibility	Linux /Windows (Latest)			
Software API	Compliant with latest UIDAI Device Capture Specifications Linux/Windows 64 bit certified by UIDAI.			
Certifications	STQC Certified (Certificate to be given with technical bid) , ISO/IEC 19794-6, FCC Class A, RoHS, IP54 compliant, WHQL, CE.			
Certifications for Eye Safety	Class 1 LED Product; IEC/EN 62471 standards			

Code	Item Description	Qty
33450-B7-008	Linux based Biometric Attendance Systems(Non Aadhaar) (500 Users) with Battery Backup and Proximity Card Reader	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)

Fingerprints templates Storage capacity	500 or above			
Card Storage (RFID)	500 or above			
Transaction storage	1,00,000			
Card reader	Inbuilt proximity card reader			
Fingerprint sensor(Biometric Systems)	500 DPI Optical sensor			
FAR	< equal to 0.0001%			
FRR	< equal to 1%			
Identification speed	< 1 sec			
Algorithm Ver	10			
Display	2.8 Color TFT or above			
Keypad	Yes			
LED Indicator	Green/Red or Onscreen Status			
Schedule Bell/Speaker	Mini Speaker			
Communication	TCP/IP, USB			
Power Supply	DC 12V: 1.5Amp			
Operating Temperature	0oC to 45oC			
Operating Humidity	20% -80%			
Battery	Minimum battery backup upto 2 hours, with minimum 1000 mAH battery or above			

Compatible Software and SDK	1) Bidder should provide the necessary web based attendance application / Cloud based / Desktop based (integrated)/ database software, which should be installed in a physical / virtual server available at customer premises as per the customer requirement. 2) Bidder should install Biometric Systems Attendance System (BAS) Software at Bidder level before delivery. Bidder has to provide all necessary technical support for integration of BAS with the required software.			
Accessories	Power Adapter, USB cable			

Code	Item Description	Qty
33450-B7-009	Linux Based Biometric Attendance Systems (Non Aadhaar) (1000 Users) with Battery Backup and Proximity Card Reader	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Fingerprints templates Storage capacity	1000 or above			
Card Storage (RFID)	1000 or above			
Transaction storage	1,00,000			

Card reader	Inbuilt proximity card reader			
Fingerprint sensor(Biometric Systems)	500 DPI Optical sensor			
FAR	< = 0.0001%			
FRR	<=1%			
Identification speed	< 1 sec			
Algorithm Ver	10			
Display	2.8 Color TFT or above			
Keypad	Yes			
LED Indicator	Green/Red or Onscreen Status			
Schedule Bell/Speaker	Mini Speaker			
Communication	TCP/IP, USB			
Power Supply	DC 12V: 1.5Amp			
Operating Temperature	0C to 45 C			
Operating Humidity	20% -80%			
Battery	Minimum battery backup upto 2 hours, with minimum 1000 mAH battery or above			
Compatible Software and SDK	1) Bidder should provide the necessary web based attendance application / Cloud based / Desktop based (integrated)/ database software, which should be installed in a physical / virtual server available at customer premises as per the customer requirement. 2) Bidder should install Biometric Systems Attendance System (BAS)Software at Bidder level before delivery. Bidder has to provide all necessary technical support for integration of BAS with the required software.			
Accessories	Power Adapter, USB cable			

Code	Item Description	Qty
33450-B7-010	Linux Based Biometric Attendance Systems (Non Aadhaar) (2000 Users) with Battery Backup and Proximity Card Reader	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Fingerprints templates Storage capacity	2000 or above			
Card Storage (RFID)	2000 or above			
Transaction storage	1,00,000			
Card reader	Inbuilt proximity card reader			
Fingerprint sensor(Biometric Systems)	500 DPI Optical sensor			
FAR	<=0.0001%			
FRR	<=1%			
Identification speed	< 1 sec			
Algorithm Ver	10			
Display	2.8 Color TFT or above			
Keypad	Yes			
LED Indicator	Green/Red or Onscreen Status			
Schedule Bell/Speaker	Mini Speaker			
Communication	TCP/IP, USB			
Power Supply	DC 12V: 1.5Amp			
Operating Temperature	0 C to 45 C			
Operating Humidity	20% -80%			

Battery	Minimum battery backup upto 2 hours, with minimum 1000 mAH battery or above			
Compatible Software and SDK	1) Bidder should provide the necessary web based attendance application / Cloud based / Desktop based (integrated)/ database software, which should be installed in a physical / virtual server available at customer premises as per the customer requirement. 2) Bidder should install Biometric Systems Attendance System (BAS)Software at Bidder level before delivery. Bidder has to provide all necessary technical support for integration of BAS with the required software.			
Accessories	Power Adapter, USB cable			

Code	Item Description	Qty
33450-B7-011	Linux Based Biometric Attendance Systems (Non Aadhaar) (10000 Users) with Battery Backup and Proximity Card Reader	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Fingerprints templates Storage capacity	10000 or above			
Card Storage (RFID)	10000 or above			
Transaction storage	1,00,000 or above			
Card reader	Inbuilt proximity card reader			
Fingerprint sensor(Biometric Systems)	500 DPI Optical sensor			

FAR	<=0.0001%			
FRR	<=1%			
Identification speedÂ				
Algorithm Ver	10			
Display	3 Color TFT or above			
Keypad	Yes			
LED Indicator	Green/Red or Onscreen Status			
Schedule Bell/Speaker	Mini Speaker			
Communication	TCP/IP, USB			
Power Supply	DC 12V: 1.5Amp			
Operating Temperature	0 C to 45 C			
Operating Humidity	20% -80%			
Battery	Minimum battery backup upto 4 hours, with minimum 2000 mAH battery or above			
Compatible Software and SDK	1) Bidder should provide the necessary web based attendance application / Cloud based / Desktop based (integrated)/ database software, which should be installed in a physical / virtual server available at customer premises as per the customer requirement. 2) Bidder should install Biometric Systems Attendance System (BAS)Software at Bidder level before delivery. Bidder has to provide all necessary technical support for integration of BAS with the required software.			
Accessories	Power Adapter, USB cable			

Code	Item Description	Qty

33450-B7-012	Linux Based Bio Metric System (Non Aadhaar) - with Face Recognition 500 User	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Face capacity	500(1:N), 500(1:1) or above			
Fingerprints templates	2000			
ID Card Storage	500			
Transaction storage	1,00,000			
Card reader	Inbuilt proximity card reader			
Fingerprint sensor(Biometric Systems)	500 DPI Optical sensor			
Push Data	Yes			
Communication	TCP/IP, RS232/485, USB Host			
Display	2.4 or above			
FAR	<=0.0001%			
FRR	<=1%			
Keypad	Yes			
Schedule Bell/Speaker	Mini Speaker			
Identification speedÂ				
Wiegand Signal	Output			
Optional Functions	MiFare Card, Wi-Fi, 4G			
Battery Backup	Minimum battery backup upto 4hours, with minimum 2000mAH battery or above			
Power Supply	12V: 3A			

Temperature	0 C- 45 C			
Humidity	20%-80%			
Compatible Software and SDK	1) Bidder should provide the necessary web based attendance application / Cloud based / Desktop based (integrated)/ database software, which should be installed in a physical / virtual server available at customer premises as per the customer requirement. 2) Bidder should install Biometric Systems Attendance System (BAS)Software at Bidder level before delivery. Bidder has to provide all necessary technical support for integration of BAS with the required software.			
Accessories	Power Adapter, USB cable			

Code	Item Description	Qty
33450-B7-013	Linux Based Bio Metric System (Non Aadhaar) - with Face Recognition 1000 User	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Face capacity	1000(1:N), 1000(1:1) or above			
Fingerprints templates	3000			
ID Card Storage	1000			
Transaction storage	1,00,000			
Card reader	Inbuilt proximity card reader			

Fingerprint sensor(Biometric Systems)	500 DPI Optical sensor			
Push Data	Yes			
Communication	TCP/IP, RS232/485, USB Host			
Display	2.4 or above			
FAR	<=0.0001%			
FRR	<=1%			
Keypad	Yes			
Schedule Bell/Speaker	Mini Speaker			
Identification speed				
Wiegand Signal	Output			
Optional Functions	MiFare Card, Wi-Fi, 3G			
Battery Backup	Minimum battery backup upto 4 hours, with minimum 2000 mAH battery or above			
Power Supply	12V: 3A			
Temperature	0 C- 45 C			
Humidity	20%-80%			
Compatible Software and SDK	1) Bidder should provide the necessary web based attendance application / Cloud based / Desktop based (integrated)/ database software, which should be installed in a physical / virtual server available at customer premises as per the customer requirement. 2) Bidder should install Biometric Systems Attendance System (BAS)Software at Bidder level before delivery. Bidder has to provide all necessary technical support for integration of BAS with the required software.			
Accessories	Power Adapter, USB cable			

Code	Item Description	Qty
33450-B7-014	Linux Based Bio Metric System (Non Aadhaar) - with Face Recognition 2000 User	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Face capacity	2000(1:N), 2000(1:1) or above			
Fingerprints templates	4000			
ID Card Storage	10000			
Transaction storage	1,00,000			
Card reader	Inbuilt proximity card reader			
Fingerprint sensor(Biometric Systems)	500 DPI Optical sensor			
Push Data	Yes			
Communication	TCP/IP, RS232/485, USB Host			
Display	4.3-Inch Touch Screen			
FAR	<=0.0001%			
FRR	<=1%			
Keypad	Yes			
Schedule Bell/Speaker	Mini Speaker			
Identification speed				
Wiegand Signal	Output			
Optional Functions	MiFare Card, Wi-Fi, 3G			
Battery Backup	Minimum battery backup upto 4 hours, with minimum 2000 mAH battery or above			
Power Supply	12V: 3A			

Temperature	0 C- 45 C			
Humidity	20%-80%			
Compatible Software and SDK	1) Bidder should provide the necessary web based attendance application / Cloud based / Desktop based (integrated)/ database software, which should be installed in a physical / virtual server available at customer premises as per the customer requirement. 2) Bidder should install Biometric Systems Attendance System (BAS)Software at Bidder level before delivery. Bidder has to provide all necessary technical support for integration of BAS with the required software.			
Accessories	Power Adapter, USB cable			

Code	Item Description	Qty
33450-B7-015	LINUX Tablet based Biometric Attendance Systems Long range Face 3000 User (2 meters)	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Type	Integrated Android Tablet based and Single Fingerprint Scanner Device			
OS	LINUX			
Processor	900 MHZ Dual Core CPU			
Display	5 inch Touch Screen			
Face Capacity	3000			

Card Capacity	3000			
Transaction Capacity	150000			
Camera	2MP Binocular Camera			
Communication	TCP/IP, WiFI, RS-485			
Biometric Algarithm	FACE V5.8			
Power Supply	12V / 3 A			
Access control Interface	3rd party EM Lock, Door Sensor, Exit Button			
Response time	<1seconds.			
Operating Temperature	0 C to 45 C			
Accessories	Power Adapter, USB cable			

Code	Item Description	Qty
33450-B7-016	LINUX Tablet based Biometric Attendance Systems Long range Face 1000 User	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Type	Integrated Android Tablet based and Single Fingerprint Scanner Device			
OS	LINUX			
Processor	900 MHZ Dual Core CPU			
Display	4inch Touch Screen			
Face Capacity	1000			
Card Capacity	1000			

Transaction Capacity	150000			
Camera	2MP Binocular Camera			
Communication	TCP/IP, WiFI, RS-485			
Biometric Algarithm	FACE V5.8			
Power Supply	12V / 3 A			
Access control Interface	3rd party EM Lock, Door Sensor, Exit Button			
Response time	<1seconds.			
Operating Temperature	0 C to 45 C			
Accessories	Power Adapter, USB cable			

Code	Item Description	Qty
33450-B7-017	ulti Door Access Controller - Finger + Card (up to 4 Doors)	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	32Bit MIPS Processor with 32MB RAM, 128 Flash Memory			
Fingerprint Templates Capacity Â Â Â Â	3,000 or above			
Card Storage capacity	30,000 or above			

Event Buffer	1,00,000			
Communication	TCP/IP, RS485			
Reader Port	1 No extended RS485 Port			
input port	8ea (Exit button 1, Exit Button 2,Exit Button 3, Exit Button 4, Door sensor 1, Door sensor 2, Door Sensor 3,Door Sensor 4)			
Reader	Finger Print & Proximity Card Reader			
Input power	9.6-14.4V DC 5A			
Compatible Software	1) Bidder should provide the necessary controller software free of cost, which should be installed in a physical / virtual server available at customer premises as per the customer requirement. Bidder has to provide all necessary technical support for the door access control.			

Code	Item Description	Qty
33450-B7-018	Mifare Smart Card Based Door Controller for Access Control and Time Attendance (for Enrolment)	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
GENERAL - Credential Support	Card			
GENERAL - User Capacity	10000			
GENERAL - Type of Card	Mifare Smart Card			
CAPACITY - Cards Per User	2			
CAPACITY - Events Buffer	50000			
COMMUNICATION - RS-485	Yes (115.2 Kbps)			

COMMUNICATION - Battery Backup	No			
COMMUNICATION - Ethernet	Yes (10/100 Mbps)			
COMMUNICATION - PoE	Yes (IEEE 802.3 af)			
INTERFACES - Exit Switch	Yes			
INTERFACES - Door Status Sense	Programmable NO, NC, Supervised			
INTERFACES - Door Lock Relay	Form C, SPDT Relay (Max 1A@30 VDC)			
INTERFACES - Door Lock Power	Internal 12VDC @ 0.5A or External			
INTERFACES - Reader Interface types	RS 232, and Wiegand IN/OUT			
AUDIO-VISUAL - Buzzer	Yes			
AUDIO-VISUAL - LED	Single LED (Tri-Color)			
CONFIGURATION - CPU	32 Bit Micro-controller			
CONFIGURATION - Flash Memory	512 KB Internal Memory + 4 MB External Flash			
CONFIGURATION - RAM Memory	128 KB SRAM			
ELECTRICAL - Input Power	12 VDC @ 2A			
ENVIRONMENTAL - Humidity	5% to 85% RH Non-Condensing			
OTHERS - System Integration	Software API for Software Integration			
OTHERS - Operational Mode	Direct Door with Server			
OTHERS - IP65	Verified			
OTHERS - Real Time Clock	Rechargeable RTC with NTP Server/ GPS Clock			
OTHERS - Tamper Detection	Yes			

OTHERS - Certification	CE, BIS			

Code	Item Description	Qty
33450-B7-019	Finger Print and Card Based Door Controller for Access Control and time Attendance with STQC Certified fingerprint sensor	1 No.

Parameter	Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
GENERAL - Credential Support	Card, PIN and Finger			
GENERAL - Display	128 x 64 Dot Matrix Display			
GENERAL - Keypad	16 Touch Sense Keys			
CAPACITY - User Capacity	50,000 (Max. 9600 in 1:N Mode)			
CAPACITY - Template Per User	Up to 10 (Single Template per Finger Mode), Up to 5 (Dual Template per Finger Mode)			
CAPACITY - Template Storage Capacity	9600 in 1:N Mode and 1 lac in 1:1 Mode			
CAPACITY - Cards Per User	Upto 2			
CAPACITY - Event Buffer	5,00,000			
CAPACITY - Types of Cards Support	Proximity Card (EM Prox) & Smart Card (Mifare and HID iClass) (Card Module Required)			
COMMUNICATION - Mobile Broadband	Yes (2G/3G Support)			
COMMUNICATION - RS-485	Yes (115.2 Kbps)			

COMMUNICATION - Ethernet	Yes (10/100 Mbps on Ethernet)			
INTERFACES - Exit Switch	Yes			
INTERFACES - Door Status Sense	Programmable NO, NC, Supervised			
INTERFACES - Door Lock Relay	Form C, SPDT Relay (Max 2A@30 VDC)			
INTERFACES - Door Lock Power	Internal 12VDC @ 0.5A or External			
INTERFACES - Aux-IN	Programmable NO, NC, Supervised			
INTERFACES - Aux-OUT	Form C, SPDT Relay (Max 1A@30 VDC)			
INTERFACES - Reader Interface types	RS 232, and Wiegand IN only			
INTERFACES - Reader Types	1 Port for Card Reader / Finger Reader / Card Finger Combo Reader / Third Party Wiegand reader			
INTERFACES - USB	2 USB Ports (1 for Data Transfer and 1 for 2G-3G Dongle)			
AUDIO- VISUAL - Buzzer	Yes			
AUDIO- VISUAL - LED	4 LEDs (Status, Alarm, Allowed, Denied)			
CONFIGURATION - CPU	400 MHz ARM 9 based Processor			
CONFIGURATION - Flash Memory	256 MB Flash			
CONFIGURATION - RAM Memory	128 MB DDR2 RAM			
ELECTRICAL - Input Power	12 VDC @ 2A			
ELECTRICAL - Reader Power Output	Internal 12 VDC @ 0.5 A or External			
ELECTRICAL - Battery Backup	No			
ENVIRONMENTAL - Humidity	5% to 85% RH Non-Condensing			

ENVIRONMENTAL - Operating Temperature	0ºC to + 50º C (32º F to 122º F)			
ENVIRONMENTAL - Certification	CE and RoHS			
OTHERS - System Integration	Software API for Software Integration			
OTHERS - Real Time Clock	Rechargable RTC with NTP Server/ GPS Clock			
OTHERS - Operational Mode	Direct Door with Server			
OTHERS - Tamper Detection	Yes			
SENSOR SPECIFICATIONS - Sensing Area	15.9mm x 17.9mm (0.62" x 0.70")			
SENSOR SPECIFICATIONS - Sensor Technology	Suprema Optical Sensor with STQC certified			
SENSOR SPECIFICATIONS - Image Size in Pixels	288 x 288			
SENSOR SPECIFICATIONS - Image Resolution in DPI	500			
SENSOR SPECIFICATIONS - Identification Time	< 1sec			
SENSOR SPECIFICATIONS - Equal Error rate (ERR)	< 0.1%			
SENSOR SPECIFICATIONS - Water-proof	IP65, Scratch free			
SENSOR SPECIFICATIONS - Verification Time	< 1sec (less than 3000 templates)			
SENSOR SPECIFICATIONS - Template Size	384 bytes			

SENSOR SPECIFICATIONS - Fingerprint Module	ISO 19794-2 Compliant			
ISO Card Support - Proximity - 125 KHz	No ISO Standards			
ISO Card Support - Mifare Card - 13.56 MHz	ISO 14443 A Supported			
ISO Card Support - HID iCLASS Card - 13.56 MHz	ISO 14443 A and ISO 15693 Supported			
ISO Card Support - DesFire Card - 13.56 MHz	ISO 14443 A Supported (Read Only)			

Code	Item Description	Qty
33450-B7-020	Single Fingerprint Device	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
CPU	324 Mhz or above			
Fingerprint sensor (Biometric Systems)	500 DPI Optical sensor			
Communication	RS 485			
Optional Function	RFID			
Voice prompt	Buzzer			
Working Voltage	12v DC			
Working Temperature	0 C to 45 C			

Protection Grade	IP 65			

Code	Item Description	Qty
33450-B7-021	ID Card Printer	1 No.

Parameter	Tender Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Print Technology	300 Dpi Color Dye sublimation, monochrome			
Feed System	Manual and hopper Fed			
Card Capacity	100 input / 100 output			
Printing	Single-sided, Double-sided			
Smart Card Encoders	Contact Chip, Mifare, DESFire and HID I Class other encoders			
Operating systems Range	Minimum : Windows and Linux. Others are optional and to be provided on demand			
USB Connection	USB 2.0, USB 3.0			
Ethernet	RJ 45 Connectivity			
Printing Speed	Colour - > 100 Cards Per Hour Monochrome - > 500 cards Per Hour			
Accept Card Dimension	ISO CR80 85.6mm x54mm / 3.375 x 2.125" 051.mm to 1.02mm / 20mil to 40mil			
Weight	5kg / 11lbs			
Printer size	Height: 233 mm/ 9.2 Length: 453mm / 17/8 Width: 206mm / 8.1			

Environmental Operating Range	Operating Environmental 10 C to 30 C			
Supported Print	ID Cards, QR Code and Barcode Printing			
Supported Cards	RFID proximity , Mifare Card, HID iclass			
Software	ID Card design Software, software for wrinting information in Mifare Card, HIDiclass and necessary SDK should be provide along with the printer.			

A1.5.8 Category B8 – SSL, Digital Signature Certificates -

Common parameters for all items	
Operating Platform	The CA should supply SSL and SDKs compatible with Windows and Linux Enterprise Server platform. The CA should support the Application software Portal developer for getting their tools integrated with the portal. The Digital Signature Certificates supplied by the CA should be compatible with both Linux OS and Windows OS. All necessary drivers and tools should be made available for both Linux and Windows operating systems.
Functions of CA	The CA should; a) take measures to operate its infrastructure as regulated by the Controller of Certification Authorities in exercise of powers conferred under the Government of India IT Act 2000 with latest amendments, rules and Guidelines. b) process the application forms and reliably identify persons applying for certificates. c) confirm the attribution of public signature key to the identified physical persons by means of a digital signature key certificate. d) issue Digital Signature Certificates, encrypted USB tokens and Revocation Certificate e) always maintain online access to the Digital Signature Certificates and Revocation list f) assure its various classes of certificates to the subscribers and undertake liability as per approved Certification Practice Statement.

Deliverables	a) Certification Practice Statement should be submitted.
	 b) The Certificates along with Tokens should be issued to the subscribers as per the Delivery Schedule indicated in the tender document after the receipt of Application form with all the necessary documents is attached. The Subscriber details should be made available through the CA's website.
	 c) A Certificates should be suspended/revoked within 2 working days after receipt of revocation request. The suspension/revocation details should be made available through the CA's website.
	 d) Rejection of applications should be made with valid reasons for rejection and remedies should be given for re-applying.
	 e) SDK integration support should be provided to the Application Developer Portal developer primarily through Tele-support ,Email support and onsite support when necessitated.
	 f) Comprehensive training should be given to the subscribers on the following aspects.
	     i) Awareness of the IT Act 2000 and other security policies of Government of India and duties of the subscribers
	     ii) Hands on training for the users in using the certificates through batch mode. Training centre and Computers and other facilities will be arranged by ELCOT/Government departments.
	     iii) Training materials and user guides should be supplied to the subscribers.
	 g) Email support, Tele support and help-desk support for the users
	 h) Replacement warranty for the defective Tokens

OS Compliance	Windows & Linux compliance by OEM

Code	Item Description	Qty
33450-B8-001	Class-3 Digital Signature Certificates	1 No.

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
The Digital Signature Certificates should be according to CCA Guidelines and comply with CPS with FIPS 140-2 certified token. The Digital Signature Certificates should be SHA-2 Compliant. The Digital Signature Certificates should support RSA 2048 bit. Managed certificates should be issued to the Employees, Government customers and Business clients of ELCOT for verifying the accuracy of information submitted by them. The encryption scheme should be provided using the algorithms like DES.			

Code	Item Description	Qty
33450-B8-002	Cryptographic Token	1 No.

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
An USB 2.0 compatible security Token running on Linux and Windows that provides the users with a secure digital credentials should be provided. The token should be a FIPS 140-2 certificafied one.			

Code	Item Description	Qty
33450-B8-003	Server Certificate (Secure Sockets Layer- SSL	1 No.

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Server Certificate (Secure Sockets Layer- SSL) - SSL certificate running on Linux and Windows should be provided for exchanging sensitive information between Portal and client.			

Code	Item Description	Qty
33450-B8-004	Form Signing SDK and Encryption SDK	1 No.

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Form Signing SDK and Encryption SDK - SDK running on Linux and Windows should be provided for integrating the certificates in the Portal application to enable Form signing, Encrypting and Verifying the signed documents. The SDK integrated with the portal should have open license to recognise and operate the Digital Signature Certificates issued by any other CA.			

Product Code	Description	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
33450-B8-005	Form Signing SDK			
33450-B8-006	Encryption SDK			
33450-B8-007	Class-3 Digital Signature Certificate for Signature - Individual			
33450-B8-008	Class-3 Digital Signature Certificate for Encryption - Individual			
33450-B8-009	Class-3 Digital Signature Certificate for Signature - Organisation			
33450-B8-010	Class-3 Digital Signature Certificate for Encryption - Organisation			
33450-B8-011	Class-3 Digital Signature Certificate COMBO for Organisation (Signature + Encryption)			
33450-B8-012	Server Certificate (Secure Sockets Layer- SSL) Single Server Single Domain			
33450-B8-013	Server Certificate (Secure Sockets Layer- SSL) Single Server Multi Domain			
33450-B8-014	Wildcard SSL Certificate			

A1.5.9 Category B9 – Cisco or Equivalent Products

Code	Item Description	Qty
33450-B9-001	Core Switch – Type 1 -Cisco Catalyst 9400 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	BidderCompliance (Yes/No)
The Switch should be a Chassis based switch with min 5 or more slots for operational and atleast 800 Gbps switching performance			
The Switch Should support 480 + Gbps on all slots			
The Switch Should support Redundant Supervisor Engine from day one			
There should not be any performance degradation even if one Supervisor Engine fails			
The Switch Should support redundant power supplies from day one			
The Switch Should support one 48 Port 10/100/1000 UTP ports from day one			
The switch should support 12 port 1G Fibre ports from day one			
The switch should support 6 port lOG Fibre ports from day one			
The Switch should support Network virtualization and segmentation with Group-based policies and Context-based analytics			
The Switch Should Must support overall more than 6 Tbps of System Bandwidth			
The Switch Should support throughput of atleast 900 Mbps			
The Switch Should support IPv4 and IPv6 support in hardware (Unicast and Multicast)			
The Switch Should support 112K IPv4 / JPv6 Routing Entries			
The Switch Should support Mirroring sessions			
The Switch Should support atleast 18,000 Security and QoS Hardware Entries			
The switch should support IPv6 support in hardware, providing wire-rate forwarding for			

JPv6 networks			
Must support Temperature of 5 to +45° C			
The Switch should support External USB for flexible storage options			
The Switch should support N + 1 redundancy			
The Switch should support 1 dedicated 10/100/1000 management port and one RJ45 console port			
Must support MACSEC 128			
The Switch Should support more than 380K Flow entries in hardware			
Must support Automation includes NetConf, Restconf, gRPC, YANG, PnP Agent			
The Switch Should support Nonstop Forwarding			
The switch should support PVLAN, VRRP, PBR, CDP, QoS, FHS, 802.1x			
The Switch Should support Unicast Reverse Path Forwarding			
The Switch Should support SPAN and RSPAN			
The Switch Should support measure, report, and reduce energy consumption on POE if considered			
The Switch Should support analyse IP service levels for IP applications and services by using active traffic monitoring			
The Switch Should support Layer 3 routing protocols - OSPF, EIGRP and multicast routing from day one			
The Switch Should support BGP, VRF and Policy based routing functionality			
The Switch should support security Features such as IEEE 802.1x, port security, Dynamic Host Configuration Protocol (DHCP) Snooping and Guard, Dynamic ARP Inspection, RA Guard, IP Source Guard, control plane protection (CoPP)			
The Switch Should support SSH, SNMP v2C and SNMP V3, NTP for IPv4 & IPv6			

Code	Item Description	Qty
33450-B9-002	Core Switch – Type 2 - Cisco Catalyst 9600 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Chassis based switch with at least 4 payload slots and additional two slot to accommodate two nos. of switch processor.			
The proposed switch will have redundant CPUs from day-1. Should support Non-Stop Forwarding and Stateful Switchover to ensure information between supervisor engines are fully to allow the standby supervisor engine to take over in subsecond time if the primary supervisor fails.			
Switch should have non-blocking per-slot throughput from day 1.			
Shall support In Service Software Upgrade (ISSU) or Hit less update to provide an upgrade of the entire chassis or an individual task/process without impacting hardware forwarding			
Switch should have redundant power supply from day 1.			
Shall support Single Operating System binary image for all switch models proposed as part of the design.			
Switch should support field replaceable components such as Supervisor, Linecards , Power-supply and Fan trays .			
Platform should integrated with SDN platform from Day 1, SDN controller should be from Same OEM.			
Should have 12 GB DRAM and 12 GB Flash with optional SSD to host 3rd party container based application.			
The switch will have at upto 8 Tbps switching capacity.			
The switch should minimum 3 Bpps.			
IPv4 Routing entry support : 200K			
IPv6 Routing entry support : 200K			
Multicast Routing entry support : 32K			

MAC addresses support: 64K			
VLANs ID: 4K			
ACL & QOS entry support : 36K			
Packet buffer : 100 MB			
The device should be IPv6 ready from day one			
Must support BGP, MPLS, IS-IS, VRF, VXLAN, OSPF Routed Access, Policy-Based Routing (PBR), PIM SM, and Virtual Router Redundancy Protocol (VRRP) from Day 1			
STP, PVLAN, First Hop Security, Link Aggregation Protocol (LACP)			
STP, Trunking, Private VLAN (PVLAN), Q-in-Q, Shaped Round Robin (SRR) scheduling, Committed Information Rate (CIR), and eight egress queues per port			
Should support with MACSEC-128 encryption algorithm on hardware			
During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.			
OS should have support for Management automation via Netconf/Yang or equivalent			
Should support Streaming Telemetry, Netflow/Sflow/Jflow, SPAN, RSPAN or equivalent			
The Switch will be populated with: 1. 12 x 40G Ports from Day 1 2. 48 x 10G Port From Day 1			
1 x Console port			
Should have blank slot for future expansion			
Chassis should support QSFP28 ports for future expansion			
The switch should be CE Marking, UL 60950, EN 60950 and ROHS5			

Code	Item Description	Qty
33450-B9-003	Distribution Switch - Type 1 Cisco 9300 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Switch should be 1U and rack mountable in standard 19" rack.			
Switch should support internal hot-swappable Redundant Power supply from day 1.			
Switch should have redundant hot swappable fans.			
Switch should have minimum 8 GB RAM and 8 GB Flash.			
Switch shall have 24 nos. 10/100/1000 SFP ports and additional 4 nos. SFP+ uplinks ports			
Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 320 Gbps of stacking throughput with 8 switch in single stack.			
Switch shall have minimum 208 Gbps of switching fabric and 154 Mpps of forwarding rate.			
Switch shall have minimum 32K MAC Addresses and 1000 active VLAN.			
Should support minimum 32K IPv4 routes or more and 16K IPv6 routes or more			
Switch shall have 8K or more multicast routes.			
Switch should support atleast 64K flow entries			
Switch should support 128 or more STP Instances.			
Switch should have 16MB or more packet buffer.			
Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2.			
Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1			

Should have advance Layer 3 protocol like BGPv4, BGPv6 , MPLS, VRF, VXLAN, IS-ISv4, OSPFv3, MP-BGP			
Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.			
Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ .			
Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.			
Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-256 on hardware			
Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.			
During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.			
Switch shall have modular OS to support application 3rd party application hosting			
Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.			
Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.			

Code	Item Description	Qty
33450-B9-004	Distribution Switch - Type 2 Cisco 9300 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Switch should be 1U and rack mountable in standard 19" rack.			
Switch should support internal hot-swappable Redundant Power supply from day 1.			
Switch should have redundant hot swappable fans.			
Switch should have minimum 16 GB RAM and 16 GB Flash.			
Switch shall have Catalyst 9300 12-port 25G/10G/1G SFP28 ports and additional 4 nos. SFP+ uplinks ports			
Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 320 Gbps of stacking thoughput with 8 switch in single stack.			
Switch shall have minimum 1000 Gbps of switching fabric and 744 Mpps of forwarding rate.			
Switch shall have minimum 32K MAC Addresses and 1000 active VLAN.			
Should support minimum 32K IPv4 routes or more and 16K IPv6 routes or more			
Switch shall have 8K or more multicast routes.			
Switch should support atleast 64K flow entries			
Switch should support 128 or more STP Instances.			
Switch should have 16MB or more packet buffer.			
Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2.			
Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1			
Should have advance Layer 3 protocol like BGPv4, BGPv6 , MPLS, VRF, VXLAN, IS-ISv4, OSPFv3, MP-BGP			

Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.			
Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ .			
Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.			
Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-256 on hardware			
Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.			
During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.			
Switch shall have modular OS to support application 3rd party application hosting			
Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.			
Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.			

Code	Item Description	Qty
33450-B9-005	Access Switch - Type 1- 24 Port (PoE) Cisco 9200 or Equivalent	**1 No**

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Switch should be 1U and rack mountable in standard 19" rack.			
Switch should support internal field replaceable unit redundant power supply from day 1			
Switch should have minimum 4 GB RAM and 4 GB Flash.			

Switch shall have 24 nos. 10/100/1000 Base-T ports and additional 4 nos. SFP+ uplinks ports.			
All 24 port should support PoE (802.3af) and PoE+ (802.3at) with a PoE power budget of 370 W.			
Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 160 Gbps of stacking throughput with 8 switch in single stack.			
Switch shall have minimum 128 Gbps of switching fabric and 95.23 Mpps of forwarding rate			
Switch shall have minimum 16K MAC Addresses and 250 active VLAN.			
Should support minimum 11K IPv4 routes or more			
Switch shall have 1K or more multicast routes.			
Switch should support atleast 16K flow entries			
Switch should support 128 or more STP Instances.			
Switch should have 6MB or more packet buffer.			
Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z.			
Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1			
Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs.			
Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.			
Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ .			
Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.			
Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports.			
Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.			

During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.			
Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.			
Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.			
Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.			

Code	Item Description	Qty
33450-B9-006	Access Switch - Type 2- 24 Port (Non-PoE) Cisco 9200 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Switch should be 1U and rack mountable in standard 19" rack.			
Switch should support internal field replaceable unit redundant power supply from day 1			
Switch should have minimum 4 GB RAM and 4 GB Flash.			
Switch shall have 24 nos. 10/100/1000 Base-T ports and additional 4 nos. SFP+ uplinks ports.			
Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 160 Gbps of stacking throughput with 8 switch in single stack.			
Switch shall have minimum 128 Gbps of switching fabric and 95.23 Mpps of forwarding rate			
Switch shall have minimum 16K MAC Addresses and 250 active VLAN.			
Should support minimum 11K IPv4 routes or more			

Switch shall have 1K or more multicast routes.			
Switch should support atleast 16K flow entries			
Switch should support 128 or more STP Instances.			
Switch should have 6MB or more packet buffer.			
Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z.			
Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1			
Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs.			
Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.			
Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ .			
Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.			
Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports.			
Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.			
During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.			
Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.			
Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.			

Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.			

Code	Item Description	Qty
33450-B9-007	Access Switch - Type 3- 48 Port (PoE) Cisco 9200 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Switch should be 1U and rack mountable in standard 19" rack.			
Switch should support internal field replaceable unit redundant power supply from day 1			
Switch should have minimum 4 GB RAM and 4 GB Flash.			
Switch shall have 48 nos. 10/100/1000 Base-T ports and additional 4 nos. SFP+ uplinks ports.			
All 48 port should support PoE (802.3af) and PoE+ (802.3at) with a PoE power budget of 740 W.			
Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 160 Gbps of stacking throughput with 8 switch in single stack.			
Switch shall have minimum 176 Gbps of switching fabric and 130 Mpps of forwarding rate			
Switch shall have minimum 16K MAC Addresses and 250 active VLAN.			
Should support minimum 11K IPv4 routes or more			
Switch shall have 1K or more multicast routes.			
Switch should support atleast 16K flow entries			
Switch should support 128 or more STP Instances.			

Switch should have 6MB or more packet buffer.			
Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z.			
Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1			
Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs.			
Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.			
Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ .			
Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPV6 Source Guard.			
Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports.			
Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.			
During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.			
Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.			
Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.			
Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.			

Code	Item Description	Qty
33450-B9-008	Access Switch - Type 4- 48 Port (Non-PoE) Cisco 9200 or Equivalent	**1 No**

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Switch should be 1U and rack mountable in standard 19" rack.			
Switch should support internal field replaceable unit redundant power supply from day 1			
Switch should have minimum 4 GB RAM and 4 GB Flash.			
Switch shall have 48 nos. 10/100/1000 Base-T ports and additional 4 nos. SFP+ uplinks ports.			
Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 160 Gbps of stacking throughput with 8 switch in single stack.			
Switch shall have minimum 176 Gbps of switching fabric and 130 Mpps of forwarding rate			
Switch shall have minimum 16K MAC Addresses and 250 active VLAN.			
Should support minimum 11K IPv4 routes or more			
Switch shall have 1K or more multicast routes.			
Switch should support atleast 16K flow entries			
Switch should support 128 or more STP Instances.			
Switch should have 6MB or more packet buffer.			
Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z.			
Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1			

Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs.			
Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.			
Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ .			
Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.			
Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports.			
Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.			
During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.			
Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.			
Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.			
Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.			

Code	Item Description	Qty
33450-B9-009	Wireless LAN Controller Cisco 9800 (Up to 500 Access Point)	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Wireless controller should support 250 AP and 5000 clients from day 1 and can be upgraded to 500 AP support with 10000 clients without any hardware change.			
The controller shall support deployment flexibility without compromising any features			
The controller shall support min 5 Gbps tunneling capacity and shall be upgradable to 10 gbps.			
The controller shall support 2x 10G/Multigigabit fiber uplink.			
Wireless Controller shall support link aggregation and load sharing between Access Point to WLC links			
The controller shall support hardware encrypted data plane between Access Point and Controller			
High Availability mode shall support controller inline data plane mode as well as local switching mode and Mesh mode			
High Availability mode shall allow geographically dispersed installation between Controllers			
The controller failover shall not trigger client de-authentication and re-association			
The redundant Controller shall sync Access Point and Client Status, including DHCP IP lease status			
Access Point shall be able to proactively distributes Client connection before and after association and tracking client condition in real time using data packet RSSI			
The controller shall support standard-based, secure AP-Controller data & control protocol like CAPWAP. protocol that has known vulnerability like PAPI cannot be used.			
The controller shall support Inter-Controller Wireless Roaming			

The controller shall maintains per-user Application usage and shall be able to export it for network analytic.			
The controller shall support Multi Languages options from embedded GUI Management			
The controller shall provide per-Client Connection Scoring and provide reasoning of Client Connection Score			
The controller shall support Cellular offload using IPv6 tunneling to Mobile Core network			
The controller shall be able to support multiple RF Management profile per group of APs, including Transmit Power Control and Dynamic Channel Assignment on both 2.4GHz and 5Ghz			
The controller shall be able to identify and avoid interferers with network performance impact analysis report			
The controller shall support optimized, automatic channel width (20~160Mhz) selection over 5GHz, 802.11ac			
Mesh AP nodes shall provide quick convergence and fast failover to new root mesh node			
Mesh Backhaul interface shall support full duplex operation using wired daisy chaining			
Mesh AP shall support fast roaming for Wired-client through wired-to-wireless bridge client			
The controller shall support per-user and per-WLAN based application recognition and control that throttle usage by rate-limiting			
The controller application recognition technology shall support exporting to 3rd party compatible format, such as NetFlow v9			
The controller shall provide policy-based mDNS gateway including chromecast gateway			
The controller shall support new application signatures without upgrading controller software			
The controller shall provide Device Profiling using mutlple profiling methods to reduce false-detection			
The system shall provide secure onboarding service for both employee and guest based on standard-based security protocol. Proposed system shall not use public cloud as user data repository			
The controller shall be able to embedded custom web portal page (HTML) to fully customize user experience without additional cost or extra box			

The controller shall provide rule-based rogue classification and automatically run rogue mitigation action			
The controller shall be able to detect employee device connection to Rogue Access Point and contain it automatically. It should also support protection from Honeypot or Evil twin.			
The controller shall support Content Security using DNS integration, Web Classification shall be fully customizable			
The system shall support control plane encryption on both IPv4 and IPv6			
The Controller's image upgrade shall be done through secure, encrypted transport			
The controller shall be able to provide unique pre-shared keys to the devices that do not support the 802.1x security protocol			
The controller shall support Identity PSK for on boarding			
The controller shall support identification & mitigation of threats inside encrypted traffic			
The controller shall support mapping of specific VLANs to single SSID, depending on Access Point location and user			
The controller shall support automatic VLAN assignment per SSID to load-balance user connection. assigned VLAN pool shall be same as number of available VLAN in the system			
The controller shall support embedded best practice configuration profile and setup			
The controller shall support packet fragmentation between Access Point and controller communication			

Code	Item Description	Qty
33450-B9-010	Wireless LAN Controller Cisco 9800 (Up to 2000 Access Point)	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Wireless controller should support 2000 AP and 30000 clients from day 1.			
The controller shall support deployment flexibility without compromising any features			
The controller shall support 40 Gbps tunneling capacity			
The controller shall support 4x10 Gig SFp/SFP+ uplink ports			
Wireless Controller shall support link aggregation and load sharing between Access Point to WLC links			
The controller shall support hardware encrypted data plane between Access Point and Controller			
High Availability mode shall support controller inline data plane mode as well as local switching mode and Mesh mode			
High Availability mode shall allow geographically dispersed installation between Controllers			
The controller failover shall not trigger client de-authentication and re-association			
The redundant Controller shall sync Access Point and Client Status, including DHCP IP lease status			
Access Point shall be able to proactively distributes Client connection before and after association and tracking client condition in real time using data packet RSSI			
The controller shall support standard-based, secure AP-Controller data & control protocol like CAPWAP. protocol that has known vulnerability like PAPI cannot be			

used.			
The controller shall support Inter-Controller Wireless Roaming			
The controller shall maintains per-user Application usage and shall be able to export it for network analytic.			
The controller shall support Multi Languages options from embedded GUI Management			
The controller shall provide per-Client Connection Scoring and provide reasoning of Client Connection Score			
The controller shall support Cellular offload using IPv6 tunneling to Mobile Core network			
The controller shall be able to support multiple RF Management profile per group of APs, including Transmit Power Control and Dynamic Channel Assignment on both 2.4GHz and 5Ghz			
The controller shall be able to identify and avoid interferers with network performance impact analysis report			
The controller shall support optimized, automatic channel width (20~160Mhz) selection over 5GHz, 802.11ac			
Mesh AP nodes shall provide quick convergence and fast failover to new root mesh node			
Mesh Backhaul interface shall support full duplex operation using wired daisy chaining			
Mesh AP shall support fast roaming for Wired-client through wired-to-wireless bridge client			
The controller shall support per-user and per-WLAN based application recognition and control that throttle usage by rate-limiting			
The controller application recognition technology shall support exporting to 3rd party compatible format, such as NetFlow v9			
The controller shall provide policy-based mDNS gateway including chromecast gateway			

The controller shall support new application signatures without upgrading controller software			
The controller shall provide Device Profiling using multiple profiling methods to reduce false-detection			
The system shall provide secure onboarding service for both employee and guest based on standard-based security protocol Proposed system shall not use public cloud as user data repository			
The controller shall be able to embedded custom web portal page (HTML) to fully customize user experience without additional cost or extra box			
The controller shall provide rule-based rogue classification and automatically run rogue mitigation action			
The controller shall be able to detect employee device connection to Rogue Access Point and contain it automatically. It should also support protection from Honeypot or Evil twin.			
The controller shall support Content Security using DNS integration, Web Classification shall be fully customizable			
The system shall support control plane encryption on both IPv4 and IPv6			
The Controller's image upgrade shall be done through secure, encrytped transport			
The controller shall be able to provide unique pre-shared keys to the devices that do not support the 802.1x security protocol			
The controller shall support Identity PSK for on boarding			
The controller shall support identification & mitigation of threats inside encrypted traffic			
The controller shall support mapping of specific VLANs to single SSID, depending on Access Point location and user			
The controller shall support automatic VLAN assignment per SSID to load-balance user connection. assigned VLAN pool shall be same as number of available VLAN in the system			

The controller shall support embedded best practice configuration profile and setup			
The controller shall support packet fragmentation between Access Point and controller communication			

Code	Item Description	Qty
33450-B9-011	Access Point – Type 1 Cisco 9100 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Access Point shall support 4x4 MIMO on both radio interfaces			
Access Point shall be able to powered up using PoE (.af)			
Access Point shall support assurance, packet capture, RF sensing capabilities			
Access Point shall support application visibility and control			
Access Point shall support encrypted traffic visibility			
Access Point should have Bluetooth5 radio to support use casses of location, asset tracking and analytics.			
Access Point shall ship with metal-based mounting bracket for durability and reliability			
Access Point shall be able to leverage current Access Point mount kit and cable conduit			
Access Point shall support Console port that uses Standard Port (RJ-45) type connection			
Access Point should have 1x 100, 1000, 2500 Multigigabit Ethernet (RJ-45) – IEEE 802.3bz			
Access Point should have USB port for future requirement.			
Must have atleast 3 dBi Antenna gain on each radios			

Must Support data rate upto 5gbps.			
Must support minimum of 23dbm of transmit power in both 2.4Ghz and 5Ghz radios. And should follow the local regulatory Norms.			
Must support AP enforced load-balance between 2.4Ghz and 5Ghz band.			
Must incorporate radio resource management for power, channel and performance optimization			
Must have -97 dB or better Receiver Sensitivity.			
Must support Proactive Key Caching and/or other methods for Fast Secure Roaming.			
Must support Management Frame Protection.			
Should support locally-significant certificates on the APs using a Public Key Infrastructure (PKI).			
Must support the ability to serve clients and monitor the RF environment concurrently.			
Same model AP that serves clients must be able to be dedicated to monitoring the RF environment.			
Must be plenum-rated (UL2043).			
Must support 16 WLANs per AP for SSID deployment flexibility.			
Access Point Must continue serving clients when link to controller is down. It should also have option to authenticate user through Radius server directly from Access Point during link unavailability to controller.			
Must support telnet and/or SSH login to APs directly for troubleshooting flexibility.			
802.11e and WMM			
Must support QoS and Video Call Admission Control capabilities.			
Access point should be wifi 6 certified.			

Code	Item Description	Qty
33450-B9-012	Access Point – Type 2 Cisco 9100 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Access Point shall support 4x4 MIMO on both radio interfaces and MU-MIMO technology			
Access Point shall be able to support Multigigabit Ethernet, support up to 2.5 Gbps PHY speed using single Cat5e or above(Cat6, Cat6a, Cat7) cable			
Access Point shall be able to support full features at 802.3at			
Access Point shall be able to powered up using PoE (.af)			
Access Point shall support Dual 5GHz radios			
Access Point shall have dedicated radio/chipset for spectrum monitoring capabilities, WIPS and off channel RRM without compromising and using the client serving radios.			
Access Point shall support hardware driven beamforming			
Access Point shall be IoT ready (Zigbee, Thread) and container support for IOT applications.			
Access Point should have Bluetooth5 radio to support use casses of location, asset tracking and analytics.			
Access Point should have 1x 100, 1000, 2500 Multigigabit Ethernet (RJ-45) – IEEE 802.3bz			
Access Point should have USB port for future requirement.			
Must have atleast 3 dBi Antenna gain on each radios			
Must Support data rate upto 5gbps.			

Must support minimum of 23dbm of transmit power in both 2.4Ghz and 5Ghz radios. And should follow the local regulatory Norms.			
Must support AP enforced load-balance between 2.4Ghz and 5Ghz band.			
Must incorporate radio resource management for power, channel and performance optimization			
Must have -97 dB or better Receiver Sensitivity.			
Must support Proactive Key Caching and/or other methods for Fast Secure Roaming.			
Must support Management Frame Protection.			
Should support locally-significant certificates on the APs using a Public Key Infrastructure (PKI).			
Must support the ability to serve clients and monitor the RF environment concurrently.			
Same model AP that serves clients must be able to be dedicated to monitoring the RF environment.			
Must be plenum-rated (UL2043).			
Must support 16 WLANs per AP for SSID deployment flexibility.			
Access Point Must continue serving clients when link to controller is down. It should also have option to authenticate user through Radius server directly from Access Point during link unavailability to controller.			
Must support telnet and/or SSH login to APs directly for troubleshooting flexibility.			
802.11e and WMM			
Must support QoS and Video Call Admission Control capabilities.			
Access point should be wifi 6 certified			

Code	Item Description	Qty
33450-B9-013	Access Point – Type 3 Cisco 9100 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Access Point shall support 4x4 MIMO on both radio interfaces and MU-MIMO technology			
Access Point shall be able to support Multigigabit Ethernet, support up to 2.5 Gbps PHY speed using single Cat5e or above(Cat6, Cat6a, Cat7) cable			
Access Point shall be able to powered up using PoE (.af)			
Access Point shall have dedicated radio/chipset for spectrum monitoring capabilities, WIPS and off channel RRM without compromising and using the client serving radios.			
Access Point should have Bluetooth5 radio to support use casses of location, asset tracking and analytics.			
Access Point should have 1x 100, 1000, 2500 Multigigabit Ethernet (RJ-45) – IEEE 802.3bz uplink, 1x Gigabit Ethernet SFP uplink and 1x10/100/1000 Base T downlink port.			
AP must have standard RJ-45 console port			
Must have atleast 6 dBi omni direction Antenna on each radios			
Must Support data rate upto 5gbps.			
Must support minimum of 30 dbm of transmit power in both 2.4Ghz and 5Ghz radios. And should follow the local regulatory Norms.			
Must support AP enforced load-balance between 2.4Ghz and 5Ghz band.			
Must incorporate radio resource management for power, channel and performance optimization			
Must have -97 dB or better Receiver Sensitivity.			

Must support Proactive Key Caching and/or other methods for Fast Secure Roaming.			
Must support Management Frame Protection.			
Should support locally-significant certificates on the APs using a Public Key Infrastructure (PKI).			
Must support the ability to serve clients and monitor the RF environment concurrently.			
Same model AP that serves clients must be able to be dedicated to monitoring the RF environment.			
Must support 16 WLANs per AP for SSID deployment flexibility.			
Access Point Must continue serving clients when link to controller is down. It should also have option to authenticate user through Radius server directly from Access Point during link unavailability to controller.			
Must support telnet and/or SSH login to APs directly for troubleshooting flexibility.			
802.11e and WMM			
Must support QoS and Video Call Admission Control capabilities.			
Access point should be wifi 6 certified			
The Access point shall be IP67 and NEMA rated			
The Access point shall support operating temperature of -40 to 65°C			
The equipment shall support up to 100 MPH sustained winds & 165 MPH wind gusts.			

Code	Item Description	Qty
33450-B9-014	Access Point – Type 4 (Cloud Managed) Cisco Meraki MR36 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
The proposed access point shall support 802.11a/n/ac/ax and dual band 2.4ghz & 5ghz radio specification			
The proposed access point shall support additional radios 1 × WIDS/WIPS and 1 × Bluetooth			
The proposed access point shall support hardware accelerated encryption			
The proposed access point shall support band steering and 802.11e/WMM			
The proposed access point shall support 1 x 10/100/1000 BASE-T Ethernet (RJ45)			
The proposed access point shall support 2 x 2 MIMO (multiple input and multiple output) and OFDMA			
Must support 802.11b/g/n/ax on the 2.4 & 802.11a/n/ac/ax Wave 2 on 5 GHz radio			
Must support aggregate 1.7Gbps or more with dual radios			
Must support 40 & 80 MHz wide channels in 5 GHz.			
The proposed access point shall support zero touch provision with true plug & play with zero configuration			
The proposed access point shall support rapid deployment options to deploy of 100's of access points using centralized single configuration template, configuration copy, configuration sync etc			
The proposed access point shall support device configuration in the dashboard even before the devices are delivered			
The proposed access point shall support fully remote monitoring, configuration,			

troubleshooting considering the situation of the deployment			
The proposed access point support self configuring, self optimizing (channel, power client connection) and self healing considering the situation of the deployment			
The proposed access point shall support client fingerprinting with 20+ parameters along with client real time location			
The proposed solution/access points should provide WIDS/WIPS and should also support auto containment of the ROUGE APs and DOS ATTACK			
The proposed solution shall support built in self registration & SMS authentication			
Access point should be powered with POE or Power adapter			
Access point should be unified and should be managed from central WLC / dashboard and support WIDS/WIPS functionality.			
Access Point should have Real-time spectrum intelligence capabilities			
The proposed solution shall support detailed location analytics and presence analytics			
The proposed solution shall support Social media authentication & Email OTP (automated) to support users to onboard without depending on the admin/IT team			
The proposed solution shall support internal as well as external captive portal API integration to support 3rd party Captive portal and should have inbuilt Captive portal customization (logo, URL, themes, message etc)			
The proposed solution shall support PMK, 802.11r for fast layer 2 roaming			
The proposed solution shall support distributed layer 3 roaming			
The proposed solution shall support decision at the access points level which includes layer 3 to layer 7 stateful firewall decisions, QOS policies, NAC policies etc for high performance and scaling (by taking decisions at the edge level)			
The proposed solution shall support WIPS/WIDS solution to protect from threats.			
The proposed solution shall support full client, OS visibility and context based policy can be assigned to different users, devices based on preferences			
The proposed solution shall support inbuilt Radius database for authentication (username/password) and authorization with expiry time			
The proposed solution shall support log management up to 12 months inbuilt			

The proposed solution shall support summary reporting and network analytics and the same shall be maintained up to 6 months			
The solution must health visibility of Wireless network and Individual client connectivity issues/latency that impact Wireless user experience			
The solution must have built-in guest captive portal for on boarding users			
The vendor should be listed in gartner magic leaders quadrant for wired and wireless segment as per latest available report and also in the last 3 years to have reliable support from OEM			
The proposed solution shall support WIPS/WIDS solution using a dedicated 3rd radio/hardware with the round the clock monitoring to protect from threats.			
The vendor should be the market leader or leaders (first two position) in the wired and wireless segment in India as per any industry leading report			

Code	Item Description	Qty
33450-B9-015	Access Point – Type 5 (Cloud Managed) Cisco Meraki MR46 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
The proposed access point shall support 802.11a/n/ac/ax and dual band 2.4ghz & 5ghz radio specification			
The proposed access point shall support additional radios 1 × WIDS/WIPS and 1 × Bluetooth			
The proposed access point shall support hardware accelerated encryption			
The proposed access point shall support band steering and 802.11e/WMM			
The proposed access point shall support 1 x 2.5 Gbps Multigigabit Ethernet port			
The proposed access point shall support 4×4:4 MU-MIMO with beamforming along with 4x4:4 UL/DL MU-MIMO and OFDMA on both bands			

Must support 802.11b/g/n/ax on the 2.4 & 802.11a/n/ac/ax Wave 2 on 5 GHz radio			
Must support aggregate 3.5Gbps or more with dual radios			
Must support 40 & 80 MHz wide channels in 5 GHz.			
The proposed access point shall support zero touch provision with true plug & play with zero configuration			
The proposed access point shall support rapid deployment options to deploy of 100's of access points using centralized single configuration template, configuration copy, configuration sync etc			
The proposed access point shall support device configuration in the dashboard even before the devices are delivered			
The proposed access point shall support fully remote monitoring, configuration, troubleshooting considering the situation of the deployment			
The proposed access point support self configuring, self optimizing (channel, power client connection) and self healing considering the situation of the deployment			
The proposed access point shall support client fingerprinting with 20+ parameters along with client real time location			
The proposed solution/access points should provide WIDS/WIPS and should also support auto containment of the ROUGE APs and DOS ATTACK			
The proposed solution shall support built in self registration & SMS authentication			
Access point should be powered with POE or Power adapter			
Access point should be unified and should be managed from central WLC / dashboard and support WIDS/WIPS functionality.			
Access Point should have Real-time spectrum intelligence capabilities			
The proposed solution shall support detailed location analytics and presence analytics			
The proposed solution shall support Social media authentication & Email OTP (automated) to support users to onboard without depending on the admin/IT team			

The proposed solution shall support internal as well as external captive portal API integration to support 3rd party Captive portal and should have inbuilt Captive portal customization (logo, URL, themes, message etc)			
The proposed solution shall support PMK, 802.11r for fast layer 2 roaming			
The proposed solution shall support distributed layer 3 roaming			
The proposed solution shall support decision at the access points level which includes layer 3 to layer 7 stateful firewall decisions, QOS policies, NAC policies etc for high performance and scaling (by taking decisions at the edge level)			
The proposed solution shall support WIPS/WIDS solution to protect from threats.			
The proposed solution shall support full client, OS visibility and context based policy can be assigned to different users, devices based on preferences			
The proposed solution shall support inbuilt Radius database for authentication (username/password) and authorization with expiry time			
The proposed solution shall support log management up to 12 months inbuilt			
The proposed solution shall support summary reporting and network analytics and the same shall be maintained up to 6 months			
The solution must health visibility of Wireless network and Individual client connectivity issues/latency that impact Wireless user experience			
The solution must have built-in guest captive portal for on boarding users			
The vendor should be listed in gartner magic leaders quadrant for wired and wireless segment as per latest available report and also in the last 3 years to have reliable support from OEM			
The proposed solution shall support WIPS/WIDS solution using a dedicated 3rd radio/hardware with the round the clock monitoring to protect from threats.			

Code	Item Description	Qty
33450-B9-016	Access Switch - Type 1 (Cloud Managed) 24 Port (Non-PoE) Cisco Meraki MR125 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Interfaces			
24 × 10/100/1000BASE-T Ethernet (RJ45)			
4 × 1G SFP ports for uplinks			
Auto-negotiation and crossover detection			
Management			
Managed via the Web with the Meraki cloud management platform			
Integrated with Meraki wireless and complete portfolio of IT products and solutions			
Zero-touch remote provisioning (no staging needed)			
Detailed historical per-port and per-client usage statistics			
Operating system, device, and hostname fingerprinting			
SNMP and SYSLOG support for integration with other network management solutions			
Automatic firmware upgrades with scheduling control			
Remote Diagnostics			
Email, SMS, and Mobile push notification alerts			
Ping, traceroute, cable testing, and link failure detection with alerting			
Remote packet capture			
Dynamic and interactive network discovery and topology			

Combined event and configuration change logs with instant search			
Stacking			
Virtual Stacking supports thousands of switch ports in a single logical stack for unified management, monitoring, and configuration			
Ethernet Switching Capabilities			
802.1p Quality of Service, 8 queues (w/ 6 configurable for DSCP-to-CoS mapping)			
802.1Q VLAN and trunking support for up to 4,094 VLANs			
802.1w, 802.1D Rapid Spanning Tree Protocol (RSTP, STP)			
STP Enhancements: BPDU guard, Root guard, Loop guard, UDLD			
Broadcast storm control			
802.1ab Link Layer Discovery Protocol (LLDP) and Cisco Discovery Protocol (CDP)			
802.3ad Link aggregation with up to 8 ports per aggregate, Multichassis aggregates supported on stacked switches			
Port mirroring			
IGMP snooping for multicast filtering			
MAC forwarding entries: 16K			
Security			
Integrated multi-factor authentication for cloud management platform			
Role-based access control (RBAC) with granular device and configuration control			
Corporate-wide password policy enforcement			
IEEE 802.1X RADIUS and MAB, hybrid authentication, and RADIUS server testing			
Single-Host/Multi-Domain/Multi-Host/Multi Authentication			
Port security: Sticky MAC, MAC whitelisting			
DHCP snooping, detection and blocking			
IPv4 and IPv6 ACLs			

Performance			
Switching capacity: 56 Gbps			
Forwarding rate: 41.67 mpps			
Jumbo frame support (9600 byte Ethernet frame)			
Flow control			
Layer 3			
DHCP Relay			
Power			
Power input: 100 - 240 VAC, 47-63 Hz			
MS120-48: 17-36 W max, fanless			
Mounting			
1U Rack-mountable with included rack mount hardware			
2-post front mounting options available			
Environment			
Operating temperature: 0°C to 45°C			
Humidity: 5 to 95% non-condensing			
Variable speed fans			
Regulatory			
CSA-US (US, Canada)			
FCC (USA)			
IC (Canada)			
CE (Europe)			
RCM (Australia/New Zealand)			
RoHS			

Code	Item Description	Qty
33450-B9-017	Access Switch - Type 2 (Cloud Managed) 48 Port (Non-PoE) Cisco Meraki MR125 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Interfaces			
48 × 10/100/1000BASE-T Ethernet (RJ45)			
4 × 1G SFP ports for uplinks			
Auto-negotiation and crossover detection			
Management			
Managed via the Web with the Meraki cloud management platform			
Integrated with Meraki wireless and complete portfolio of IT products and solutions			
Zero-touch remote provisioning (no staging needed)			
Detailed historical per-port and per-client usage statistics			
Operating system, device, and hostname fingerprinting			
SNMP and SYSLOG support for integration with other network management solutions			
Automatic firmware upgrades with scheduling control			
Remote Diagnostics			
Email, SMS, and Mobile push notification alerts			
Ping, traceroute, cable testing, and link failure detection with alerting			

Remote packet capture			
Dynamic and interactive network discovery and topology			
Combined event and configuration change logs with instant search			
Stacking			
Virtual Stacking supports thousands of switch ports in a single logical stack for unified management, monitoring, and configuration			
Ethernet Switching Capabilities			
802.1p Quality of Service, 8 queues (w/ 6 configurable for DSCP-to-CoS mapping)			
802.1Q VLAN and trunking support for up to 4,094 VLANs			
802.1w, 802.1D Rapid Spanning Tree Protocol (RSTP, STP)			
STP Enhancements: BPDU guard, Root guard, Loop guard, UDLD			
Broadcast storm control			
802.1ab Link Layer Discovery Protocol (LLDP) and Cisco Discovery Protocol (CDP)			
802.3ad Link aggregation with up to 8 ports per aggregate, Multichassis aggregates supported on stacked switches			
Port mirroring			
IGMP snooping for multicast filtering			
MAC forwarding entries: 32K			
Security			
Integrated multi-factor authentication for cloud management platform			
Role-based access control (RBAC) with granular device and configuration control			
Corporate-wide password policy enforcement			

IEEE 802.1X RADIUS and MAB, hybrid authentication, and RADIUS server testing			
Single-Host/Multi-Domain/Multi-Host/Multi Authentication			
Port security: Sticky MAC, MAC whitelisting			
DHCP snooping, detection and blocking			
IPv4 and IPv6 ACLs			
Performance			
Switching capacity: 104 Gbps			
Forwarding rate: 77.38 mpps			
Jumbo frame support (9600 byte Ethernet frame)			
Flow control			
Layer 3			
DHCP Relay			
Power			
Power input: 100 - 240 VAC, 47-63 Hz			
MS120-48: 8-18 W max, fanless			
Mounting			
1U Rack-mountable with included rack mount hardware			
2-post front mounting options available			
Environment			
Operating temperature: 0°C to 45°C			
Humidity: 5 to 95% non-condensing			
Variable speed fans			

Regulatory			
CSA-US (US, Canada)			
FCC (USA)			
IC (Canada)			
CE (Europe)			
RCM (Australia/New Zealand)			
RoHS			

Code	Item Description	Qty
33450-B9-018	Access Switch - Type 3 (Cloud Managed) 24 Port (PoE) Cisco Meraki MR125 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Interfaces			
24 × 10/100/1000BASE-T Ethernet (RJ45)			
4 × 1G SFP ports for uplinks			
Auto-negotiation and crossover detection			
The proposed Switch shall support POE+ all on ports			
Management			
Managed via the Web with the Meraki cloud management platform			
Integrated with Meraki wireless and complete portfolio of IT products and solutions			
Zero-touch remote provisioning (no staging needed)			

Detailed historical per-port and per-client usage statistics			
Operating system, device, and hostname fingerprinting			
SNMP and SYSLOG support for integration with other network management solutions			
Automatic firmware upgrades with scheduling control			
Remote Diagnostics			
Email, SMS, and Mobile push notification alerts			
Ping, traceroute, cable testing, and link failure detection with alerting			
Remote packet capture			
Dynamic and interactive network discovery and topology			
Combined event and configuration change logs with instant search			
Stacking			
Virtual Stacking supports thousands of switch ports in a single logical stack for unified management, monitoring, and configuration			
Ethernet Switching Capabilities			
802.1p Quality of Service, 8 queues (w/ 6 configurable for DSCP-to-CoS mapping)			
802.1Q VLAN and trunking support for up to 4,094 VLANs			
802.1w, 802.1D Rapid Spanning Tree Protocol (RSTP, STP)			
STP Enhancements: BPDU guard, Root guard, Loop guard, UDLD			
Broadcast storm control			
802.1ab Link Layer Discovery Protocol (LLDP) and Cisco Discovery Protocol (CDP)			
802.3ad Link aggregation with up to 8 ports per aggregate, Multichassis aggregates supported on stacked switches			
Port mirroring			

IGMP snooping for multicast filtering			
MAC forwarding entries: 16K			
Security			
Integrated multi-factor authentication for cloud management platform			
Role-based access control (RBAC) with granular device and configuration control			
Corporate-wide password policy enforcement			
IEEE 802.1X RADIUS and MAB, hybrid authentication, and RADIUS server testing			
Single-Host/Multi-Domain/Multi-Host/Multi Authentication			
Port security: Sticky MAC, MAC whitelisting			
DHCP snooping, detection and blocking			
IPv4 and IPv6 ACLs			
Performance			
Switching capacity: 56 Gbps			
Forwarding rate: 41.67 mpps			
Jumbo frame support (9600 byte Ethernet frame)			
Flow control			
Layer 3			
DHCP Relay			
Power			
Power input: 100 - 240 VAC, 47-63 Hz			
MS120-24: 8-18 W max, fanless			

MS120-24P: 28-250 W			
48V DC 802.3af/802.3at Power-over-Ethernet (PoE/PoE+) available on all ports (maximum of 30W per port for PoE+) for powered switches			
Mounting			
1U Rack-mountable with included rack mount hardware			
2-post front mounting options available			
Environment			
Operating temperature: 0°C to 45°C			
Humidity: 5 to 95% non-condensing			
Variable speed fans			
Regulatory			
CSA-US (US, Canada)			
FCC (USA)			
IC (Canada)			
CE (Europe)			
RCM (Australia/New Zealand)			
RoHS			

Code	Item Description	Qty
33450-B9-019	Access Switch - Type 4 (Cloud Managed) 48 Port (PoE) Cisco Meraki MR125 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Interfaces			
48 × 10/100/1000BASE-T Ethernet (RJ45)			
4 × 1G SFP ports for uplinks			
Auto-negotiation and crossover detection			
The proposed Switch shall support POE+ all on ports			
Management			
Managed via the Web with the Meraki cloud management platform			
Integrated with Meraki wireless and complete portfolio of IT products and solutions			
Zero-touch remote provisioning (no staging needed)			
Detailed historical per-port and per-client usage statistics			
Operating system, device, and hostname fingerprinting			
SNMP and SYSLOG support for integration with other network management solutions			
Automatic firmware upgrades with scheduling control			
Remote Diagnostics			
Email, SMS, and Mobile push notification alerts			
Ping, traceroute, cable testing, and link failure detection with alerting			
Remote packet capture			

Dynamic and interactive network discovery and topology			
Combined event and configuration change logs with instant search			
Stacking			
Virtual Stacking supports thousands of switch ports in a single logical stack for unified management, monitoring, and configuration			
Ethernet Switching Capabilities			
802.1p Quality of Service, 8 queues (w/ 6 configurable for DSCP-to-CoS mapping)			
802.1Q VLAN and trunking support for up to 4,094 VLANs			
802.1w, 802.1D Rapid Spanning Tree Protocol (RSTP, STP)			
STP Enhancements: BPDU guard, Root guard, Loop guard, UDLD			
Broadcast storm control			
802.1ab Link Layer Discovery Protocol (LLDP) and Cisco Discovery Protocol (CDP)			
802.3ad Link aggregation with up to 8 ports per aggregate, Multichassis aggregates supported on stacked switches			
Port mirroring			
IGMP snooping for multicast filtering			
MAC forwarding entries: 32K			
Security			
Integrated multi-factor authentication for cloud management platform			
Role-based access control (RBAC) with granular device and configuration control			
Corporate-wide password policy enforcement			

IEEE 802.1X RADIUS and MAB, hybrid authentication, and RADIUS server testing			
Single-Host/Multi-Domain/Multi-Host/Multi Authentication			
Port security: Sticky MAC, MAC whitelisting			
DHCP snooping, detection and blocking			
IPv4 and IPv6 ACLs			
Performance			
Switching capacity: 104 Gbps			
Forwarding rate: 77.38 mpps			
Jumbo frame support (9600 byte Ethernet frame)			
Flow control			
Layer 3			
DHCP Relay			
Power			
Power input: 100 - 240 VAC, 47-63 Hz			
MS120-48: 8-18 W max, fanless			
Mounting			
1U Rack-mountable with included rack mount hardware			
2-post front mounting options available			
Environment			
Operating temperature: 0°C to 45°C			
Humidity: 5 to 95% non-condensing			

Variable speed fans			
Regulatory			
CSA-US (US, Canada)			
FCC (USA)			
IC (Canada)			
CE (Europe)			
RCM (Australia/New Zealand)			
RoHS			

Code	Item Description	Qty
33450-B9-020	Access Switch - Type 5 (Cloud Managed) 8 Port (PoE) Cisco Meraki MR 120 or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Interfaces			
8 × 10/100/1000BASE-T Ethernet (RJ45)			
2 × 1G SFP ports for uplinks			
MS120-8 FP includes 124W PoE/PoE+			
Auto-negotiation and crossover detection			
Management			
Managed via the Web with the Meraki cloud management platform			
Integrated with Meraki wireless and complete portfolio of IT products and solutions			
Zero-touch remote provisioning (no staging needed)			
Detailed historical per-port and per-client usage statistics			

Operating system, device, and hostname fingerprinting			
SNMP and Syslog support for integration with other network management solutions			
Automatic firmware upgrades with scheduling control			
Remote Diagnostics			
Email, SMS, and mobile push notification alerts			
Ping, traceroute, cable testing, and link failure detection with alerting			
Remote packet capture			
Dynamic and interactive network discovery and topology			
Combined event and configuration change logs with instant search			
Stacking			
Virtual Stacking supports thousands of switch ports in a single logical stack for unified management, monitoring, and configuration			
Security			
Integrated multi-factor authentication for cloud management platform			
Role-based access control (RBAC) with granular device and configuration control			
Corporate-wide password policy enforcement			
IEEE 802.1X RADIUS and MAB, hybrid authentication, and RADIUS server testing			
Single-Host/Multi-Domain/Multi-Host/Multi Authentication			
Port security: Sticky MAC, MAC whitelisting			
DHCP snooping, detection and blocking			
IPv4 and IPv6 ACLs			
Performance			
Switching capacity: 20 Gbps			
Forwarding rate: 14.88 mpps			
Jumbo frame support (9600 byte Ethernet frame)			
Flow control support			
Layer 3			
DHCP Relay			

Power			
Power input: 100 - 240 VAC, 47-63 Hz			
MS120-8: 6-9 W max, fanless			
MS120-8LP: 7-88 W max, fanless			
MS120-8FP: 9-162 W max, fanless			
48V DC 802.3af/802.3at Power-over-Ethernet (PoE/PoE+) available on all ports (maximum of 30W per port for PoE+) for powered switches			
Environment			
Operating temperature: 0°C to 45°C			
Humidity: 5 to 95% non-condensing			
Variable speed fans			
Regulatory			
CSA-US (US, Canada)			
FCC (USA)			
IC (Canada)			
CE (Europe)			
RCM (Australia/New Zealand)			
RoHS			

.

Code	Item Description	Qty
33450-B9-021	Router Type 1 : CISCO 4451 Series or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
The Router should support modular architecture, multi-core Processor, internal redundant field replaceable power supply (from Day1). The Router Should have capabilities of seamless field upgrade/replacement (without interrupting running processes and services) for modular interfaces.			
Router have a physical separation between control and data planes.			
Router should have 4 x 1G SFP/Base-T (combo or dedicated) port			
The Router should support interfaces like Channelized E1/T1, Serial V.35, G.703, LTE, Gigabit and 10G Ethernet modules. All the modular interfaces on the router should support hot-swapability feature to accommodate field upgrades without rebooting the router.			
The Router should have atleast 4 empty slot for future use			
Router should have minimum 6 GB of on-board/inbuilt DRAM/RAM for data plane + control plane processes and 4 GB Flash from Day 1. Should support expandability up to 16 GB DRAM and 16 GB Flash. *			
The router must support IKEv1, L2TP, IKEv2, GRE and IPSEC from day 1. The proposed solution should serve the GRE encryption for traffic from any location to other location on demand and also should able to create GRE tunnel.			
Router should support IGMP v1/v2/v3 and PIM multicast routing			
Router should support static Routes, OSPFv2, OSPFv3, BGP4, MBGP, BFD, Policy based routing, IPv4 and IPv6 tunneling from Day 1			
The Router should support Zone Based Firewall feature or an external appliance for the same functionality can be provided.			

Router should Support Traffic Optimization feature built in the router operating system or an external appliance for the same functionality can be provided.			
Shall have 802.1p class of service and marking, classification, policing and shaping.			
Router should support SSHv2, SNMPv2c, SNMPv3 and NTP			
Routers should support AAA using RADIUS and TACACS+			
Should have extensive support for IP SLA and best path selection for metrics like delay, latency, jitter, packet loss to assure business-critical IP applications from Day1.			
The router should support cRTP to compress voice (RTP) streams			
The router should support call processing backup mechanism that allows IP phones to register to the router			
Router should support monitoring of network traffic with application level insight with deep packet visibility into web traffic, RTP-Based VoIP traffic.			
Router should have traffic load balancing capability on dual WAN Links based on based on advanced criteria, such as reachability, delay, loss, jitter and bandwidth utilization.			
Router shall have capability to add on demand IPSec VPN tunnels dynamically established multipoint-to-multipoint IPSEC based spoke-to-spoke VPN tunnels matching traffic conditions			
Router should have capability to enable SD-WAN features without hardware upgrade			
Router shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.			
Router shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.			
Router/Router's Operating System should be tested and certified for EAL 3/NDPP or above under Common Criteria Certification			
Router should be IPv6 Certified/IPv6 logo ready			

Code	Item Description	Qty
33450-B9-022	Router Type 2 : CISCO 4331 Series or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
The Router should support modular architecture, multi-core Processor, internal field replaceable power supply. The Router Should have capabilities to seamless upgrade/replacement (without interrupting running processes and services) for modular interfaces.			
Router should have 2 x 1G SFP/Base-T (combo or dedicated) port			
The Router should have support for interfaces like Channelized E1/T1, V.35, G.703, LTE, Gigabit ethernet modules. All the modular interfaces on the router should support hot-swapability feature to accommodate field upgrades without rebooting the router.			
The Router should have 2 empty slot for future use			
Router should have minimum 4 GB of active DRAM/RAM and 4 GB Flash. Should support expandability up to 8 GB DRAM and 16 GB Flash.			
Router should support IGMP v1/v2/v3 and PIM multicast routing			
Router should support static Routes, OSPFv2, OSPFv3, BGP4, MBGP, BFD, Policy based routing, IPv4 and IPv6 tunneling			
Shall have 802.1p class of service and marking, classification, policing and shaping.			
Router should support SSHv2, SNMPv2c, SNMPv3 and NTP			
Routers should support AAA using RADIUS and TACACS+			
Should have extensive support for IP SLA and best path selection for metrics like delay, latency, jitter, packet loss to assure business-critical IP applications from Day1.			
The router should support cRTP to compress voice (RTP) streams			

Router should support monitoring of network traffic with application level insight with deep packet visibility into web traffic, RTP-Based VoIP traffic.			
Router should have traffic load balancing capability on dual WAN Links based on based on advanced criteria, such as reachability, delay, loss, jitter and bandwidth utilization.			
Router shall have capability to add on demand IPSec feature			
Router should have capability to enable SD-WAN features without hardware upgrade			
Router shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.			
Router shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.			
Router/Router's Operating System should be tested and certified for EAL 3/NDPP or above under Common Criteria Certification			
Router should be IPv6 Certified/IPv6 logo ready			

Code	Item Description	Qty
33450-B9-023	Router Type 3 : CISCO 4321 Series or Equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Router should have Minimum 2 WAN and 2 LAN of 10/100/1000 Mbps GE Ports with 2 free slots from day 1			
Packet forwarding rate 50 Mbps from day 1 and upgradable to 100 Mbps			
Should be IPv4 and IPv6 enabled from day one			
HSRP/VRRP, Static Routes, RIPv2, OSPFv2, OSPFv3, BGP, BGP4, MBGP, BFD, Policy based routing, IPv4 and IPv6 tunneling enabled from day one			
IGMP v1/v2/v3, PIM-DM, PIM-SM, Source Specific Multicast (SSM) enabled from day one			
Class-based queuing, marking, policing and shaping			
Should have provision of network performance monitoring features like delay, latency, jitter, packet loss etc.			
Should have SNMPv1, v2 and v3, NTP, FTP/TFTP, SSH, TELNET			
Should have AAA using RADIUS or TACACS /TACACS+			
Should have Packet Filtering mechanism using access control lists.			
should have DES, 3DES, AES encryption & MD5 authentication			
Should have other IP Services like GRE tunneling, Standard ACL/Extended ACL, IPSec VPN, NAT features enabled from day one			
Should have secure shell for secure connectivity			
Should have console port and an external modem for remote management			
Pre-planned scheduled Reboot Facility, Configuration rollback			

Real Time Performance Monitor – service-level agreement verification probes/alerts			
Should be 220V AC powered with 5A power cord bundled			

Code	Item Description	Qty
33450-B9-024	Cisco Firepower Small Office (Model FPR-2130 or equivalent)	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Hardware Architecture			
The proposed solution/appliance MUST be upto Layer 7 protection. There should be no performance degradation in the overall transaction processing.			
The appliance based security platform should be capable of providing firewall, application visibility, and control, VPN functionality and anti-apt in a single appliance.			
The appliance should support atleast 12 * 1G Gigabit ports, 4 x 10G SFP+ and should be scalable to additional 8 * 10G in future			
Proposed Firewall should not be proprietary ASIC based in nature & should be open architecture based on multi-core cpu's to protect & scale against dynamic latest security threats. The appliance hardware should be a multicore CPU architecture with a hardened 64 bit operating system to support higher memory			
The proposed solution should have dual redundant power supply and redundant hot swappable fans.			
Firewall Should consume 1RU Form Factor.			
Performance & Scalability			
Should support 4.5 Gbps of NGFW (FW, AVC and IPS) real-world / production performance			
Firewall should have VPN throughput of 1.5 gbps			

Firewall should support atleast 2,000,000 concurrent sessions with application visibility turned on			
Firewall should support atleast 20,000 connections per second with application visibility turned on			
Firewall should support at least 1000 VLANs			
Next Generation Firewall Features			
Firewall should provide application detection for DNS, FTP, HTTP, SMTP,ESMTP, LDAP, MGCP, RTSP, SIP, SCCP, SQLNET, TFTP, H.323, SNMP			
Firewall should support creating access-rules with IPv4 & IPv6 objects simultaneously			
Firewall should support operating in routed & transparent mode			
Should support Static, RIP, OSPF, OSPFv3 and BGP			
Firewall should support manual NAT and Auto-NAT, static nat, dynamic nat, dynamic pat			
Firewall should support Nat66 (IPv6-to-IPv6), Nat 64 (IPv6-to-IPv4) & Nat46 (IPv4-to-IPv6) functionality			
Firewall should support Multicast protocols like IGMP, PIM, etc			
Should support security policies based on security group names in source or destination fields or both			
Should support capability to limit bandwidth on basis of apps / groups, Networks / Geo, Ports, etc			
The detection engine must be capable of detecting and preventing a wide variety of threats (e.g., malware, network probes/reconnaissance, VoIP attacks, buffer overflows, P2P attacks, zero-day threats, etc.).			
The solution must be capable of passively gathering information about network hosts and their activities, such as operating system, services, open ports, client applications, and vulnerabilities, to assist with multiple activities, such as intrusion event data correlation, elimination of false positives, and policy compliance.			
The solution must be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.) with minimal human intervention.			

Should support Application Visibility and Control (AVC) supports more than 10000 application-layer and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.			
The solution must provide a full-featured NBA capability to detect threats emerging from inside the network (i.e., ones that have not passed through a perimeter IPS). This includes the ability to establish "normal" traffic baselines through flow analysis techniques (e.g., NetFlow) and the ability to detect deviations from normal baselines.			
The NBA capability must provide the option of supplying endpoint intelligence to the IPS for correlation against intrusion events to aid in event impact prioritization.			
The solution shall provide on-premise based sandbox technology where the objectionable content may be executed and inspected. Local Malware analysis appliance should have integrated redundant power supply and minimum of 2 x 10 ports. The sandboxing solution should semalessly integrate with the proposed web and email security solution as well..			
High-Availability Features			
NG Firewall should support Active/Standby failover.			
Firewall should support ether channel or equivalent functionality for the failover control & date interfaces for provide additional level of redundancy			
Firewall should support redundant interfaces to provide interface level redundancy before device failover			
Firewall should support 802.3ad Ether channel or equivalent functionality to increase the bandwidth for a segment.			
Management			
The management platform must be accessible via a web-based interface and ideally with no need for additional client software			
The management platform must provide a highly customizable dashboard.			

The management platform must be capable of integrating third party vulnerability information into threat policy adjustment routines and automated tuning workflows			
The management platform must be capable of role-based administration, enabling different sets of views and configuration capabilities for different administrators subsequent to their authentication.			
Should support REST API for monitoring and config programmability			
The management platform must provide multiple report output types or formats, such as PDF, HTML, and CSV.			
The management platform must support multiple mechanisms for issuing alerts (e.g., SNMP, e-mail, SYSLOG).			
The management platform must provide robust reporting capabilities, including a selection of pre-defined reports and the ability for complete customization and generation of new reports.			
The management platform must risk reports like advanced malware, attacks and network			
The management platform must include an integration mechanism, preferably in the form of open APIs and/or standard interfaces, to enable events and log data to be shared with external network and security management applications, such as Security Information and Event Managers (SIEMs), and log management tools.			

Code	Item Description	Qty
33450-B9-025	Cisco Firepower Medium Office (Model FPR-4112 or equivalent)	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Chassis and other hardware details:			
Rack mountable modular chassis (of 1RU) with hot swappable redundant power supply, power cords with three pin power socket of type IEC C13 suitable for India			
Proposed Firewall should not be proprietary ASIC based in nature & should be open architecture based on multi-core cpu's to protect & scale against dynamic latest security threats.			
Port details:			
i) Minimum 4 no. of 10/100/1000 copper ports and 4 X 1Gbps/10 Gbps SFP/SFP+ fiber ports			
ii) Dedicated port for management and mandatory USB port to upload configuration files, image management and troubleshooting			
Operating parameters:			
i) Power – 230 VAC, 50 Hz			
ii) Temperature – 0 to 40° Celsius			
iii) Humidity – 5% to 95% (non-condensing)			
Performance:			
i) Firewall throughput – 18 Gbps (FW, AVC and IPS) or better - Real-world / production performance			

iv) Maximum concurrent sessions – 9 Million or more			
v) New sessions/second – 90K or more			
vi) IPSec VPN throughput - 8 Gbps or more and minimum 900 VPN Peer			
Firewall Functions:			
Shall support zone-based firewall function, DDoS flood prevention attack per pack second (1.5 M) or higher. , NAT, PAT, Application Visibility and Control, Advanced Threat protection including Anti-Malware protection			
Should support Reputation- and category-based URL filtering offering comprehensive alerting and control over suspect web traffic and enforces policies on more than 280 million of URLs in more than 80 categories.			
Should support capability to integrate with other security solutions to receive contextual information like security group tags/names			
Should support the capability to quarantine end point by integrating with other security solution like Network Admission Control			
IPS functions:			
Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.) with minimal human intervention.			
Should support automatic Real Time Signature generation based on Rate Variant, Rate Invariant algorithms & Challenge Response Mechanisms; within few seconds, without human intervention			
Routing functions:			
Should support Static, RIP, OSPF, OSPFv3 and BGP, BGPv6			
Firewall should support Nat66 (IPv6-to-IPv6), Nat 64 (IPv6-to-IPv4) & Nat46 (IPv4-to-IPv6) functionality			
IP assignment functions:			
Shall support Static, Dynamic Host Configuration Protocol (DHCP), Internal DHCP server, DHCP relay, DNS			

High Availability functions:			
Shall support Active/passive or active/active, Low impact chassis cluster upgrades, Configuration synchronization			
Management			
Shall support Structured system log, SSH, Telnet, SNMP (v2/v3) and Traceroute.			
The management platform must be accessible via a web-based interface and ideally with no need for additional client software			
The management platform must be a dedicated OEM appliance and VM running on server will not be accepted			

Code	Item Description	Qty
33450-B9-026	Cisco Firepower Large Office (Model FPR-4115 or equivalent)	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Chassis and other hardware details:			
Rack mountable modular chassis (of 1RU) with hot swappable redundant power supply, power cords with three pin power socket of type IEC C13 suitable for India			
Proposed Firewall should not be proprietary ASIC based in nature & should be open architecture based on multi-core cpu's to protect & scale against dynamic latest security threats.			
Port details:			
i) Minimum 4 no. of 10/100/1000 copper ports and 4 X 1Gbps/10 Gbps SFP/SFP+ fiber ports			
ii) Dedicated port for management and mandatory USB port to upload configuration files, image management and troubleshooting			

Operating parameters:			
i) Power – 230 VAC, 50 Hz			
ii) Temperature – 0 to 40° Celsius			
iii) Humidity – 5% to 95% (non-condensing)			
Performance:			
i) Firewall throughput – 33 Gbps (FW, AVC and IPS) or better - Real-world / production performance			
iv) Maximum concurrent sessions – 15 Million or more			
v) New sessions/second – 210K or more			
vi) IPSec VPN throughput - 12.5 Gbps or more and minimum 1500 VPN Peer			
Firewall Functions:			
Shall support zone-based firewall function, DDoS flood prevention attack per pack second (1.5 M) or higher. , NAT, PAT, Application Visibility and Control, Advanced Threat protection including Anti-Malware protection			
Should support Reputation- and category-based URL filtering offering comprehensive alerting and control over suspect web traffic and enforces policies on more than 280 million of URLs in more than 80 categories.			
Should support capability to integrate with other security solutions to receive contextual information like security group tags/names			
Should support the capability to quarantine end point by integrating with other security solution like Network Admission Control			
IPS functions:			
Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.) with minimal human intervention.			
Should support automatic Real Time Signature generation based on Rate Variant, Rate Invariant algorithms & Challenge Response Mechanisms; within few seconds,			

without human intervention			
Routing functions:			
Should support Static, RIP, OSPF, OSPFv3 and BGP, BGPv6			
Firewall should support Nat66 (IPv6-to-IPv6), Nat 64 (IPv6-to-IPv4) & Nat46 (IPv4-to-IPv6) functionality			
IP assignment functions:			
Shall support Static, Dynamic Host Configuration Protocol (DHCP), Internal DHCP server, DHCP relay, DNS			
High Availability functions:			
Shall support Active/passive or active/active, Low impact chassis cluster upgrades, Configuration synchronization			
Management			
Shall support Structured system log, SSH, Telnet, SNMP (v2/v3) and Traceroute.			
The management platform must be accessible via a web-based interface and ideally with no need for additional client software			
The management platform must be a dedicated OEM appliance and VM running on server will not be accepted			

Code	Item Description	Qty
33450-B9-027	Rack Server - C220M5 or Equivalent/higher	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Rack Server shall have a minimum of one Intel latest generation Skylake Processors with minimum 2.1GHz & 10 cores per socket.			
Intel chipset compatible with the offered processors.			
The server should Support upto 8 hot-swappable SAS, NL-SAS and SSD drives.			
Server should be configured with 3 Nos 600 GB 10K RPM 12G SAS Drives in Raid 5.			
The Server RAID controller should support the following configurations RAID 0, 1, 5, 6, 10, 50, and 60			
Server should be configured minimum with 2GB of Flash backed write cache module			
Should have at least 24 DIMM slots per server and support minimum up to 1.5TB of DDR4 2666 MHz memory			
The Server should be configured with 2 x 16 GB of DDR4 Memory from day one			
Support for advanced memory redundant technologies like Advanced error correcting code (ECC) and memory mirroring.			
Should have 2 * 10 GbE Base T(embedded) LAN ports			
Should provide minimum Dual 10G SFP+ ports. The same adapter should be upgradable to 40G ports for future requirements.			
Should provide Dual port 16Gbps FC HBA.			
Up to 2 PCIe Generation 3.0 slots			

Should support out of band upgrades, Agentless out-of-band management, integrated diagnostics and Power monitoring and reporting			
The server should support industry standard management protocols like IPMI v2 and SNMP v3			
One 1-Gbps RJ-45 management port and support for Microsoft Windows Server ,Red Hat Enterprise Linux (RHEL) ,SUSE Linux Enterprise Server (SLES)			
The server should support multiple management interfaces including web user interface and command line interface.			
Should have the following ports for server connectivity			
1 serial port; 4 USB 3.0/2.0 ports; 1 VGA video port			

Code	Item Description	Qty
33450-B9-028	Cisco Blade Chassis 5108	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Enclosure			
Blade chassis shall be 19" rack mountable			
The enclosure Should support full height/width and half height/width blades in the same enclosure, occupying a max of 10RU rack height, it should support minimum 8 half height/width blades per blade chassis			
Power			
The enclosure should be populated fully with power supplies of the highest capacity & should be energy efficient.			
The power subsystem should support N + N / N+1 power redundancy (where N is greater than 1) for a fully populated chassis			
Cooling			

Each blade enclosure should have a cooling subsystem consisting of redundant hot pluggable fans or blowers			
Blade Support			
Should support built-in management software in redundancy			
Should provide single management console for all the blade servers across multiple chassis.			
Chassis connectivity			
The chassis should be provided with redundant modules for connectivity			
Converged Module			
Chassis should have sufficient number of redundant converged modules to provide a minimum FCoE uplink bandwidth of 20Gbps per blade server and 10Gbps sustained per blade server (with 1 module failure) for a fully populated chassis for converged Traffic.			
Chassis should support aggregation of multiple enclosures to consolidate data centre network connections, reduce hardware and to scale network bandwidth across multiple enclosures. the interconnects can be internal or external in either case the interconnects should be provided in redundancy. All the modules/switches for chassis interconnectivity should be in redundancy. For internal interconnect switches all the switches in the chassis should be fully populated for maximum throughput & redundancy from day 1.			
All Network and management modules should be populated from day 1 to ensure redundancy			
Future Scalability			
Total number of Chassis should be provided as per solution requirements. Each Chassis should be kept empty at least 30% or more blade slots for Future scalability.			

Code	Item Description	Qty
33450-B9-029	Cisco Blade server B220M5 or Equivalent/Higher	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Each blade shall have two numbers of latest Intel Xeon Scalable Processors (Intel® Xeon® 6230 processor family or higher) with Min. 20 cores per processor each having Min. 2.1 GHz processor speed.			
Intel chipset compatible with the offered processors.			
Min. 24 DIMM slots, should be provided with 16 GB RAM per core using DDR4 DIMM's operating at 2933 MT/s (depending on processor model)			
Advanced ECC protection, online mirror memory			
2 X 1800 GB 12G, 10K RPM SAS Drives			
SAS Raid Controller with RAID 0/1			
The server should provide a minimum of 40 Gbps of bandwidth with Converged network adapter ports across two or more cards.			
Each Blade should have redundant network Connectivity to all the Chassis Interconnect modules.			
Server must be populated with all internal mLOM, PCI-e slots with Connectivity cards to offer maximum throughput to the overall Network on Day 1.			
The blade server to be provided with card level redundancy			
Minimum of 1* internal USB 3.0 port ,1* internal SD card slot			

Code	Item Description	Qty
33450-B9-030	Cisco Webex Meeting Suites	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Specifications for a Cloud Collaboration platform to allows multiple users upto 1000 participants to collaborate with each other using different devices in every meeting. The Solution must be secure, Scalable and must include the following functionalities. One should be able to conduct Events, Webinars, Web Casts, Trainings as well as all their meetings virtually without any limit in number of meetings and any restriction on the duration of the meeting up to 24 hours.			
Users should be able to join into a collaboration meting from any of the following devices: Laptop, Computers-support for both Mac and Windows; Mobile Phones: Android, iOS; PSTN including dial-in functionality with at least 8 different local toll numbers available in India: users must be able to join in from their PSTN phones, HD Video Conferencing devices: SIP & H.323 based			
Content Sharing:			
The tool should have the capability for document, application, and desktop sharing from Laptop/Computers			
The tool should have the capability for annotation and collaboration tools using the application on the Computers/Mobile devices			
During Content sharing all participant audio & video streams must be available and there should not be any limitation during the time of content sharing.			
Content sharing using BFCP/H.239 from Standards based VC devices from Cisco, Polycom, Avaya etc			
Content Collaboration:			

The platform must provide clients on Mobile and Touch screen devices to do white boarding			
The platform should also allow touch screen enabled devices with the requisite app installed to share a content and do annotations using multicoloured virtual pens. Other participants on the conference should also be able to co-annotate on the same content. This should also happen simultaneously.			
The platform must allow 3 -in-1 collaboration devices viz Video conferencing, Whiteboarding and content sharing devices to connect into a conference and be able to share audio, video, content sharing while simultaneously annotating on content			
Scheduling of meetings			
The host should be able to set up a meeting using Outlook or Gmail as well. The necessary integration at the back end infra and applications should be done by the bidder.			
Starting & Setting up of conferences must also be possible from a Web Portal			
Audio and Video Connections			
The tool should provide High-quality video ; full-screen video; with up to 6 simultaneous webcam video feeds and voice-activated switching and 25 video participants in continuous presence.			
The tool should support meetings and recording capabilities including downloadable recordings and playback. Recording should support MP4 format for easy viewing. (Please mention how many GB) with addition cost details . User privillage to download and share to the respective stakeholders			
The users connected in to the web meeting from desktop should be able to connect on audio using any of the following methods:			
Computer audio			
Call back or Dial In with Telephone Service Provider (PSTN) audio. The exact packages must be mentioned in the commercial documents.			
The solution must have published at least 2 India Toll/Tollfree numbers for host & participants to join the meeting using Local/STD numbers.			
The tool should work on HTTPS 443 for signalling. Should have UDP ports for media			

SECURITY			
All Meetings must support encryption of data in-transit & rest. Encryption should be with latest TLS, SHA & AES standards. Please mention 128 or 256			
Solution must support Role-Based Access & Audit Logs			
Solution must support Two-Factor Authentication			
The Solution also must have support of End to End Encrypted meetings as a native capability			
App Based Features			
The solution must have a standard app published on Android, iOS for mobile & Windows & Mac desktops.			
The solution should also support Web based meetings & should also support VDI environments.			
The Tool should support end to end encrypted traffic to conferencing bridge.			
Connecting Standards based VC devices:			
The solution should allow for H.323 and SIP based hardware based Video conference endpoints			
The solution should allow for the users connected on the web based tool to share video, audio and content with the hardware based Video conferencing device and vice versa.			
The solution must allow to start a meeting directly from any SIP/H.323 based VC device using a secure pin.			
The solution should support the following features when a SIP/H.323 room based Video conference endpoint connects to the meeting:			
Video Resolution: main video up to 720p at 30 fps and content sharing			
Video Aspect Ratios: 4:3 standard and 16:9 widescreen aspect ratios			
Single, dual, and multiscreen standards-based video conferencing systems			
Advanced Encryption Standard (AES) 128-bit encryption			
Signaling protocol support: H.323/SIP, TLS			

Media protocol support: RTP, sRTP, and RTCP			
Content share (dual video) protocol support: Binary Floor Control Protocol (BFCP)/H.239 / TIP			
Video codec support: H.263 and H.264 AVC			
Audio codec support: G.711, G.722, OPUS or equivalent			
The solution should support the following advanced security features such as :			
Personal Identification Number (PIN)-protected access into meetings from video endpoint			
Personal Identification Number (PIN)-protected access into meetings from telephones during dial in.			
Meeting lock/unlock for added privacy to prevent unintended participants from joining			
Authenticated access into meetings on desktop and mobile apps			
During the meeting , the user should be able to have the following controls			
See all meeting participants in a unified participant list			
Drop participants			
Record sessions with video, audio, and content for future reference, training, or demonstrations			
Mute, unmute audio of participants			
Number of Users in a single meeting			
The single meeting should support at least 200 web based users joining from desktop/laptop etc. and additional participants upto 1000 either directly on the meeting platform			
The solution should be licensed as per number of individuals who would require scheduling capability.			
Each host must have access to a personal room on cloud with a fixed meeting address, as well as an option to schedule password protected meetings.			

Code	Item Description	Qty
33450-B9-031	Cisco Cisco Desk Pro	**1 No**

Specifications
General Specification
Should be an integrated system with at least 26 inch or higher 4K LED/LCD/TFT screen, 4K Camera, Mics and speakers for wide band audio output. The Codec should be a part of the unit.
It should be possible to use camera, microphone and speakers with any SW client (without using units Codec Functionalities)
LED/LCD/TFT screen should be a touch screen to provide a touch interface to the user.
Must support IPv4 and IPv6 from day one.
The display should work as PC/Laptop Display when not in a call, and should allow working on PC and Attending calls simultaneously.
Must have the following touch buttons for ease of use 1. Mute/Unmute 2. Volume Increase/Decrease
1 x LAN /Ethernet--10/100/1000
1 x LAN /Ethernet--10/100/1000 to connect a PC (i.e. built in switch)
Must support 802.11a/b/g/n/ac 2.4 GHz and 5 GHz
Must support bluetooth 3.0 for connecting bluetooth headsets
Video Standard & Features
Should support minimum H.264
System should support H.323 and SIP protocol.
System must support desktop sharing H.323 and SIP calls
System should support Video stream upto Full HD 1080p30 and Content stream upto 4K 2160p15
System must have ability to send and receive two live simultaneous video sources in a single call.

System must support layout control for video and presentation on a single LED/LCD screen.
Should Touch forwarding capabilities via USB - C
Camera
Should be 4K Ultra HD camera with privacy shutter
70 degrees horizontal Field of View
55 degrees vertical field of view
Automatic focus, brightness and white balance
Camera On LED indicator
Automatic tilt adjustment
Video Input & Output
Should have HDMI input to connect PC/ Laptop directly to the Video Conferencing System and display a resolution upto 3840 x 2160p60 (4kp60).
Should also have USB-C Display port with resolution upto 3840 x 2160p60 (4kp60).
The user must be able to toggle between the Laptop/PC mode and the Video Conferencing mode at a push of button/icon.
Must have a HD output via a HDMI output port (for future support to connect to external display)
System must support H.239 and BFCP for resolutions upto 1080p
Audio Input & Output
The unit should support Internal microphone array for speech USB headset Bluetooth headset

The unit should support Integrated High-quality speakers with directional audio Analog headphone output USB headset Bluetooth headset
Content Sharing
System should support Wireless Content Sharing and allow sharing content from PC/Laptop
Audio Features
Audio System : The system should have two stereo front speakers with inbuilt microphones, wideband speakers. G.722, G.711, AAC-LD or better
Noise Reduction/Echo Cancellation, Automatic Gain control
Bandwidth requirement Upto 6 Mbps Point to Point
SIP/H.323/IP Features
Must support Standard based Packet loss recovery algorithm to handle packet loss.
Must support QOS
Must' support URI Dialing
Must support SIP and H.323
Security Features
Should have password protected system menu
Encryption of video call: ITU-T standards based Encryption of the video call using Advanced Encryption Standard (AES)
Call should be encrypted end-to-end on IP calls
Should support firewall traversal solution using the H.460.18 and H.460.19 protocol

Code	Item Description	Qty
33450-B9-032	Cisco Video Conference for small and Medium Room (Cisco WebEx Kit Mini)	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Video Standard & Features			
Latest video standards H.264, H.265			
Frame rate should support 60 fps with 1080p resolution.			
Ability to send and receive two live simultaneous video sources in a single call, so that the image from the main camera and PC or document camera can be seen simultaneously.			
Should support H.239 and BFCP protocols			
The system must have the ability to pair mobile devices such as Tablets and Smart phones based on iOS or Android platforms so that these devices can be used for: 1) View the Presentation that is being shown in the VC call. 2) Add and disconnect call. 3) Take snapshot of the presentation being shown			
The system must have the ability to pair with laptop for sending content without any wires to the VC system. In case the above feature is not available natively, then additional components can be provided to achieve this.			
Video Input & Output			
Should have at least 1 no. of HDMI output to connect Full High Definition display devices such as plasma and projectors			
When not in a VC call, it should be possible to view presentation from laptops on the screen so that users can collaborate			

Should have a digital input (HDMI/DVI) to connect PC/ Laptop directly to the Video conferencing system and display resolutions from WXGA (1280 x 768) to 1080p (1920 x 1080)			
Support for 1080p 60fps.			
Should support the ability to view and share presentations at a resolution of 3840 × 2160 (4K)			
Audio Input & Output , Other Features			
Must have built-in microphone so that the solution does not have any wires coming onto the table.			
The pick up of the microphone should be at least 10 feet from the microphone.			
Must have a built in audio amplifier and speakers for providing Hi fidelity sound with mid range speakers. The VC unit must have at least 22W of amplifier output.			
G.711, G.722, G.722.1, 64 kbps MPEG-4 AAC-LD standard must be supported..			
Noise Reduction, Automatic Gain control, Acoustic Echo Canceller, Active Lip synchronization			
Camera			
Full HD 1080p camera			
Should support atleast 120 degrees horizontal field of view			
The camera should also have face detection mechanism to enable automatic framing of participants.			
Should have the ability to turn OFF User framing if need be.			
The camera and codec should be from the same OEM.			
Multisite Features			
1+ 3 SIP/H.323 MultiSite. Resolution up to at least 720p30			
Individual layouts in MultiSite CP			
H.323/SIP/VoIP in the same conference			
Must have Individual transcoding and rate matching for each site so that all the sites can be connected at different bandwidths and different audio and video protocols without affecting the resolution to the other sites.			

Support for Presentation (H.239/BFCP) from any participant at resolutions up to 3840 x 2160p5			
H.264, Encryption, Dual Stream from any site			
Network Interfaces and Other Capabilities			
1 LAN /Ethernet--10/100/1000 Mbps full duplex			
H323/SIP upto 6 Mbps point-to-point.			
Packet loss handling mechanism			
Differentiated Services(QOS):			
IP adaptive bandwidth management (including flow control)			
Auto Network Address Translation(NAT) support			
Standards based- Packet Loss Recovery feature			
Should support URI Dialling			
Support for H.245 DTMF tones in H.323			
Should support IPv4 and IPv6 from day one.			
System Management using HTTPS and SSH			
User Interfaces			
In order to provide a good user experience, the unit must be equipped with an intuitive Touch Screen/Panel for controlling the VC unit.			
Must have ability to browse the directory, search a contact, Enable / disable speaker tracking, change layouts, mute/ unmute, increase-decrease volume.			
Security			
Password protected system menu			
ITU-T standards based Encryption of the video call			
Call should be encrypted end-to-end on IP			
Should support Standards-based AES Encryption via Automatic key generation and exchange. The same should be available in a call with Video with presentation (dual video)			
Ability to manually turn encryption ON/ OFF should be there.			
Automatic key generation and exchange			

Code	Item Description	Qty
33450-B9-033	Cisco WebEx Room Kit	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Video Standard & Features			
Latest video standards H.264, H.265			
Should support 60 fps with 1080p resolution.			
Ability to send and receive two live simultaneous video sources in a single call, so that the image from the main camera and PC or document camera can be seen simultaneously.			
Should support H.239 and BFCP protocols			
The system must have the ability to pair mobile devices such as Tablets and Smart phones based on iOS or Android platforms so that these devices can be used for: 1) View the Presentation that is being shown in the VC call. 2) Add and disconnect call.			
The system must have the ability to pair with laptop for sending content without any wires to the VC system. In case the above feature is not available natively, then additional components can be provided to achieve this.			
Video Input & Output			
Should have at least 2 no.'s of HDMI output to connect Full High Definition display devices such as plasma and projectors for both Video and Content.(Dual Monitor Support)			
When not in a VC call, it should be possible to view presentation from two laptops on each of the screen so that users can collaborate			

Should have a digital input (HDMI/DVI) to connect PC/ Laptop directly to the Video conferencing system and display resolutions from WXGA (1280 x 768) to 1080p (1920 x 1080)			
Support for 1080p 60fps.			
Should support the ability to view and share presentations at a resolution of 3840 × 2160 (4K)			
Audio Input & Output			
Must have built-in microphone so that the solution does not have any wires coming onto the table.			
Should support 2 Microphone inputs			
The pick up of the microphones should be at least 10 feet from the microphone.			
Echo Cancellation for every input must be available.			
Must have a built in audio amplifier and speakers for providing Hi fidelity sound with mid range speakers. The VC unit must have at least 22W of amplifier output.			
G.711, G.722, G.722.1, 64 kbps MPEG-4 AAC-LD standard must be supported..			
Noise Reduction, Automatic Gain control, Acoustic Echo Canceller, Active Lip synchronization			
Camera			
Full HD 1080p camera			
Should support atleast 80 degrees horizontal field of view			
Should have the capability to automatically detect active speakers in the conference room. The camera should also have face detection mechanism to enable automatic framing of participants.			
The camera should automatically detect who in the room is speaking and select the best camera framing for that person. And when no one is speaking it should automatically select the best group framing.			
The system should be capable of providing metrics such as participant count that could be used for resource utilization, return on investment reports.			
Should have the ability to turn OFF speaker tracking if need be.			

Must be able to capture a person at a distance of 12 feet in full frame			
The camera and codec should be from the same OEM.			
Multisite Features			
1+ 3 SIP/H.323 MultiSite. Resolution up to at least 720p30 available as an option key that can be purchased and installed in future.			
Individual layouts in MultiSite CP			
H.323/SIP/VoIP in the same conference			
Must have Individual transcoding and rate matching for each site so that all the sites can be connected at different bandwidths and different audio and video protocols without affecting the resolution to the other sites.			
Support for Presentation (H.239/BFCP) from any participant at resolutions up to 3840 x 2160p5			
H.264, Encryption, Dual Stream from any site			
Network Interfaces & Other Features			
1 LAN /Ethernet--10/100/1000 Mbps full duplex			
H323/SIP upto 6 Mbps point-to-point.			
Packet loss handling mechanism			
Differentiated Services(QOS):			
IP adaptive bandwidth management (including flow control)			
Auto Network Address Translation(NAT) support			
Standards based- Packet Loss Recovery feature			
Should support URI Dialling			
Support for H.245 DTMF tones in H.323			
Should support IPv4 and IPv6 from day one.			
System Management using HTTPS and SSH			
User Interfaces			
In order to provide a good user experience, the unit must be equipped with an intuitive Touch Screen/Panel for controlling the VC unit.			

Must have ability to browse the directory, serach a contact, Enable / disable speaker tracking, change layouts, mute/ unmute, increase-decrease volume.			
Must have the capability to integrate with external control systems to control Blinds, Lights, air conditioning using the API's . The User interface must have the necessary icons for controlling the external devices			
Security			
Password protected system menu			
ITU-T standards based Encryption of the video call			
Call should be encrypted end-to-end on IP			
Should support Standards-based AES Encryption via Automatic key generation and exchange. The same should be available in a call with Video with presentation (dualvideo)			
Ability to manually turn encryption ON/ OFF should be there.			
Automatic key generation and exchange			

Code	Item Description	Qty
33450-B9-034	Cisco Video Conference for Medium Conference Room Cisco WebEx Kit+ with 1 Nos of PTZ camera	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Video Standard & Features			
Latest video standards H.264, H.265			
Should support 60 fps with 1080p resolution.			
Ability to send and receive two live simultaneous video sources in a single call, so that the image from the main camera and PC or document camera can be seen simultaneously.			
Should support H.239 and BFCP protocols			

The system must have the ability to pair with laptop for sending content without any wires to the VC system.			
In case the above feature is not available natively, then additional components can be provided to achieve this.			
Video Input & Output			
Should have at least 1 x HDMI inputs to connect Full HD cameras.			
Must have 2 HDMI inputs to connect two laptops/PC for presentations			
All inputs should support 1080p60			
Should support the ability to view and share presentations at a resolution of 3840 × 2160 (4K)			
Should have at least 2 no.'s of HDMI output to connect Full High Definition display devices such as plasma and projectors for both Video and Content.(Dual Monitor Support) with support of 4K resolution output on both displays			
When not in a VC call, it should be possible to view presentation from two laptops on each of the screen so that users can collaborate.			
Audio Input & Output			
Should support 3 Microphone inputs to connect 3 microphones.			
The pick up of the microphones should be at least 10 feet from the microphone.			
Echo Cancellation for every input must be available.			
Should support audio output			
G.711, G.722, G.722.1, 64 kbps MPEG-4 AAC-LD standard must be supported..			
Noise Reduction, Automatic Gain control, Acoustic Echo Canceller, Active Lip synchronization			
Camera			
Minimum of 20 x optical zoom and 10x Digital zoom			
1920 x 1080 pixels progressive @ 60fps			
Each camera should have minimum +20°/-15° tilt, +/- 150° pan			
The Camera and codec should be from the same manufacturer.			
Must have Infinite focus and should not blur any object that is very far away			

Manual & Auto Focus & White Balance must be supported			
Must be PoE+ Compatible			
Should have at least 70° static field of view.			
Multisite Features			
Should support built-in Multiconference capability to connect at least 1+3 sites at 720p30fps in a continuous presence mode			
All sites must be visible in a continuous presence mode with rate matching and transcoding such that different sites may connect at different speeds and protocols and still maintain a resolution of at least 720p			
Network Interfaces and Other Features			
1 LAN /Ethernet--10/100/1000 Mbps full duplex			
H323/SIP upto 6 Mbps point-to-point.			
Packet Loss Based Downspeeding			
QoS--DiffServe			
IP adaptive bandwidth management (including flow control)			
Auto Gatekeeper discovery			
Auto Network Address Translation(NAT) support			
Standards based- Packet Loss Recovery feature			
System should support IPv4 and IPv6 from day one.			
Should support URL Dialling			
Support for H.245 DTMF tones in H.323			
User Interfaces			
In order to provide a good user experience, the unit must be equipped with an intuitive Touch Screen/Panel for controlling the VC unit.			
Must have ability to browse the directory, serach a contact, Enable / disable speaker tracking, change layouts, mute/ unmute, increase-decrease volume.			
Must have the capabilty to integrate with external control systems to control Blinds, Lights, air conditioning using the API's . The User interface must have the necessary icons for controlling the external devices			

Security			
Password protected system menu			
ITU-T standards based Encryption of the video call			
Call should be encrypted end-to-end on IP			
Should support Standards-based: H.235 v3 and AES Encryption via Automatic key generation and exchange. The same should be available in a call with Video with presentation (dualvideo)			
Ability to manually turn encryption ON/ OFF should be there.			
Automatic key generation and exchange			
System Management using HTTPS and SSH			

Code	Item Description	Qty
33450-B9-035	Cisco WebEx Desk USB Camera	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Product Overview			
Desk Camera should be premium USB web camera that provides high-quality video and audio for video conferencing, video streaming, and video recording.			
USB desk camera that can be connected to a personal computer over USB and mounted onto an external monitor, laptop, or tripod as per project requirement			
The Camera fulfills the following use cases:			
Upgrade video: Upgrades an existing laptop camera to high quality video for heavy video and meeting users			
Instant office: Office or home working users with laptop docked to existing independent monitor, Webex Desk Camera provides outstanding video and superior			

dual microphones, more akin to room video and audio standards			
Creation and Broadcast: for users broadcasting or creating basic video content who need a quality camera			
Online Education: for students, teachers who need to join online classes and do not have access to a room or desk system			
Video Features			
4K Ultra HD camera supports video streaming and recording			
Multiple resolutions and frame rates (up to 4K at 30fps, 1080p/720p at 60fps)			
13MP image sensor and supports YUY2/NV12/MJPEG Video Format			
Supports excellent video in various light conditions			
81° diagonal field of view			
10x digital zoom			
Face detection enhanced auto focus with auto brightness and white balance			
Face detection enhanced auto exposure with Buil-in video shutter supports video mute and unmute.			
Audio Features			
Offers high quality microphone audio via 2x omni-directional microphone with background noise reduction			
Certifies with Windows Hello and allows secure facial recognition login through the IR sensor			
Powers admin-controlled workplace occupancy detection* through human detection and face detection			
High quality 48kHz audio			
2x omni-directional microphone with background noise reduction			
Multiple connection and mounting options			
Includes both USB C-to-A and USB C-to-C cables for flexible PC connection			
Multiple placement options with the camera clip and the tripod screw thread			
Video Conferencing Platform support			
Supports the following Cisco desktop applications on Windows and Mac OS			

Webex App			
Webex Meetings App			
Cisco Jabber			
Compatible with all popular meeting or video applications (including Microsoft Teams, Skype for Business, Zoom, Google Meet and Google Hangouts, BlueJeans, Slack, FaceTime, etc.)			
Components			
Fully integrated unit is delivered with:			
4K image sensor and active LED			
Dedicated chipset for AI Computer Vision algorithms			
IR sensor and IR LED			
2 internal microphones			
Video privacy shutter			
USB 3.0 type C port			
Camera clip			
Tripod screw thread			
1 USB 3.0 USB-C to USB-A cable			
1 USB 3.0 USB-C to USB-C cable			
USB passthrough			
Ability to provide video and audio over one USB cable to a connected computer			
Security features			
Secure facial recognition login via the Windows Hello, certified by Microsoft for compliance			
Image (software load) authentication			
Physical privacy shutter			
Software and user interface			
Webex Desk Camera OS			
Control the camera directly with Webex Desk Camera App on Windows and Mac OS			

Upgrade camera firmware from web-based Cisco Accessory Hub			

Code	Item Description	Qty
33450-B9-036	Cisco Meeting Server (Multiparty Conference Unit)	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
General Specification			
General			
The MCU should be running on standard intel servers on standard Virtualized platforms. The hardware, software and virtualization software should be supplied and supported by a single OEM.			
All necessary hardware to support the required capacity needs to be supplied from day one. Each of the server supplied for the MCU must have a redundant power supply from day1.			
The MCU must also support Full HD mode and it must provide a capacity of connecting at least 45 sites @1080p30 fps day one			
The same MCU should also be configured to support 90 sites at HD 720p30fps day one			
The MCU must be able to host at least 5 simultaneous conferences each having different capacities restricted by the maximum port capacity of the MCU			
Additionally, MCU should support atleast 30 Personal Meeting Rooms, which can be assigned to officials for their meetings.			
MCU should be capable of supporting participants using various means i.e. via video enabled phones, room based video endpoints, soft clients on mobile/tablet or via the browser using WebRTC compatible browsers in a single conference. The meeting quality has to be consistent and of high quality. The end points can be present on the WAN network or on the internet. In case additional components are required for this functionality, all additional components required to have this functionality has to be			

included in the solution			
The MCU should have the capability to host meetings with internal and external participants in a secure way such that it should co-exist with the enterprise security policies			
The MCU should support H323 and SIP protocols.			
The MCU must support the concept of virtual meeting rooms to users who Hosts meeting frequently. Such meeting rooms should support dialing in from standard based video end points, internal and external users and browser based clients. The system should allow one Virtual meeting room per employee, however it should not consume resources when not in use.			
The MCU should be able to maintain the dynamic resource allocation capacity for 1080p, 720p and SD participants simultaneously without having to reboot or change any configuration.			
The MCU should support 90 ports or more at HD 720p (transmit and receive) up to 4Mbps on IP in continuous presence mode with 30fps, 200 audio ports, 100 WebRTC connections and H.264 resolution and AES encryption on the same MCU.			
The MCU should display a security icon on the endpoint if the conference is secure.			
The administrator should be able to specify maximum resolution for main video and content.			
Video conferencing endpoints deployed at other organization must be able to take part in video conferencing. The endpoints can be of various makes such as Polycom, Cisco, LifeSize etc using open standards.			
Interoperability with all organization must be possible using standards based dialing methodology using the Internet.			
The MCU should be able to integrate with Call Control system using SIP.			

At least 1 LAN /Ethernet--10/100/1000 Mbps full duplex and dedicated serial/USB connection for maintenance/upgrade.			
Video Standards and Features			
Should support H.263, H.263+, H.263++, H.264, H.264 SVC/H.264 High Profile video algorithms			
Should support video resolution from SD to Full HD to join into a conference			
The proposed MCU should be able to combine HD and SD in the same conference without degrading the HD resolution from and to the HD endpoints. The MCU shall interoperate with multiple vendors' endpoints. The supported mediums should be IPv4 and IPv6.			
The MCU should have H.239/BFCP protocol for sending and receiving dual video streams (Presenter + Presentation).			
At least 20 sites to be seen simultaneously on the screen in traditional Continuous Presence mode.			
The MCU must also support advanced continuous presence such that the site that is "on-air" to be seen on a larger window and the other sites are seen in smaller quadrants.			
MCU Solution should support minimum of 10 layouts			
Audio Standards			
Along with the support for basic algorithms like G.711 and G.722.1 the MCU should also support wideband Audio protocols like MPEG 4 AAC - LC and MPEG 4 AAC - LD			
The MCU should support transcoding of different Audio/video Protocols.			
MCU should be able to combine HD and SD in the same conference without degrading the HD resolution from and to the HD endpoints.			
Video			
Security Features			
The MCU must be a secure Non-PC Hardware with a strong operating system. The Hardware and software must be from the same OEM.			
The MCU should support 128 Bit strong AES encryption for calls and H.235 for authentication			

The MCU must support encryption for calls on SIP.			
Should support firewall traversal solution for Business to Business (B2B) Video Calling.			

Code	Item Description	Qty
33450-B9-037	Cisco IP PABX for 1000 Users	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
General Specifications			
The network will have SIP based call control architecture with call control functionality centralized or distributed across multiple nodes across WAN for enhanced redundancy.			
A comprehensive IP based solutions based on a Server Gateway Architecture.			
Support for integrated telephony solution for Video conferencing devices, Analog & IP Phones, PSTN gateways over IP architecture.			
The solution should offer users the ability to use their UC clients and IP Phones outside of the enterprise (Internet) to make audio and video calls along with IM/Presence with or without VPN.			
The solution should allow for business to business (B2B) video calls using SIP, H.323 with other organizations without bypassing existing firewalls.			
The solution should allow provisioning of gateways			
System Architecture			
The call control system should be fully redundant solution with NO single point of failures & should provide 1:1 redundancy. Both the server should do call processing all the time and act as backup in case of the failure of one server.			
The call control should support clustering over WAN			
The proposed system should be Integratable with ACD, IVR.			
The call control system should support IPv4 and IPv6 from day one.			

The system should natively support tenant partitioning so as to comply with TRAI regulations for not allowing VoIP (CUG calls) and PSTN calls to be bridged. Any third party applications to manage tenant partitioning should not be quoted in the architecture.			
The proposed call control server should provide support for standards based SIP IP Phones (Wired & Wireless), Analog Phones, Video Phones, Video Conferencing endpoints and soft clients to provide centralized management and unified dial plan.			
Conference Bridge—provides software conference bridge resources that can be used by IP EPABX.			
The system should support an inbuilt reporting tool for calls. Reports that are provided include Calls on a user basis, Calls through gateways, Simplified Call Quality.			
Should support signaling standards/Protocols – SIP, H.323, Q.Sig.			
CODEC support - G.711, G.729, G.729ab, g.722, iLBC			
The system should provide the ability to perform tasks in bulk i.e. Add, Remove, Update users, phones, gateways, dial plan etc.			
The system should support creation of users and their authentication locally and via an integration with LDAP.			
The system should support an inbuilt reporting tool for calls. Reports that are provided include Calls on a user basis, Calls through gateways, Simplified Call Quality.			
The system should support call admission control to configure number of calls that can be active between locations – intercluster and intracluster.			
Call preservation – redundancy and automated failure – on call-processing failure. In progress PSTN calls at each of the locations should not be interrupted in the event of any WAN failure or call control server failure.			
Open API should be provided when required which will help to develop customized IP applications which will integrate with call processing.			
It is required to provide Survivable Call Control functionality so that the survivable system at the remote location i.e. Media Gateway shall provide fall back call control service in case the remote site looses all connectivity to the main Call Control system placed. It is expected that the survivability call control system will provide a minimal set			

of essential telephony features to the end-users that could be a subset of the feature that are available from the main call control system.			
Security			
All the appliances in the call control system should have dual redundant and hot swappable power supply and fans for high availability.			
All appliances in the call control system should have hot swappable storage media to ensure high availability.			
Support for configuration database (contains system and device configuration information, including dial plan)			
Having inbuilt administration web based administration. No additional thick client for administration on the Admin PC. Should also support HTTPS for management.			
Access to the system should be secure for the purpose of access over IP network. The protection of signaling connection over IP by means of authentication, Integrity and encryption should be carried out using TLS.			
There should be provision of defining password aging, one time passwords. Provision shall be available to bar unauthorized user to connect to the system. The system should monitor and report the following types of security \ violation login Violations, authorization code violation Station security code violations etc.			
IP Phones should not support direct, external initiated, connections via HTTP, telnet, FTP, TFTP or any other protocol as means to prevent distributed Denial of Service attack exploitation, except those required for routine firmware upgrades.			
Role Based Account Management to define different levels of administrator access depending on specific function responsibility			
The system should support complete encryption capabilities with the ability to encrypt all traffic (media and call control signaling) between IP phones, softphones, call controllers, gateways and all other associated endpoints using a strong encryption algorithm (AES, IPSec and SRTP, for example).			

All management traffic between the remote console/session and control server should be encrypted (SSH for Direct Command Line Sessions, Interface, HTTPS (SSL) for Web Sessions, SFTP for File Transfer Etc.).			
Should support SSL for LDAP directory integration.			
All Hardware & Software with license required for providing above Security measures must be incorporated.			
System Capabilities Summary			
The System should have IP capability for interfacing & Communicating with Voice, Video and Data infrastructure			
The architecture should support a minimum of 1000 IP phones and VC systems per Server			
The System should support Alternate Call Routing			
The System should have GUI support web based management console			
System backups: The management system should have the provisioning for taking manual as well as scheduling of automatic periodic backup of complete system & data.			
The System should support Audio message-waiting indicator (AMWI)			
The System should have Automated bandwidth selection			
Should support SNMP v2, v3			
It should be possible to monitor the call control system i.e. system performance, device status, device discovery, CTI applications, voice messaging ports etc.			
IM & Presence			
Solution should provide a "presence" application for users, so that they can see the availability status of their contacts in their contact list.			
The common supported status for this application should be available, busy, idle, away etc.			
Should support the users to see other user's IP phone's on/off hook states			
The instant messaging application should support manual setting of user status to: Available, Away, Do Not Disturb (DND) etc.			
Shall provide support for open protocols like XMPP.			

Presence based desktop application shall allow escalation of Instant Message to Audio call and further to Video call			
Should support management of contact list and personal settings from Presence based desktop application			
Should support click to call, click to Video and click to conference features.			
The Soft Client should have soft phone capability and should support desktop and iPad based point to point video calls.			
Video Telephony Support			
The call control system should provide integrated video telephony features to the users so that user with IP Phone / Soft phone and video telephony end point should be able to place video calls with the same user model as audio calls.			
The users should be able to transfer video calls as audio calls			
Call-Server should provide a common control agent for signaling, configuration, and serviceability for voice or video end points.			
Call control system should handle CODEC and video capabilities of the endpoints, bandwidth negotiation to determine if video/audio call can take place.			
End user Features required:			
Extension mobility			
Call forward all			
Message-waiting indicator (MWI)			
Privacy			
Device mobility			
Do not disturb			
Hunt groups			
Dial-plan partitioning			
Distributed call processing			
Deployment of devices and applications across an IP network			
"Clusters" of Call-Servers for scalability, redundancy, and load balancing			
Intercluster scalability to 100+ sites or clusters through H.323 gatekeeper			

Fax over IP—G.711 pass-through and Fax Relay			
Forced authorization codes and client matter codes (account codes)			
H.323 interface to selected devices			
Hotline and private line automated ringdown (PLAR)			
Interface to H.323 gatekeeper for scalability, CAC, and redundancy			
Language support for client user interfaces (languages specified separately)			
Multi-Level Precedence and Preemption (MLPP)			
Multilocation—dial-plan partition			
Multiple ISDN protocol support			
Multiple remote CallServer platform administration and debug utilities			
Prepackaged alerts, monitor views, and historical reports with Real Time Monitor Tool (RTMT).			
Real-time and historical application performance monitoring through operating system tools and Simple Network Management Protocol (SNMP)			
Remote terminal service for off-net system monitoring and alerting			
Real-time event monitoring and presentation to common syslog			
Trace setting and collection utility			
Cluster wide trace setting tool.			
Trace Collection tool.			
Multisite (cross-WAN) capability with intersite CAC			
Q.SIG (International Organization for Standardization [ISO])			
Video calls to be placed with the same user model as audio calls.			
Call-Server should support new video end points.			
SIP Video endpoints which should inherit the functionality of audio calls which gives the user the same call model for both video and audio calls.			
Call-Server should have the infrastructure to handle codec and video capabilities of the endpoints, bandwidth negotiation to determine if video/audio call can take place, single point of administration, management of media devices such as gateways and MCUs.			

Call-Server should provide a common control agent for signaling, configuration, and serviceability for voice or video end points.			

Code	Item Description	Qty
33450-B9-038	Cisco IP Phone 7821	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
General Specification			
The phone should support Power over Ethernet IEEE 802.3af class 1/2/3 and should also have AC power adapter option			
Should feature a LCD display of at least 3.5" for information such as calling party name, calling party number, and digits dialled to be displayed.			
The phone should have two ethernet ports of at least 10/100 BASE-T Ethernet ports, one for the LAN connection and the other for connecting to PC/laptop.			
Corporate directory and Lightweight Directory Access Protocol (LDAP) integration.			
Ready access to missed, received or placed calls (plus intercom history and directories).			
The phone should support QoS mechanism through 802.1p/q.			
IP address Assignment by DHCP or statically configured			
Hands-free operation with full-duplex speaker-phone			
The phone should be a SIP based Phone i.e session Initiation protocol (SIP) supported			
The phone should support XML based services and applications.			
The phone should have a distinct LED indicator for message waiting.			
Should have keys for specific functionalities such as – voicemail, directories, settings, transfer, speakerphone, mute on/off, headset etc			
Media Encryption (SRTP) using AES			
Signaling Encryption (TLS) using AES			

Should support 802.1x			
Encryption of Configuration Files			
The phone should have the ability to register to call control server over an internet link with or without VPN.			
The phone should support IPv4 and IPv6 from day1.			
The phone should support at least 100 entries for call history i.e. missed, received, placed etc.			
It should support the following codecs: G.711a/µ-law, G.722, G.729a, iLBC			
The phone should have RJ9 headset port to connect any standards based headset. The phone should also have a separate headset key			
The phone also includes the following settings - Display contrast, Ring type, Network configuration, Call status			
The Phone should support the ability to provide different ringtones for internal and external calls.			
Should have volume control button for easy volume adjustments for the speakerphone, handset and ringer.			
The phone should support mounting against a wall			
The phone should support 2 programmable lines keys.			

The phone should the following features:			
i. Call forward			
ii. Call pickup			
iii. Call waiting			
iv. Extension Mobility			
v. Auto answer			
vi. Message waiting indicator			
vii. Music on hold			
viii. Forced Authorization Code (Account Code/FAC)			
ix. Conference			
x. Music on Hold (MoH)			
xi. Corporate directory			
xii. Auto-detection of headset			
xiii. Busy Lamp Field (BLF)			
xiv. Callback			
xv. Immediate Divert			

Code	Item Description	Qty
33450-B9-039	Cisco IP Phone 8841	1 No

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Should have min 5" screen (800 × 480 resolution) with color display and at least 4 programmable line keys			
The phone should be a SIP based Phone i.e session Initiation protocol (SIP) supported			
The phone should support Power over Ethernet IEEE 802.3af class 1/2/3 and should also have AC power adapter option			
The phone should have 2 x 1GE ports, one for the LAN connection and the other			

for connecting to PC/laptop.			
Corporate directory and Lightweight Directory Access Protocol (LDAP) integration.			
Ready access to missed, received or placed calls (plus intercom history and directories).			
The phone should support QoS mechanism through 802.1p/q.			
IP address Assignment by DHCP or statically configured			
Hands-free operation with full-duplex speaker-phone			
The phone should support XML based services and applications.			
The phone should have a distinct LED indicator for message waiting.			
Should have keys for specific functionalities such as – voicemail, directories, settings, transfer, speakerphone, mute on/off, headset etc			
Media Encryption (SRTP) using AES			
Signaling Encryption (TLS) using AES			
802.1x support			
Encryption of Configuration Files			
The phone should have the ability to register to call control server from outside of the enterprise with or without VPN.			
The phone should support IPv4 and IPv6 from day one.			
The phone should support backlit indicators for the audio path keys (handset, headset, and speakerphone), select key, line keys, and message waiting.			
Should support following audio codec - G.711a, G.711u, G.729a, G.722, iSAC, Internet Low Bitrate Codec (iLBC)			
The phone should have RJ9 headset port to connect any standards based headset. The phone should also have a separate headset key			
The phone should support mounting against a wall			
The phone should support at least 100 entries for call history i.e. missed, received, placed etc.			
Should support busy lamp indicator (BLF) to indicate the presence			

Should support boss-secretary feature, so that secretary can answer calls on behalf of Manager			
The handset should be hearing aid-compatible			
The phone should be available in white colour			
The phone should support the following features at a minimum: a. Call forward b. Call pickup c. Call waiting d. Calback e. Call park f. Conference g. Extension Mobility h. Auto answer i. Auto-detection of headset j. Immediate Divert k. Music on hold (MoH) l. SIP URI dialing m. URL Dialing n. Message waiting indicator (MWI) o. Personal directory p. Forced Authorization Code (Account/FAC) q. Call history lists			

Code	Item Description	Qty
33450-B9-040	Access Point (CISCO 9120 or equivalent)	**1 No**

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Access Point shall support 4x4 MIMO on both radio interfaces and MU-MIMO technology			
Access Point shall be able to support Multigigabit Ethernet, support up to 2.5 Gbps PHY speed using single Cat5e or above(Cat6, Cat6a, Cat7) cable			
Access Point shall be able to support full features at 802.3at			
Access Point shall be able to powered up using PoE (.af)			
Access Point shall support Dual 5GHz radios			
Access Point shall have dedicated radio/chipset for spectrum monitoring capabilities, WIPS and off channel RRM without compromising and using the client serving radios.			
Access Point shall support hardware driven beamforming			
Access Point shall be IoT ready (Zigbee, Thread) and container support for IOT applications.			
Access Point should have Bluetooth5 radio to support use casses of location, asset tracking and analytics.			
Access Point should have 1x 100, 1000, 2500 Multigigabit Ethernet (RJ-45) – IEEE 802.3bz			
Access Point should have USB port for future requirement.			
Must have atleast 3 dBi Antenna gain on each radios			
Must Support data rate upto 5gbps.			

Must support minimum of 23dbm of transmit power in both 2.4Ghz and 5Ghz radios. And should follow the local regulatory Norms.			
Must support AP enforced load-balance between 2.4Ghz and 5Ghz band.			
Must incorporate radio resource management for power, channel and performance optimization			
Must have -97 dB or better Receiver Sensitivity.			
Must support Proactive Key Caching and/or other methods for Fast Secure Roaming.			
Must support Management Frame Protection.			
Should support locally-significant certificates on the APs using a Public Key Infrastructure (PKI).			
Must support the ability to serve clients and monitor the RF environment concurrently.			
Same model AP that serves clients must be able to be dedicated to monitoring the RF environment.			
Must be plenum-rated (UL2043).			
Must support 16 WLANs per AP for SSID deployment flexibility.			
Access Point Must continue serving clients when link to controller is down. It should also have option to authenticate user through Radius server directly from Access Point during link unavailability to controller.			
Must support telnet and/or SSH login to APs directly for troubleshooting flexibility.			
802.11e and WMM			
Must support QoS and Video Call Admission Control capabilities.			
Access point should be wifi 6 certified			
OEM Support should be 3 years Warranty			

Code	Item Description	Qty
33450-B9-041	Firewall Cisco FPR4112-NGFW-K9 or equivalent	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Chassis and other hardware details:			
Rack mountable modular chassis (of 1RU) with hot swappable redundant power supply, power cords with three pin power socket of type IEC C13 suitable for India			
Proposed Firewall should not be proprietary ASIC based in nature & should be open architecture based on multi-core cpu's to protect & scale against dynamic latest security threats.			
Port details:			
i) Minimum 8 nos. of 10/100/1000 copper ports and 4 X 1Gbps/10 Gbps SFP/SFP+ fiber ports			
ii) Dedicated port for management and mandatory USB port to upload configuration files, image management and troubleshooting			
Operating parameters:			
i) Power – 230 VAC, 50 Hz			
ii) Temperature – 0 to 40° Celsius			
iii) Humidity – 5% to 95% (non-condensing)			
Performance:			
i) Firewall throughput – 18 Gbps or better			

ii) Throughput with IPS – 10 Gbps or better			
iv) Maximum concurrent sessions – 9 Million or more			
v) New sessions/second – 90K or more			
vi) IPSec VPN throughput - 8 Gbps or more and minimum 900 VPN Peer			
Firewall Functions:			
Shall support zone-based firewall function, DDoS flood prevention attack per pack second (1.5 M) or higher. , NAT, PAT, Application Visibility and Control, Advanced Threat protection including Anti-Malware protection			
Should support Reputation- and category-based URL filtering offering comprehensive alerting and control over suspect web traffic and enforces policies on more than 280 million of URLs in more than 80 categories.			
Should support capability to integrate with other security solutions to receive contextual information like security group tags/names			
Should support the capability to quarantine end point by integrating with other security solution like Network Admission Control			
IPS functions:			
Should be capable of dynamically tuning IDS/IPS sensors (e.g., selecting rules, configuring policies, updating policies, etc.) with minimal human intervention.			
Should support automatic Real Time Signature generation based on Rate Variant, Rate Invariant algorithms & Challenge Response Mechanisms; within few seconds, without human intervention			
Routing functions:			
Should support Static, RIP, OSPF, OSPFv3 and BGP, BGPv6			
Firewall should support Nat66 (IPv6-to-IPv6), Nat 64 (IPv6-to-IPv4) & Nat46 (IPv4-to-IPv6) functionality			

IP assignment functions:			
Shall support Static, Dynamic Host Configuration Protocol (DHCP), Internal DHCP server,DHCP relay, DNS			
High Availability functions:			
Shall support Active/passive or active/active, Low impact chassis cluster upgrades, Configuration synchronization			
Management			
Shall support Structured system log, SSH, Telnet, SNMP (v2/v3) and Traceroute.			
The management platform must be accessible via a web-based interface and ideally with no need for additional client software			
The management platform must be a dedicated OEM appliance and VM running on server will not be accepted			
OEM Support should be 3 years Warranty			

Code	Item Description	Qty
33450-B9-042	Core Switch – Type 1 - Specification (Model : CISCO Catalyst 9400 or Equivalent)	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
The Switch should be a Chassis based switch with min 5 or more slots for operational and atleast 800 Gbps switching performance			
The Switch Should support 480+ Gbps on all slots			

The Switch Should support Redundant Supervisor Engine from day one			
There should not be any performance degradation even if one Supervisor Engine fails			
The Switch Should support redundant power supplies from day one			
The Switch Should support 2x48 Port 10/100/1000 UTP ports from day one			
The switch should support 1x24 port 1G Fibre (SFP) ports from day one			
The switch should support 2x24 port 10G (SFP+) Fibre ports from day one			
The switch should 48 ports 10 G LR SFP Modules from day one			
The Switch should support Network virtualization and segmentation with Group-based policies and Context-based analytics			
The Switch Should Must support overall more than 6 Tbps of System Bandwidth			
The Switch Should support throughput of atleast 900 Mbps			
The Switch Should support IPv4 and IPv6 support in hardware (Unicast and Multicast)			
The Switch Should support 112K IPv4 / JPv6 Routing Entries			
The Switch Should support Mirroring sessions			
The Switch Should support atleast 18,000 Security and QoS Hardware Entries			
The switch should support IPv6 support in hardware, providing wire-rate forwarding for JPv6 networks			
Must support Temperature of 5 to +45° C			
The Switch should support External USB for flexible storage options			
The Switch should support N + 1 redundancy			
The Switch should support 1 dedicated 10/100/1000 management port and one RJ45 console port			

Must support MACSec 128			
The Switch Should support more than 380K Flow entries in hardware			
Must support Automation includes NetConf, Restconf, gRPC, YANG, PnP Agent			
The Switch Should support Nonstop Forwarding			
The switch should support PVLAN, VRRP, PBR, CDP, QoS, FHS, 802.1x			
The Switch Should support Unicast Reverse Path Forwarding			
The Switch Should support SPAN and RSPAN			
The Switch Should support measure, report, and reduce energy consumption on POE if considered			
The Switch Should support analyse IP service levels for IP applications and services by using active traffic monitoring			
The Switch Should support Layer 3 routing protocols - OSPF, EIGRP and multicast routing from day one			
The Switch Should support BGP, VRF and Policy based routing functionality			
The Switch should support security Features such as IEEE 802.1x, port security, Dynamic Host Configuration Protocol (DHCP) Snooping and Guard, Dynamic ARP Inspection, RA Guard, IP Source Guard, control plane protection (CoPP)			
The Switch Should support SSH, SNMP v2C and SNMP V3, NTP for IPv4 & IPv6			
OEM Support should be 3 years Warranty			

Code	Item Description	Qty
33450-B9-043	Router Type 1 : Specification (Model : ISR4451-X/K9 or Equivalent)	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
The Router should support modular architecture, multi-core Processor, internal redundant field replaceable power supply (from Day1). The Router Should have capabilities of seamless field upgrade/replacement (without interrupting running processes and services) for modular interfaces.			
Router with support of minimum bandwidth of 2Gbps from day 1 upgrable to 4 Gbps			
Router have a physical separation between control and data planes.			
Router should have 8 x 1G SFP/Base-T (combo or dedicated) port from Day 1			
Router should have 6 Nos. of Serial ports from Day 1			
The Router should support interfaces like Channelized E1/T1, Serial V.35, G.703,. All the modular interfaces on the router should support hot-swapability feature to accommodate field upgrades without rebooting the router.			
The Router should have atleast 4 empty slot for future use			
Router should have minimum 4 GB of on-board/inbuilt DRAM/RAM for data plane + control plane processes and 4 GB Flash from Day 1. Should support expandability up to 8 GB DRAM and 16 GB Flash.			
The router must support IKEv1, L2TP, IKEv2, GRE and IPSEC from day 1. The proposed solution should serve the GRE encryption for traffic from any location to other location on demand and also should able to create GRE tunnel.			

Router should support IGMP v1/v2/v3 and PIM multicast routing			
Router should support static Routes, OSPFv2, OSPFv3, BGP4, MBGP, BFD, Policy based routing, IPv4 and IPv6 tunneling from Day 1			
The Router should support Zone Based Firewall feature or an external appliance for the same functionality can be provided.			
Router should Support Traffic Optimization feature built in the router operating system or an external appliance for the same functionality can be provided.			
Shall have 802.1p class of service and marking, classification, policing and shaping.			
Router should support SSHv2, SNMPv2c, SNMPv3 and NTP			
Routers should support AAA using RADIUS and TACACS+			
Should have extensive support for IP SLA and best path selection for metrics like delay, latency, jitter, packet loss to assure business-critical IP applications from Day1.			
The router should support cRTP to compress voice (RTP) streams			
The router should support call processing backup mechanism that allows IP phones to register to the router			
Router should support monitoring of network traffic with application level insight with deep packet visibility into web traffic, RTP-Based VoIP traffic.			
Router should have traffic load balancing capability on dual WAN Links based on based on advanced criteria, such as reachability, delay, loss, jitter and bandwidth utilization.			
Router shall have capability to add on demand IPSec VPN tunnels dynamically established multipoint-to-multipoint IPSEC based spoke-to-spoke VPN tunnels matching traffic conditions			
Router should have capability to enable SD-WAN features without hardware upgrade			
Router shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.			

Router shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.			
Router/Router's Operating System should be tested and certified for EAL 3/NDPP or above under Common Criteria Certification			
OEM Support should be 3 years Warranty			

Code	Item Description	Qty
33450-B9-044	Wireless LAN Controller Cisco 9800 (Up to 2000 Access Point) - Specification (Model : CISCO Catalyst 9800-40 or Equivalent)	**1 No**

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Wireless controller should support 2000 AP and 30000 clients from day 1.			
The controller shall support deployment flexibility without compromizing any features			
The controller shall support 40 Gbps tunneling capacity			
The controller shall support 4x10 Gig SFp/SFP+ uplink ports			
Wireless Controller shall support link aggregation and load sharing between Access Point to WLC links			
The controller shall support hardware encrypted data plane between Access Point and Controller			
High Availability mode shall support controller inline data plane mode as well as local switching mode and Mesh mode			
High Availability mode shall allow geographically dispersed installation between Controllers			

The controller failover shall not trigger client de-authentication and re-association			
The redundant Controller shall sync Access Point and Client Status, including DHCP IP lease status			
Access Point shall be able to proactively distributes Client connection before and after association and tracking client condition in real time using data packet RSSI			
The controller shall support standard-based, secure AP-Controller data & control protocol like CAPWAP. protocol that has known vulnerability like PAPI cannot be used.			
The controller shall support Inter-Controller Wireless Roaming			
The controller shall maintains per-user Application usage and shall be able to export it for network analytic.			
The controller shall support Multi Languages options from embedded GUI Management			
The controller shall provide per-Client Connection Scoring and provide reasoning of Client Connection Score			
The controller shall support Cellular offload using IPv6 tunneling to Mobile Core network			
The controller shall be able to support multiple RF Management profile per group of APs, including Transmit Power Control and Dynamic Channel Assignment on both 2.4GHz and 5Ghz			
The controller shall be able to identify and avoid interferers with network performance impact analysis report			
The controller shall support optimized, automatic channel width (20~160Mhz) selection over 5GHz, 802.11ac			
Mesh AP nodes shall provide quick convergence and fast failover to new root mesh node			
Mesh Backhaul interface shall support full duplex operation using wired daisy chaining			

Mesh AP shall support fast roaming for Wired-client through wired-to-wireless bridge client			
The controller shall support per-user and per-WLAN based application recognition and control that throttle usage by rate-limiting			
The controller application recognition technology shall support exporting to 3rd party compatible format, such as NetFlow v9			
The controller shall provide policy-based mDNS gateway including chromecast gateway			
The controller shall support new application signatures without upgrading controller software			
The controller shall provide Device Profiling using multiple profiling methods to reduce false-detection			
The system shall provide secure onboarding service for both employee and guest based on standard-based security protocol Proposed system shall not use public cloud as user data repository			
The controller shall be able to embedded custom web portal page (HTML) to fully customize user experience without additional cost or extra box			
The controller shall provide rule-based rogue classification and automatically run rogue mitigation action			
The controller shall be able to detect employee device connection to Rogue Access Point and contain it automatically. It should also support protection from Honeypot or Evil twin.			
The controller shall support Content Security using DNS integration, Web Classification shall be fully customizable			
The system shall support control plane encryption on both IPv4 and IPv6			
The Controller's image upgrade shall be done through secure, encrypted transport			
The controller shall be able to provide unique pre-shared keys to the devices that do not support the 802.1x security protocol			
The controller shall support Identity PSK for on boarding			

The controller shall support identification & mitigation of threats inside encrypted traffic			
The controller shall support mapping of specific VLANs to single SSID, depending on Access Point location and user			
The controller shall support automatic VLAN assignment per SSID to load-balance user connection. assigned VLAN pool shall be same as number of available VLAN in the system			
The controller shall support embedded best practice configuration profile and setup			
The controller shall support packet fragmentation between Access Point and controller communication			
OEM Support should be 3 years Warranty			

Code	Item Description	Qty
33450-B9-045	Distribution Switch - Type 1 Cisco 9300 or Equivalent	**1 No**

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Switch should be 1U and rack mountable in standard 19" rack.			
Switch should support internal hot-swappable Redundant Power supply from day 1.			
Switch should have redudant hotswappable fans.			
Switch should have minimum 8 GB RAM and 8 GB Flash.			
Switch shall have 48 nos. 10/100/1000 SFP ports			
Switch shall have 4 nos. 10G SFP ports			
10G SFP Ports should be populated with 10G LR Fiber Transceivers			

Stacking Cable should be provided from day one			
Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 320 Gbps of stacking thoughput with 8 switch in single stack.			
Switch shall have minimum 208 Gbps of switching fabric and 154 Mpps of forwarding rate.			
Switch shall have minimum 32K MAC Addresses and 1000 active VLAN.			
Should support minimum 32K IPv4 routes or more and 16K IPv6 routes or more			
Switch shall have 8K or more multicast routes.			
Switch should support atleast 64K flow entries			
Switch should support 128 or more STP Instances.			
Switch should have 16MB or more packet buffer.			
Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z & 1588v2.			
Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1			
Should have advance Layer 3 protocol like BGPv4, BGPv6 , MPLS, VRF, VXLAN, IS-ISv4, OSPFv3, MP-BGP			
Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.			
Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ .			
Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.			
Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-256 on hardware			

Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.			
During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.			
Switch shall have modular OS to support application 3rd party application hosting			
Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.			
Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.			
OEM Support should be 3 years Warranty			

Code	Item Description	Qty
33450-B9-046	Access Switch - Type 4- 48 Port (Non-PoE) Cisco 9200 or Equivalent	**1 No**

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Switch should be 1U and rack mountable in standard 19" rack.			
Switch should support internal field replaceable unit redundant power supply from day 1			
Switch should have minimum 4 GB RAM and 4 GB Flash.			
Switch shall have 48 nos. 10/100/1000 Base-T ports			
Switch shall have 4 nos of 10G SFP ports			
10G SFP Ports shall be populated with 10G LR Transceivers			

Switch Shall be supplied with Stacking cable from day one			
Switch should have dedicated slot for modular stacking, in addition to asked uplink ports. Should support for minimum 160 Gbps of stacking thoughput with 8 switch in single stack.			
Switch shall have minimum 176 Gbps of switching fabric and 130 Mpps of forwarding rate			
Switch shall have minimum 16K MAC Addresses and 250 active VLAN.			
Should support minimum 11K IPv4 routes or more			
Switch shall have 1K or more multicast routes.			
Switch should support atleast 16K flow entries			
Switch should support 128 or more STP Instances.			
Switch should have 6MB or more packet buffer.			
Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z.			
Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, PBR and QoS features from Day1			
Switch should support network segmentation that overcomes the limitation of VLANs using VXLAN and VRFs.			
Switch shall have 802.1p class of service, marking, classification, policing and shaping and eight egress queues.			
Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ .			
Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.			
Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports.			

Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.		
During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.		
Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.		
Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.		
Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.		
OEM Support should be 3 years Warranty		

A1.5.10 Category B10 – Linux Products

S.N	Product Code	Description	Bidder Compliance (Yes/No)
1	33450-B10-001	Red Hat Enterprise Linux for Virtual Datacenters, Premium - 1 Year	
2	33450-B10-002	Red Hat Enterprise Linux for Virtual Datacenters, Premium - 3 Years	
3	33450-B10-003	Red Hat Enterprise Linux for Virtual Datacenters, Standard - 1 Year	
4	33450-B10-004	Red Hat Enterprise Linux for Virtual Datacenters, Standard - 3 Years	
5	33450-B10-005	Red Hat Enterprise Linux Server, Premium (Physical or Virtual Nodes) - 1 year	

6	33450-B10-006	Red Hat Enterprise Linux Server, Premium (Physical or Virtual Nodes) - 3 years	
7	33450-B10-007	Red Hat Enterprise Linux Server, Standard (Physical or Virtual Nodes) - 1 year	
8	33450-B10-008	Red Hat Enterprise Linux Server, Standard (Physical or Virtual Nodes) -3 years	
9	33450-B10-009	Red Hat Enterprise Linux Server with Smart Management, Premium (Physical or Virtual Nodes) - 1 year	
10	33450-B10-010	Red Hat Enterprise Linux Server with Smart Management, Premium (Physical or Virtual Nodes) - 3 years	
11	33450-B10-011	Red Hat Enterprise Linux Server with Smart Management, Standard (Physical or Virtual Nodes) - 1 Year	
12	33450-B10-012	Red Hat Enterprise Linux Server with Smart Management, Standard (Physical or Virtual Nodes) - 3 Years	
13	33450-B10-013	Red Hat Enterprise Linux Extended Life Cycle Support (Physical or Virtual Nodes)	
14	33450-B10-014	Red Hat Enterprise Linux Extended Life Cycle Support (Unlimited Guests)	
15	33450-B10-015	Red Hat Enterprise Linux for SAP Applications, Premium (Physical or Virtual Nodes) - 1 Year	
16	33450-B10-016	Red Hat Enterprise Linux for SAP Applications, Premium (Physical or Virtual Nodes) - 3 Years	
17	33450-B10-017	Red Hat Enterprise Linux for SAP Applications, Standard (Physical or Virtual Nodes) - 1 Year	
18	33450-B10-018	Red Hat Enterprise Linux for SAP Applications, Standard (Physical or Virtual Nodes) - 3 Years	
19	33450-B10-019	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Premium - 1 Year	
20	33450-B10-020	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Premium - 3 Years	

21	33450-B10-021	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Standard - 1 Year	
22	33450-B10-022	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Standard - 3 Years	
23	33450-B10-023	Red Hat Enterprise Linux for SAP Solutions, Premium (Physical or Virtual Nodes) - 1 Year	
24	33450-B10-024	Red Hat Enterprise Linux for SAP Solutions, Premium (Physical or Virtual Nodes) - 3 Years	
25	33450-B10-025	Red Hat Enterprise Linux for SAP Solutions, Standard (Physical or Virtual Nodes) - 1 Year	
26	33450-B10-026	Red Hat Enterprise Linux for SAP Solutions, Standard (Physical or Virtual Nodes) - 3 Years	
27	33450-B10-027	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Premium - 1 Year	
28	33450-B10-028	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Premium - 3 Years	
29	33450-B10-029	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Standard - 1 Year	
30	33450-B10-030	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Standard - 3 Years	
31	33450-B10-031	High Availability -1 year	
32	33450-B10-032	High Availability -3 years	
33	33450-B10-033	High Availability for Unlimited Guests -1 year	
34	33450-B10-034	High Availability for Unlimited Guests -3 years	
35	33450-B10-035	Resilient Storage -1 year	
36	33450-B10-036	Resilient Storage -3 years	
37	33450-B10-037	Resilient Storage for Unlimited Guests -1 year	
38	33450-B10-038	Resilient Storage for Unlimited Guests -3 years	
39	33450-B10-039	Smart Management -1 year	

40	33450-B10-040	Smart Management -3 years	
41	33450-B10-041	Smart Management for Unlimited Guests -1 year	
42	33450-B10-042	Smart Management for Unlimited Guests -3 years	
43	33450-B10-043	Red Hat Enterprise Virtualization (2- sockets), Premium -1 year	
44	33450-B10-044	Red Hat Enterprise Virtualization (2- sockets), Premium -1 year	
45	33450-B10-045	Red Hat JBoss Enterprise Application Platform, 4-Core Premium - 1 Year	
46	33450-B10-046	Red Hat JBoss Enterprise Application Platform, 4-Core Premium - 3 Years	
47	33450-B10-047	Red Hat JBoss Enterprise Application Platform, 4-Core Standard - 1 Year	
48	33450-B10-048	Red Hat JBoss Enterprise Application Platform, 4-Core Standard - 3 Years	
49	33450-B10-049	Red Hat JBoss Enterprise Application Platform, 16-Core Premium -1 year	
50	33450-B10-050	Red Hat JBoss Enterprise Application Platform, 16-Core Premium -3 years	
51	33450-B10-051	Red Hat JBoss Enterprise Application Platform, 16-Core Standard -1 year	
52	33450-B10-052	Red Hat JBoss Enterprise Application Platform, 16-Core Standard -3 years	
53	33450-B10-053	Red Hat JBoss Enterprise Application Platform, 64-Core Premium -1 year	
54	33450-B10-054	Red Hat JBoss Enterprise Application Platform, 64-Core Premium -3 years	
55	33450-B10-055	Red Hat JBoss Enterprise Application Platform, 64-Core Standard -1 year	
56	33450-B10-056	Red Hat JBoss Enterprise Application Platform, 64-Core Standard -3 years	
57	33450-B10-057	Red Hat JBoss Enterprise Application Platform, Extended Life Cycle Support Add-On, 4-Core Premium	
58	33450-B10-058	Red Hat JBoss Enterprise Application Platform, Extended Life Cycle Support Add-On, 4-Core Standard	
59	33450-B10-059	Red Hat JBoss Enterprise Application Platform ELS Program, 16-Core Standard	
60	33450-B10-060	Red Hat JBoss Enterprise Application Platform ELS Program, 16-Core Premium	
61	33450-B10-061	Red Hat JBoss Enterprise Application Platform ELS Program, 64-Core Standard	
62	33450-B10-062	Red Hat JBoss Enterprise Application Platform ELS Program, 64-Core Premium	
63	33450-B10-063	Red Hat JBoss Web Server, 16-Core Premium - 1 year	
64	33450-B10-064	Red Hat JBoss Web Server, 16-Core Premium - 3 years	

65	33450-B10-065	Red Hat JBoss Web Server, 16-Core Standard - 1 year	
66	33450-B10-066	Red Hat JBoss Web Server, 16-Core Standard - 3 years	
67	33450-B10-067	Red Hat JBoss Web Server Plus, 16-Core Premium -1 year	
68	33450-B10-068	Red Hat JBoss Web Server Plus, 16-Core Premium -3 years	
69	33450-B10-069	Red Hat JBoss Web Server Plus, 16-Core Standard -1 year	
70	33450-B10-070	Red Hat JBoss Web Server Plus, 16-Core Standard -3 years	
71	33450-B10-071	Red Hat Process Automation Manager, Premium (16 Cores) - 1 Year	
72	33450-B10-072	Red Hat Process Automation Manager, Premium (16 Cores) - 3 Years	
73	33450-B10-073	Red Hat Process Automation Manager, Standard (16 Cores) - 1 Year	
74	33450-B10-074	Red Hat Process Automation Manager, Standard (16 Cores) - 3 Years	
75	33450-B10-075	Red Hat Decision Manager, Premium (16 Cores) - 1 Year	
76	33450-B10-076	Red Hat Decision Manager, Premium (16 Cores) - 3 Years	
77	33450-B10-077	Red Hat Decision Manager, Standard (16 Cores) - 1 Year	
78	33450-B10-078	Red Hat Decision Manager, Standard (16 Cores) - 3 Years	
79	33450-B10-079	Red Hat Fuse, 4-Core Premium - 1 Year	
80	33450-B10-080	Red Hat Fuse, 4-Core Premium - 3 Years	
81	33450-B10-081	Red Hat Fuse, Premium (16 Cores) - 1 Year	
82	33450-B10-082	Red Hat Fuse, Premium (16 Cores) -3 Years	
83	33450-B10-083	Red Hat Fuse, 4-Core Standard - 1 Year	
84	33450-B10-084	Red Hat Fuse, 4-Core Standard - 3 Years	
85	33450-B10-085	Red Hat Fuse, Standard (16 Cores) - 1 Year	
86	33450-B10-086	Red Hat Fuse, Standard (16 Cores) - 3 Years	
87	33450-B10-087	Red Hat Fuse, Extended Lifecycle Support Add-On, Premium (4 Cores)	
88	33450-B10-088	Red Hat Fuse, Extended Life Cycle Support Add-On, Standard (4 Cores)	
89	33450-B10-089	Red Hat Fuse ELS Program, Premium (16 Cores)	
90	33450-B10-090	Red Hat Fuse ELS Program, Standard (16 Cores)	
91	33450-B10-091	Red Hat 3scale API Management, Premium (4 Cores) - 1 Year	

92	33450-B10-092	Red Hat 3scale API Management, Premium (4 Cores) - 3 Years	
93	33450-B10-093	Red Hat 3scale API Management, Standard (4 Cores) - 1 Year	
94	33450-B10-094	Red Hat 3scale API Management, Standard (4 Cores) - 3 Years	
95	33450-B10-095	Red Hat 3scale API Management, Premium (16 Cores) - 1 Year	
96	33450-B10-096	Red Hat 3scale API Management, Premium (16 Cores) - 3 Years	
97	33450-B10-097	Red Hat 3scale API Management, Standard (16 Cores) - 1 Year	
98	33450-B10-098	Red Hat 3scale API Management, Standard (16 Cores) - 3 Years	
99	33450-B10-099	Red Hat OpenShift Container Platform, Premium (2 Cores or 4 vCPUs, for Windows) - 1 Year	
100	33450-B10-100	Red Hat OpenShift Container Platform, Premium (2 Cores or 4 vCPUs, for Windows) - 3 Years	
101	33450-B10-101	Red Hat OpenShift Container Platform (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 1 Year	
102	33450-B10-102	Red Hat OpenShift Container Platform (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 3 Years	
103	33450-B10-103	Red Hat OpenShift Container Platform (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 1 Year	
104	33450-B10-104	Red Hat OpenShift Container Platform (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 3 Years	
105	33450-B10-105	Red Hat OpenShift Container Platform Premium (2 Cores or 4 vCPUs) - 1 Year	
106	33450-B10-106	Red Hat OpenShift Container Platform Premium (2 Cores or 4 vCPUs) - 3 Years	
107	33450-B10-107	Red Hat OpenShift Container Platform Standard (2 Cores or 4 vCPUs) - 1 Year	
108	33450-B10-108	Red Hat OpenShift Container Platform Standard (2 Cores or 4 vCPUs) - 3 Years	
109	33450-B10-109	Red Hat Ansible Automation, Standard (100 Managed Nodes) - 1 Year	
110	33450-B10-110	Red Hat Ansible Automation, Standard (100 Managed Nodes) - 3 Years	
111	33450-B10-111	Red Hat Ansible Automation, Premium (100 Managed Nodes) - 1 Year	
112	33450-B10-112	Red Hat Ansible Automation, Premium (100 Managed Nodes) - 3 Years	

113	33450-B10-113	Red Hat OpenStack Platform, Premium (2-sockets) - 1 Year	
114	33450-B10-114	Red Hat OpenStack Platform, Premium (2-sockets) - 3 Years	
115	33450-B10-115	Red Hat OpenStack Platform, Standard (2-sockets) - 1 Year	
116	33450-B10-116	Red Hat OpenStack Platform, Standard (2-sockets) - 3 Years	
117	33450-B10-117	Red Hat OpenStack Platform (without guest OS), Premium (2-sockets) - 1 Year	
118	33450-B10-118	Red Hat OpenStack Platform (without guest OS), Premium (2-sockets) - 3 Years	
119	33450-B10-119	Red Hat OpenStack Platform (without guest OS), Standard (2-sockets) - 1 Year	
120	33450-B10-120	Red Hat OpenStack Platform (without guest OS), Standard (2-sockets) - 3 Years	
121	33450-B10-121	Red Hat OpenShift Kubernetes Engine, Premium (2 Cores or 4 vCPUs) - 1 Year	
122	33450-B10-122	Red Hat OpenShift Kubernetes Engine, Premium (2 Cores or 4 vCPUs) - 3 Years	
123	33450-B10-123	Red Hat OpenShift Kubernetes Engine, Standard (2 Cores or 4 vCPUs) - 1 Year	
124	33450-B10-124	Red Hat OpenShift Kubernetes Engine, Standard (2 Cores or 4 vCPUs) - 3 Years	
125	33450-B10-125	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 1 Year	
126	33450-B10-126	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 3 Years	
127	33450-B10-127	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 1 Year	
128	33450-B10-128	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 3 Years	
129	33450-B10-129	Consulting : Consulting Unit	
130	33450-B10-130	Training : Training Unit	
131	33450-B10-131	Red Hat Learning Subscription Standard	
132	33450-B10-132	Red Hat Enterprise Linux Automation with Ansible Classroom Training	
133	33450-B10-133	Red Hat System Administration I Classroom Training	
134	33450-B10-134	Red Hat JBoss Application Administration I Classroom Training	

| 135 | 33450-B10-135 | Red Hat OpenStack Administration I: Core Operations for Domain Operators Classroom Training | |
| 136 | 33450-B10-136 | Containers, Kubernetes, and Red Hat OpenShift Administration II Classroom Training | |

A1.5.11Category B11 – Information Kiosks

Parameter	Requirement(NEW)	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Type / Mounting	Wall Mount or Pedestal			
Construction Base	The Kiosk shall be wall mounted with permanent and screw less chassis or pedestal. The enclosure shall be of minimum 1.6mm think CRCA steel, polymer powder coated designed to work in harsh condition. The design shall be vandal resistant. Design must be sleek and attractive			
Display Type				
Type	LED HD Wide Screen Backlit Anti Glare Display			
Size	Capacitive Touch Screen with 21"(HD Resolution) with TCO 6 Certification.			
Touch Screen	APR/SAW Type with 3mm or higher anti glare & overlay tempered vandal resistant glass.			
System Details				

Processor	Intel Core i3 processor or Higher.			
Memory(RAM)	8GB, DDR4 expandable to 32 GB or higher			
Optical Device Drive	Provision to connect external CD/DVD ROM			
HDD/Storage	Integrated Dual port SATA Controller HDD 1 TB 7200 RPM or higher			
Operating System	UBUNTU 14.04 or higher			
Ethernet	Integrated Gigabit Ethernet Controller with IPv6 complaint.			
Other Ports	Ethernet 10/100 Mbps or higher , VGA/HDMI/Display Port out.			
Wireless	802.11 or higher			
USB Ports	2 x USB 2.0 , 1 x USB 3.0			
Cooling	Suitable 2 no.of fans to be provided inside the chasis.			
UPS	Inbuilt UPS 600 VA with 30 minutes backup on full load at 0-6 PF			

A1.5.12 Category B12 – High End Plotters & Scanners

Code	Item Description	Qty
33450-B12-SP001	A4 ADF 8ppm Portable Scanner	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Scanner type	A4, LTR ADF			
Scanning speed at 200dpi	8ppm / 16ipm - B/W, color or higher			
Optical Resolution	600 dpi or higher			
Media size	A4, LTR			
ADF capacity	10 sheets and above			
File format output	TIFF, JPEG, PDF etc			
Daily volume	100 sheets and above			
Interface	USB			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
Imaging features	Automatic brightness and contrast.			
OS Compliance	Windows & Linux Compliance by OEM			
Energy efficient	Energy star , BIS			

Code	Item Description	Qty
33450-B12-SP002	A4 Flatbed with ADF 20 PPM Scanner	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Scanner type	A4 Flatbed with ADF			
Scanning speed at 200dpi	20 ppm - BW / Color or higher			
Optical Resolution	600dpi or higher			
Media size	A4			
ADF capacity	50 sheets and above			
File format output	TIFF, JPEG, PDF etc			
Daily volume	1500sheets and above			
Interface	USB			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
Imaging features	Automatic brightness and contrast, auto image straightening(deskew)			
OS Compliance	Windows & Linux Compliance by OEM			
Certification	Energy star , BIS			

Code	Item Description	Qty
33450-B12-SP003	A4 ADF 30PPM Scanner	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Scanner type	ADF			
Scanning speed at 200dpi	30ppm / 60 ipm– B/W, color or higher			
Optical Resolution	600dpi or higher			
Document size	A4			
ADF capacity	ADF 50 sheets and above			
File format output	TIFF, JPEG, PDF etc			
Daily volume	2000 sheets or better			
Imaging features	Automatic brightness and contrast, auto image straightening(deskew)			
Interface	USB, Ethernet 10/100 Mbps			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
OS Compliance	Windows & Linux Compliance by OEM			
Certification	Energy star , BIS			

Code	Item Description	Qty
33450-B12-SP004	A4 Flatbed with ADF 40 PPM Scanner	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Scanner type	Flatbed ADF			
Scanning speed at 200dpi (A4)	40 ppm - BW / Color or higher			
Optical Resolution	600dpi or higher			
Document size	A4, Legal			
ADF capacity	ADF 60 sheets			
File format output	TIFF, JPEG, PDF etc			
Daily volume	3000 sheets or better			
Imaging features	Automatic brightness and contrast, auto image straightening (deskew)			
Interface	USB, Ethernet 10/100 Mbps			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
OS Compliance	Windows & Linux Compliance by OEM			
Certification	Energy star , BIS			

Code	Item Description	Qty
33450-B12-SP005	A4 ADF 60PPM Scanner	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Scanner type	ADF			
Scanning speed at 200dpi (A4)	60 ppm /120 ipm – B/W , color or higher			
Optical Resolution	600dpi or higher			
Document size	A4, Legal			
ADF capacity	ADF 80 sheets and above			
File format output	TIFF, JPEG, PDF etc			
Daily volume	6000 sheets and above			
Imaging features	Automatic brightness and contrast, auto image straightening(deskew)			
Interface	USB, Ethernet 10/100 Mbps			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
OS Compliance	Windows & Linux Compliance by OEM			
Certification	Energy star , BIS			

Code	Item Description	Qty
33450-B12-SP006	A4 ADF 60 PPM Scanner with CCD	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Scanner type	ADF			
Scanning Technology	CCD			
Scanning speed at 200dpi (A4)	60 ppm /120 ipm – B/W , color or higher			
Optical Resolution	600dpi or higher			
Document size	A4, Legal			
ADF capacity	ADF 60 sheets and above			
File format output	TIFF, JPEG, PDF etc			
Daily volume	6000 sheets and above			
Imaging features	Automatic brightness and contrast, auto image straightening(deskew)			
Interface	USB, Ethernet 10/100 Mbps			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
OS Compliance	Windows & Linux Compliance by OEM			
Certification	Energy star , BIS			

Code	Item Description	Qty
33450-B12-SP007	A4 ADF 70PPM Scanner	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Scanner type	ADF			
Scanning speed at 300dpi (A4)	70 ppm /140 ipm – B/W , color or higher			
Optical Resolution	600dpi or higher			
Document size	A4, Legal			
ADF capacity	ADF 100sheets and above			
File format output	TIFF, JPEG, PDF etc			
Daily volume	7000 sheets and above			
Imaging features	Automatic brightness and contrast, auto image straightening(deskew)			
Interface	USB, Ethernet 10/100 Mbps			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
OS Compliance	Windows & Linux Compliance by OEM			
Certification	Energy star , BIS			

Code	Item Description	Qty
33450-B12-SP008	A3 ADF 60 PPM Scanner with Network	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Scanner type	ADF			
Scanning speed at 300dpi (A4)	60ppm /120 ipm – B/W , color or higher			
Optical Resolution	600dpi or higher			
Document size	A3, A4, Legal			
ADF capacity	ADF 200 sheets and above			
File format output	TIFF, JPEG, PDF etc			
Daily volume	7000 sheets and above			
Imaging features	Automatic brightness and contrast, auto image straightening(deskew)			
Interface	USB, Ethernet 10/100 Mbps			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
OS Compliance	Windows & Linux Complince by OEM			
Certification	Energy star , BIS			

Code	Item Description	Qty
33450-B12-SP009	A3 Flatbed with ADF 70 PPM Scanner	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Scanner type	Flatbed with ADF			
Scanning speed at 200dpi (A4)	70 ppm / 140 ipm – B/W , color or higher			
Optical Resolution	600dpi or higher			
Document size	A3, A4, Legal			
ADF capacity	ADF 200 sheets and above			
File format output	TIFF, JPEG, PDF etc			
Daily volume	8000 sheets and above			
Imaging features	Automatic brightness and contrast, auto image straightening(deskew)			
Interface	USB, Ethernet 10/100 Mbps			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
OS Compliance	Windows & Linux Compliance by OEM			
Energy efficient	Energy star , BiS			

Code	Item Description	Qty
33450-B12-SP010	A3 ADF 120PPM Scanner	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Scanner type	ADF			
Scanning speed at 200dpi (A4)	120ppm /220 ipm – B/W , color or higher			
Optical Resolution	600dpi or higher			
Document size	A3,A4, Legal			
ADF capacity	ADF 300 sheets and above			
File format output	TIFF, JPEG, PDF etc			
Daily volume	40000 sheets and above			
Imaging features	Bar Code Reading, Automatic brightness and contrast, auto image straightening (deskew)			
Interface	USB, Ethernet 10/100 Mbps			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
OS Compliance	Windows & Linux Compliance by OEM			
Certification	Energy star , BIS			

Code	Item Description	Qty
33450-B12-SP011	A0 – 36 "LED Monochrome Plotter & Color Scanner	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Print type	Laser Monochrome printer			
Technology	Standard Fusing Technology			
Printer size	Max 36"			
Resolution	600 x 600 dpi or higher			
Printer Speed	3 A0/ minute.(6 /A1 sizes per minute)			
Paper handling	2 Automatic Rolls & manual sheet feed			
Power Consumption	Standby 88w, Printing 1.5kw			
Interface	Ethernet (1000Base-T), USB			
Scanner				
Resolution	600 x 600dpi or higher			
Scanning speed	14m/min B/w, 4m/min color scanning, 9m/min copying			
Supported file format	TIFF, PDF, JPEG			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
OS Compliance	Windows and Linux Compliance by OEM			
Certification	Energy star , BIS			

Code	Item Description	Qty
33450-B12-SP012	A1 24" inch Plotter (color)	1 No.

Parameter	Tender Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Technology	Inkjet			
Printer size	24"			
Ink type	All colors pigment inks			
Resolution	1200 dpi or higher			
Printer Speed (A1 Line Drawings B / W)	Min 50 sec/A1 size			
Printer Speed (A1 Color image)	Min 50 sec/A1 size			
Max.Printing width	24"			
Paper handling	Single top loading roll feed			
Interface	Ethernet (1000Base-T), USB			
Temperature &Voltage	Should work for Indian climate & Electrical environment			
OS Compliance	Windows & Linux Compliance by OEM			
Certification	Energy star , BIS			

Code	Item Description	Qty
33450-B12-SP013	A0 – 36 " Inkjet Plotter & Color Scanner	1 No.

Parameter	Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Technology	Inkjet			
Printer Size	Min 36"			
Print Resolution	1200 x 1200 dpi or better			
Printer Speed (A1 – Line Drawings B/W & Colour)	A1 size / 60 Sec or better			
Paper Handling	One Automotic Roll or better			
Interface	Ethernet 10/100Mbps, USB			
Network	Ethernet 10/100Mbps			
Scan Resolution	600dpi or better			
Scanning Speed (200 dpi)	Min 3 inch per second - Color / Min 10 inch per second - Greyscale			
Support File Format	TIFF, PDF, JPEG, etc.			
Temperature & Voltage	Should work for Indian climate & Electrical environment			
Operating System Compatibility	Windows & Linux Compliance by OEM			
Certification	Energy star, BIS			

Code	Item Description	Qty
33450-B12-SP014	A4 Flatbed Scanner	1 No.

Parameter	Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Parameter	Specifications			
Scanner Type	Flatbed			
Scanning Speed at 300 dpi	12 sec/page or higher			
Optical Resolution	600 dpi or higher			
Scan Area	Flatbed - A4			
Media Size	A4			
File format output	TIFF, JPEG, PDF			
Interface	USB			
Imaging Features	Auto Cropping, Automatic Brightness and Contrast, Auto Image Strengthening (Deskew)			
Temperature & Voltage	Should work for Indian Climate & Electrical Environment			
Operating System Compatibility	Windows & Linux Compliance by OEM			
Certification	Energy star, BIS			

A1.5.13 Category B13 – IP Camera

Default Parameters of IP Camera for all line items

Image sensor	1/2.7" to 1/2.9" Progressive Scan CMOS or better	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Day and Night	Automatic/manual/scheduled (Senses the level of ambient light to determine when to switch day/night mode)			
Electronic Shutter	1/25-1/10000s or better			
On Screen Display	Should support OSD of Camera Name, Time, Date,Location, etc			
Video Compression	H.264, H. 265 or better			
Viewing/configuration	Support IE Browser/VMS/NVR and IOS/Android/windows			
Interface	Minimum 1 RJ45 Port			
POE	Internal 802.3af POE Support			
ONVIF compliance	ONVIF version 2.4 or better and ONVIF Profile S compliant			
Operating Temperature	-10 to 60°C, or better			
Surge Protection	Minimum 2KVA surge protection should be included with each camera			

Mounting	No Cable and connectors should be visible outside. Camera should be mounted with suitable Mounting box (IP66 Rated) to hide the cables and connectors or Cable should directly terminate inside the Camera.			
General Certification	CE, FCC, UL/cUL, ROHS, BIS, NABL's or any otherGovernment authorized Testing Lab Certification			

Code	Item Description	Qty
33450-B13-001	2 MP Fixed Lens Dome Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Lens	3.6 mm Fixed Lens or better			
IR Range	Min 20 Mtr or better			
WDR	D-WDR or better			
Min. Illumination	Color mode: F1.2 @ 0.05 lux and B&W mode: F1.2@ 0.01 lux or better			
Streaming Support	Dual Streaming			
Intelligent Video	Atleast Motion Detection			

Resolutions and frame rates	Main Stream : 25/30 fps at 1920x1080			
Protocol Support	IPv4, IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Audio Function	Camera Should support 2 way audio and should have audio in/out interfaces, Internal MIC should be available.			
Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free SD card management			

Code	Item Description	Qty
33450-B13-002	2 MP Fixed Lens Bullet Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Lens	3.6 mm Fixed Lens or better			
IR Range	Min 20 Mtr or better			
WDR	D-WDR or better			
Min. Illumination	Color mode: F1.2 @ 0.05 lux and B&W mode: F1.2@ 0.01 lux or better			
Streaming Support	Dual Streaming			
Intelligent Video	Atleast Motion Detection			

Resolutions and frame rates	Main Stream : 25/30 fps at 1920x1080			
Protocol Support	IPv4, IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			

Code	Item Description	Qty
33450-B13-003	5 MP Fixed Lens Bullet Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Lens	Should support 3.6 mm and 4 mm and 6mm Fixed Lens (Selection of size is based on customer preference)			
IR Range	Min 30 Mtr or better			
WDR	D-WDR or better			
Min. Illumination	Color mode: F1.2 @ 0.05 lux and B&W mode: F1.2@ 0.01 lux or better			
Streaming Support	Dual Streaming			
Intelligent Video	Atleast Motion Detection			
Resolutions and frame rates	Main Stream : 25/30 fps at 1920x1080			
Protocol Support	IPv4, IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			

Code	Item Description	Qty
33450-B13-004	2 MP MVF Dome Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Lens	Min 2.7~12 mm Motorized Varifocal Lens or better, DC-iris or P-iris, Auto Focus			
IR Range	Min 30 Mtr or better			
WDR	D-WDR or better			
Min. Illumination	Color mode: F1.2 @ 0.05 lux and B&W mode: F1.2@ 0.01 lux or better			
Streaming Support	Triple Streaming			
Intelligent Video	Motion Detection, Camera Tampering detection, Line crossing			
Resolutions and frame rates	Min : 25/30 fps at 1920x1080, 25/30 fps at 1280x960, 25/30 fps at 1280x720 Min : 25/30 fps at 704x576, 25/30 fps at 352x288			
Protocol Support	IPv4, IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Corridor Mode	Support 9:16 aspect ratio for narrow corridors, hallways or aisles.			
Privacy Mask	Support Minimum 2 areas / Zones			

Image setting	Image Defog, ROI, BLC, Flicker Control, White Balance, 3DNR, Saturation, Brightness, Contrast, Sharpness			
Audio Function	Camera Should support 2 way audio and should have audio in/out interfaces, Internal MIC should be available.			
Alarm interface	Camera Should support 1ch alarm in and 1ch alarm out			
Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free SD card management			
HLC	Required			

Code	Item Description	Qty
33450-B13-005	2 MP MVF Bullet Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Lens	Min 2.7~12mm Motorized Varifocal Lens or better, DC-iris or P-iris, Auto Focus			
IR Range	Min 50 Mtr or better			
WDR	120 db or better			
Min. Illumination	Color mode: F1.2 @ 0.02 lux and B&W mode: F1.2@ 0.01 lux or better			

Streaming Support	Triple Streaming			
Intelligent Video	Motion Detection, Camera Tampering detection, Line crossing			
Resolutions and frame rates	Min : 25/30 fps at 1920x1080, 25/30 fps at 1280x960, 25/30 fps at 1280x720 Min : 25/30 fps at 704x576, 25/30 fps at 352x288			
Protocol Support	IPv4, IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Corridor Mode	Support 9:16 aspect ratio for narrow corridors, hallways or aisles.			
Privacy Mask	Support Minimum 2 areas / Zones			
Image setting	Image Defog, ROI, BLC, Flicker Control, White Balance, 3DNR, Saturation, Brightness, Contrast, Sharpness			
Sun shield	Should have Sunshield			
Audio Function	Camera Should support 2 way audio and should have audio in/out interfaces			
Alarm interface	Camera Should support 1ch alarm in and 1ch alarm out			
Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free SD card management			
HLC	Required			

Code	Item Description	Qty
33450-B13-006	5 MP MVF Bullet Camera with Analytics	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Lens	Min 2.7~12 mm Motorized Varifocal Lens or better, DC-iris or P-iris,Auto Focus			
IR Range	Min 50 Mtr or better			
WDR	120 db or better			
Min. Illumination	Color mode: F1.2 @ 0.02 lux and B&W mode: F1.2@ 0.01 lux or better			
Streaming Support	Triple Streaming			
Intelligent Video	Motion Detection, Camera Tampering detection, Line crossing			
Behaviour Analytics	Object/People counting, Missing object Detection, Loitering, Face detection, Perimeter Intrusion Detection, Crowd detection			
Resolutions and frame rates	Min: 25/30 fps at 1920x1080, 25/30 fps at 1280x960, 25/30 fps at 1280x720 Min : 25/30 fps at 704x576, 25/30 fps at 352x288			

Protocol Support	IPv4, IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Corridor Mode	Support 9:16 aspect ratio for narrow corridors, hallways or aisles.			
Privacy Mask	Support Minimum 2 areas / Zones			
Image setting	Image Defog, ROI, BLC, Flicker Control, White Balance, 3DNR, Saturation, Brightness, Contrast, Sharpness			
Sun shield	Should have Sunshield			
Audio Function	Camera Should support 2 way audio and should have audio in/out interfaces			
Alarm interface	Camera Should support 1ch alarm in and 1ch alarm out			
Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free SD card management			
HLC	Required			

Code	Item Description	Qty
33450-B13-007	5 MP Box Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Lens	C/CS Mount Detachable type lens with 5~50 mm, DC-iris			
IR Range	Internal or external IR 50 Mtr or better			
WDR	120 db or better			
Min. Illumination	Color mode: F1.2 @ 0.02 lux and B&W mode: F1.2@ 0.01 lux or better			
Streaming Support	Triple Streaming			
Intelligent Video	Motion Detection, Camera Tampering detection, Line crossing			
Resolutions and frame rates	Min : 30 fps at 2592x1944, 25/30 fps at 2592X1520, 25/30 fps at 2560x1440, 50/60 fps at 1920x1080, 50/60 fps at 1280x960, 50/60 fps at 1280x720			
Protocol Support	IPv4, IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Corridor Mode	Support 9:16 aspect ratio for narrow corridors, hallways or aisles.			
Privacy Mask	Support Minimum 2 areas / Zones			
Image setting	Image Defog, ROI, BLC, Flicker Control, White Balance, 3DNR, Saturation, Brightness, Contrast, Sharpness			

Sun shield	Should have Sunshield			
Audio Function	Camera Should support 2 way audio and should have audio in/out interfaces			
Alarm interface	Camera Should support 1ch alarm in and 1ch alarm out			
Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free SD card management			
HLC	Required			

Code	Item Description	Qty
33450-B13-008	5 MP MVF Dome Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Lens	Min 2.7~12 mm Motorized Varifocal Lens or better, DC-iris or P-iris, Auto Focus			
IR Range	Min 30 Mtr or better			
WDR	120 db or better			
Min. Illumination	Color mode: F1.2 @ 0.02 lux and B&W mode: F1.2@ 0.01 lux or better			
Streaming	Triple Streaming			

Support				
Intelligent Video	Motion Detection, Camera Tampering detection, Line crossing			
Resolutions and frame rates	Min: 30 fps at 2592x1944, 25/30 fps at 2592X1520, 25/30 fps at 2560x1440, 25/30 fps at 1920x1080, 25/30 fps at 1280x960, 25/30 fps at 1280x720 Min : 25/30 fps at 480x240			
Protocol Support	IPv4, IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Corridor Mode	Support 9:16 aspect ratio for narrow corridors, hallways or aisles.			
Privacy Mask	Support Minimum 2 areas / Zones			
Image setting	Image Defog, ROI, BLC, Flicker Control, White Balance, 3DNR, Saturation, Brightness, Contrast, Sharpness, Image enhancement, lens correction, Auto Exposure control, Automatic gain control, Hue, automatic noise reduction, Watermark			
Audio Function	Camera Should support 2 way audio and should have audio in/out interfaces, Internal MIC should be available.			
Alarm interface	Camera Should support 1ch alarm in and 1ch alarm out			
Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free SD card management			
HLC	Required			
Behaviour Analytics	Object/People counting, Missing object Detection, Face detection, Perimeter Intrusion Detection			

Code	Item Description	Qty
33450-B13-009	5 MP MVF Bullet Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Lens	Min 2.7~12 mm Motorized Varifocal Lens or better, DC-iris or P-iris, Auto Focus			
IR Range	Min 50 Mtr or better			
WDR	120 db or better			
Min. Illumination	Color mode: F1.2 @ 0.02 lux and B&W mode: F1.2@ 0.01 lux or better			
Streaming Support	Triple Streaming			
Intelligent Video	Motion Detection, Camera Tampering detection, Line crossing			
Resolutions and frame rates	Min: 30 fps at 2592x1944, 25/30 fps at 2592X1520, 25/30 fps at 2560x1440, 25/30 fps at 1920x1080, 25/30 fps at 1280x960, 25/30 fps at 1280x720, Min : 25/30 fps at 480x240			
Protocol Support	IPv4, IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Corridor Mode	Support 9:16 aspect ratio for narrow corridors, hallways or aisles.			
Privacy Mask	Support Minimum 2 areas / Zones			

Image setting	Image Defog, ROI, BLC, Flicker Control, White Balance, 3DNR,Saturation, Brightness, Contrast, Sharpness, Image enhancement, lens correction, Auto Exposure control, Automatic gain control, Hue, automatic noise reduction, Watermark			
Sun shield	Should have Sunshield			
Audio Function	Camera Should support 2 way audio and should have audio in/out interfaces			
Alarm interface	Camera Should support 1ch alarm in and 1ch alarm out			
Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free SD card management			
HLC	Required			
Behaviour analytics	Object/People counting, Missing object Detection, Face detection, Perimeter Intrusion Detection			

Code	Item Description	Qty
33450-B13-010	8 MP MVF Dome Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Lens	Min 2.7~12 mm Motorized Varifocal Lens or better, DC-iris or P-iris, Auto Focus			
IR Range	Min 30 Mtr or better			
WDR	120 db or better			

Min. Illumination	Color mode: F1.2 @ 0.02 lux and B&W mode: F1.2@ 0.01 lux or better			
Streaming Support	Triple Streaming			
Intelligent Video	Motion Detection, Camera Tampering detection, Line crossing			
Resolutions and frame rates	Min: 25/30 fps at 3840 × 2160, 25/30 fps at 2592x1944, 25/30 fps at 2592X1520, 25/30 fps at 2560x1440, 25/30 fps at 1920x1080, 25/30 fps at 1280x960, 25/30 fps at 1280x720 Min : 25/30 fps at 480x240			
Protocol Support	IPv4, IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Corridor Mode	Support 9:16 aspect ratio for narrow corridors, hallways or aisles.			
Privacy Mask	Support Minimum 2 areas / Zones			
Image setting	Image Defog, ROI, BLC, Flicker Control, White Balance, 3DNR, Saturation, Brightness, Contrast, Sharpness, Image enhancement, lens correction, Auto Exposure control, Automatic gain control, Hue, automatic noise reduction, Watermark			
Audio Function	Camera Should support 2 way audio and should have audio in/out interfaces			
Alarm interface	Camera Should support 1ch alarm in and 1ch alarm out			
Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free SD card management			
HLC	Required			

| Behaviour Analytics | Object/People counting, Missing object Detection, Face detection, Perimeter Intrusion Detection | | | |

Code	Item Description	Qty
33450-B13-011	8 MP MVF Bullet Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Lens	Min 2.7~12 mm Motorized Varifocal Lens or better, DC-iris or P-iris, Auto Focus			
IR Range	Min 50 Mtr or better			
WDR	120 db or better			
Min. Illumination	Color mode: F1.2 @ 0.02 lux and B&W mode: F1.2@ 0.01 lux or better			
Streaming Support	Triple Streaming			
Intelligent Video	Motion Detection, Camera Tampering detection, Line crossing			
Resolutions and frame rates	Min: 30 fps at 3840 × 2160, 25/30 fps at 2560x1440, 25/30 fps at 1920x1080, 25/30 fps at 1280x960, 25/30 fps at 1280x720, Min, 25/30 fps at 480x240			
Protocol Support	IPv4, IPv6, HTTP, HTTPS, FTP, SMTP, UPnP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Corridor Mode	Support 9:16 aspect ratio for narrow corridors, hallways or aisles.			
Privacy Mask	Support Minimum 2 areas / Zones			

Image setting	Image Defog, ROI, BLC, Flicker Control, White Balance, 3DNR, Saturation, Brightness, Contrast, Sharpness, Image enhancement, lens correction, Auto Exposure control, Automatic gain control, Hue, automatic noise reduction, Watermark			
Sun shield	Should have Sunshield			
Audio Function	Camera Should support 2 way audio and should have audio in/out interfaces			
Alarm interface	Camera Should support 1ch alarm in and 1ch alarm out			
Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free SD card management			
Operating Temperature	-10 to 60 °C, or better			
HLC	Required			
Behaviour Analytics	Object/People counting, Missing object Detection, Face detection, Perimeter Intrusion Detection			

Code	Item Description	Qty
33450-B13-012	2 MP 20x PTZ Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Zoom	20x Optical Zoom and 12x Digital Zoom or better			
Lens	Focal Length Min 5.2 to 104 mm or higher, Auto Focus, Remote optical zoom, Support Manual focus and IRIS Control			
Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: 0° ~ 90°, auto flip 180°			
Manual Control Speed	Pan: 0.1° ~200° /s; Tilt: 0.1° ~200° /s or better			
Preset Speed	Pan: 240° /s; Tilt: 240° /s or better			
Presets	Minimum 250 Preset Points			
IR Range	Min 120 Mtr or better			
WDR	120 db or better			
HLC	Required			
Min. Illumination	Color mode: F1.2 @ 0.002 lux and B&W mode: F1.2@ 0.001 lux or better			
Streaming Support	Individually configurable 3 video streams (H.264/H.265), Unicast/ Multicast			
Resolutions and frame rates	Min: 25/30 fps at 1920x1080, 25/30 fps at 1280x960, 25/30 fps at 1280x720 Min : 25/30 fps at 704x576, 25/30 fps at 352x288			

Protocol Support	Ipv4, Ipv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UpnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Intelligent Video	Motion Detection, Camera Tampering detection, Line crossing			
Privacy Mask	Support Minimum 24 areas / Zones, Support Dynamic Privacy Mask			
Image setting	Image Defog, ROI, BLC, Flicker Control, White Balance, 3DNR, Image enhancement, lens correction, Auto Exposure control, Automatic gain control, Hue, automatic noise reduction, Watermark			
Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free disk management			
Power	Internal PoE /PoE+(802.3 af/at) and AC 24V/ DC12V/ 100- 230VAC			
Housing	Full Metal housing with Mounting bracket included for Wall/Pole Mount			

Code	Item Description	Qty
33450-B13-013	2 MP 30x Auto Tracking PTZ Camera	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Zoom	25x Optical Zoom and 12x Digital Zoom or better			
Lens	Focal Length Min 4.7 to 150 mm or higher, Auto Focus, Remote optical zoom, Support Manual focus and IRIS Control			
Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: 0° ~ 90°, auto flip 180°			
Manual Control Speed	Pan: 0.1° ~200° /s; Tilt: 0.1° ~200° /s or better			
Preset Speed	Pan: 240° /s; Tilt: 240° /s or better			
Presets	Minimum 250 Preset Points			
IR Range	Min 180 Mtr or better			
WDR	Real/True WDR 120 db or better			
HLC	Required			
Min. Illumination	Color mode: F1.2 @ 0.002 lux and B&W mode: F1.2@ 0.001 lux or better			
Streaming Support	Individually configurable 3 video streams (H.264/H.265), Unicast/ Multicast			

Resolutions and frame rates	Min: 25/30 fps at 1920x1080, 25/30 fps at 1280x960, 25/30 fps at 1280x720 Min : 25/30 fps at 704x576, 25/30 fps at 352x288			
Protocol Support	Ipv4, IPv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UpnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Intelligent Video	Motion Detection, Camera Tampering detection, Line crossing			
Behaviour Analytics	Missing object Detection, Face detection, Perimeter Intrusion Detection			
Auto Tracking	Support Auto Tracking, activate the alarm with continuous tracking of an object			
image stabilization	should support electronic image stabilization			
Privacy Mask	Support Minimum 24 areas / Zones, Support Dynamic Privacy Mask			
Image setting	Image Defog, ROI, BLC, Flicker Control, White Balance, 3DNR, Image enhancement, lens correction, Auto Exposure control, Automatic gain control, Hue, automatic noise reduction, Watermark			
Audio Function	Camera Should support 2 way audio and should have audio in/out interfaces			

Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free disk management			
Edge Storage Auto Backup	Camera should record automatically when NVR not reachable and support automatic Synchronization of backup recording form SD Card to NVR when connection resume			
Alarm interface	Camera Should support 1ch alarm in and 1ch alarm out			
Housing	Full Metal housing with Mounting bracket included for Wall/Pole Mount			
Time and Date	When camera reboots or powered ON after long time, the time and date of camera should remain same as per last configured without any update or synchronization required using NVR or internet			

Code	Item Description	Qty
33450-B13-014	5 MP 30x PTZ Camera	1 no

Parameters	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Zoom	30x Optical Zoom and 12x Digital Zoom or better			
Lens	Focal Length Min 4.7 to 141 mm or higher, Auto Focus, Remote optical zoom, Support Manual focus and IRIS Control			
Pan/Tilt Range	Pan: 200° /s; Tilt: 200° /s or better			

Manual Control Speed	Pan: 0.1° ~200° /s; Tilt: 0.1° ~200° /s or better			
Preset Speed	Pan: 200° /s; Tilt: 200° /s or better			
Presets	Minimum 250 Preset Points			
IR Range	Min 200 Mtr or better			
WDR	Real/True WDR 120 db or better			
HLC	Required			
Min. Illumination	Color mode: F1.2 @ 0.002 lux and B&W mode: F1.2@ 0.001 lux or better			
Streaming Support	Individually configurable 3 video streams (H.264/H.265), Unicast/ Multicast			
Resolutions and frame rates	Min: 18 fps at 2592x1944, 25 fps at 2592X1520, 25 fps at 2560x1440, 25/30 fps 25/30 fps at 1920x1080, 25/30 fps at 1280x960, 25/30 fps at 1280x720 Min : 25/30 fps at 704x576, 25/30 fps at 352x288			
Protocol Support	Ipv4, Ipv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP			
Intelligent Video	Motion Detection, Camera Tampering detection, Line crossing			
Behaviour Analytics	Missing object Detection, Face detection, Perimeter Intrusion Detection			
image stabilization	should support electronic image stabilization			
Privacy Mask	Support Minimum 24 areas / Zones, Support Dynamic Privacy Mask			

Image setting	Image Defog, ROI, BLC, Flicker Control, White Balance, 3DNR, Image enhancement, lens correction, Auto Exposure control, Automatic gain control, Hue, automatic noise reduction, Watermark			
Audio Function	Camera Should support 2 way audio and should have audio in/out interfaces			
Internal Edge Storage	Camera should support Micro SD/SDHC/SDXC memory card for edge recording and support up to 128GB Capacity, Schedule and Event Recording, Support pre-post alarm buffer recording, configurable free disk management			
Edge Storage Auto Backup	Camera should record automatically when NVR not reachable and support automatic Synchronization of backup recording form SD Card to NVR when connection resume			
Alarm interface	Camera Should support 1ch alarm in and 1ch alarm out			
Power	Internal PoE /PoE+(802.3 af/at) Or AC 24V/ DC12V/ 100- 230VAC			
Housing	Full Metal housing with Mounting bracket included for Wall/Pole Mount			
Integration tools	SDK, CGI, API or other integration related files to be provided			
Time and Date	When camera reboots or powered ON after long time, the time and date of camera should remain same as per last configured without any update or synchronization required using NVR or internet			

Tender Ref: ELCOT/Proc/OT/33450/RC Tender -Group B/2021-22

Code	Item Description	Qty
33450-B13-015	Network Video Recorder 8 Channels 1 HDD	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Channels	8 Channels or better			
Storage	1 SATA hard drives support up to 6 TB			
Bandwidth	Should support 40 mbps or better Bandwidth			
Resolution	Support 8 Channel each up to 5 MP Resolution			
Video compression	H.264, H. 265 or better			
Interface	1# RJ45 Port, 1# VGA and 1# HDMI, HDMI: 1920×1080, 1280×1024, 1280×720 VGA: 1920×1080, 1280×1024, 1440x900, 1280×72 1 Channel Audio Output, 4 channel Alarm in and 1 channel Alarm out or better, 2 nos. of USB port			
OSD	Camera title, Time, Motion detection, Recording			
Record Interval	User customizable Interval, Pre-record: 1~60 sec, Post-record: 10~120 sec			
Record Mode	Manual, Schedule (Regular/ Continuous), Motion Detection, Line Crossing, Perimeter Intrusion			
Monitoring and Playback	Should support 8 Channels streaming in Single screen, 4 Channels 1080P synchronous Playback			
Search Mode	Time /Date, Motion detection, record type, record time, Exact Search, etc			

Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Full Screen			
ONVIF compliance	ONVIF version 2.4 or better and ONVIF Profile S compliant			
Backup file format	Should be viewable in VLC and Windows Media Player or equivalent			
Backup Mode	External Hard disk, Network storage, Memory Stick (Not less than 64 GB). Should be able to edit and crop the video file to backup device			
Operating Temperature	0 to 55°C, or better			
Power Supply	Internal/External Power supply			
Certification	CE, FCC, UL, ROHS, NABL's or any otherGovernment authorized Testing Lab Certification			
Mounting	NVR should be Rack mountable with suitable rack mounting bracket to be provided			

Code	Item Description	Qty
33450-B13-016	Network Video Recorder 16 Channels 2 HDD	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Channels	16 Channels or better			
Storage	2 SATA hard drives each support up to 6 TB			
Bandwidth	Should support 120 mbps or better Bandwidth			
Resolution	Support 4K streaming, Support 16 Channel each up to (3840*2160) Resolution			
Video compression	H.264, H. 265 or better			
Interface	1# RJ45 Port, 1# VGA and 1# 4K HDMI, HDMI: 3840x 2160, 2560x1600, 1920×1080, 1280×1024, 1280×720 VGA: 1920×1080, 1280×1024, 1440x900, 1280×72 Should have audio in and out interfaces, 1 channel Alarm out or better, 2 nos. of USB port			
Edge Storage Function	NVR should accept Automatic Synchronization of backup recording form SD Card to NVR			
Intelligent Video	NVR Should support Camera Tampering Detection, Line Crossing and Perimeter Intrusion Detection			
Audio	Support Audio Recording, Support 2 way audio			
OSD	Camera title, Time, Motion detection, Recording			

Record Interval	User customizable Interval, Pre-record: 1~60 sec, Post-record: 10~120 sec			
Record Mode	Manual, Schedule (Regular/ Continuous), Motion Detection, Line Crossing, Perimeter Intrusion			
Monitoring and Playback	Should support 16 Channels streaming in Single screen, 8 Channels 1080 P synchronous Playback			
Search Mode	Time /Date, Motion detection, video analytics, record type, record time, Exact Search, etc			
Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Full Screen			
Encryption	Should support Encrypted recording from IP Camera to NVR			
ONVIF compliance	ONVIF version 2.4 or better and ONVIF Profile S compliant			
High availability	NVR Should support N+1 High availability for Hardware Backup			
Backup file format	Should be viewable in VLC and Windows Media Player or equivalent			
Backup Mode	External Hard disk, Network storage, Memory Stick (Not less than 64 GB). Should be able to edit and crop the video file to backup device			
Operating Temperature	0 to 55 °C, or better			
Power Supply	Internal Power supply			
Certification	CE, FCC, UL, ROHS, NABL's or any otherGovernment authorized Testing Lab Certification			
Mounting	NVR should be Rack mountable with suitable rack mounting bracket to be provided			

Code	Item Description	Qty
33450-B13-017	Network Video Recorder 32 Channels 4 HDD	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Channels	32 Channels or better			
Storage	4 SATA hard drives each support up to 8 TB			
Raid	Should support Raid 0,1,5,6,10			
Bandwidth	Should support 200 mbps or better Bandwidth			
Resolution	Support 4K streaming, Support 32 Channel each up to (3840*2160) Resolution			
Video compression	H.264, H. 265 or better			
Interface	2# of Gigabit port with load balancing and failover, 1# VGA and 2# 4K HDMI, HDMI: 3840x 2160, 2560x1600, 1920×1080, 1280×1024, 1280×720 VGA: 1920×1080, 1280×1024, 1440x900, 1280×72 Should have audio in and out interfaces, 1# RS-485, 1# RS-232, 16 channel Alarm in and 4 channel Alarm out or better, 3 nos. of USB port			

Edge Storage Function	NVR should accept Automatic Synchronization of backup recording form SD Card to NVR			
Intelligent Video	NVR Should support Camera Tampering Detection, Line Crossing and Perimeter Intrusion Detection			
Audio	Support Audio Recording, Support 2 way audio			
OSD	Camera title, Time, Motion detection, Recording			
Record Interval	User customizable Interval, Pre-record: 1~60 sec, Post-record: 10~600 sec			
Record Mode	Manual, Schedule (Regular/ Continuous), Motion Detection, Line Crossing, Perimeter Intrusion			
Monitoring and Playback	Should support 32 Channels streaming in Single screen, 16 Channels 1080P synchronous Playback			
Search Mode	Time /Date, Motion detection, video analytics, record type, record time, Exact Search, etc			
Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Full Screen			
Encryption	Should support Encrypted recording from IP Camera to NVR			
ONVIF compliance	ONVIF version 2.4 or better and ONVIF Profile S compliant			
High availability	NVR Should support N+1 High availability for Hardware Backup			
Backup file format	Should be viewable in VLC and Windows Media Player or equivalent			
Backup Mode	External Hard disk, Network storage, Memory Stick (Not less than 64 GB). Should be able to edit and crop the video file to backup device			
Operating	0 to 55 °C, or better			

Temperature				
Power Supply	Internal Power supply			
Certification	CE, FCC, UL, ROHS, NABL's or any otherGovernment authorized Testing Lab Certification			
Mounting	NVR should be Rack mountable with suitable rack mounting bracket to be provided			

Code	Item Description	Qty
33450-B13-018	Network Video Recorder 64 Channels 8 HDD	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Channels	64 Channels or better support			
Storage	8 SATA hard drives each support up to 8 TB			
Raid	Should support Raid 0,1,5,6,10			
Bandwidth	Should support 300 mbps or better Bandwidth			
Resolution	Support 4K streaming, Support 64 Channel each up to (3840*2160) Resolution			
Video compression	H.264, H.265 or better			

Interface	2# of Gigabit port with load balancing and failover,1# VGA and 2# 4K HDMI, HDMI: 3840x 2160, 2560x1600, 1920×1080, 1280×1024, 1280×720 VGA: 1920×1080, 1280×1024, 1440x900, 1280×72 Should have audio in and out interfaces, 1# RS-485, 1# RS-232, 16 channel Alarm in and 4 channel Alarm out or better, 3 nos. of USB port			
Edge Storage Function	NVR should accept Automatic Synchronization of backup recording form SD Card to NVR			
Intelligent Video	NVR Should support Camera Tampering Detection, Line Crossing, Object/People counting, Missing object Detection, Loitering, Face detection, Perimeter Intrusion Detection, Crowd detection			
Audio	Support Audio Recording, Support 2 way audio			
OSD	Camera title, Time, Motion detection, Recording			
Record Interval	User customizable Interval, Pre-record: 1~60 sec, Post-record: 10~600 sec			
Record Mode	Manual, Schedule (Regular/ Continuous), Motion Detection, Line Crossing, Perimeter Intrusion			
Monitoring and Playback	Should support 64 Channels streaming in Single screen, 32 Channels 1080P synchronous Playback			
Search Mode	Time /Date, Motion detection, video analytics, record type, record			

	time, Exact Search, etc			
Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Full Screen			
Encryption	Should support Encrypted recording from IP Camera to NVR			
ONVIF compliance	ONVIF version 2.4 or better and ONVIF Profile S compliant			
High availability	NVR Should support N+1 High availability for Hardware Backup			
Backup file format	Should be viewable in VLC and Windows Media Player or equivalent			
Backup Mode	External Hard disk, Network storage, Memory Stick (Not less than 64 GB). Should be able to edit and crop the video file to backup device			
Operating Temperature	0 to 55°C, or better			
Power Supply	Internal Power supply			
Certification	CE, FCC, UL, ROHS, NABL's or any otherGovernment authorized Testing Lab Certification			
Mounting	NVR should be Rack mountable with suitable rack mounting bracket to be provided			

Code	Item Description	Qty
33450-B13-019	Network Video Recorder 128 Channels 16 HDD	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Channels	128 Channels or better support			
Storage	16 SATA Hot swappable hard drives each support up to 8 TB			
Raid	Should support Raid 0,1,5,6,10			
Bandwidth	Should support 300 mbps or better Bandwidth			
Resolution	Support 4K streaming, Support 128 Channel each up to (3840*2160) Resolution			
Video compression	MJPEG,H.264, H.265 or better			
Interface	2# of Gigabit port with load balancing and failover,1# VGA and 2# 4K HDMI, HDMI: 3840x 2160, 2560x1600, 1920×1080, 1280×1024, 1280×720 VGA: 1920×1080, 1280×1024, 1440x900, 1280×72 Should have audio in and out interfaces, 1# RS-485, 1# RS-232, 16 channel Alarm in and 4 channel Alarm out or better, 3 nos. of USB port			
Edge Storage Function	NVR should accept Automatic Synchronization of backup recording form SD Card to NVR			

Intelligent Video	NVR Should support Camera Tampering Detection, Line Crossing, Object/People counting, Missing object Detection, Loitering, Face detection, Perimeter Intrusion Detection, Crowd detection			
Audio	Support Audio Recording, Support 2 way audio			
OSD	Camera title, Time, Motion detection, Recording			
Record Interval	User customizable Interval, Pre-record: 1~60 sec, Post-record: 10~600 sec			
Record Mode	Manual, Schedule (Regular/ Continuous), Motion Detection, Line Crossing, Perimeter Intrusion			
Monitoring and Playback	Should support 64 Channels streaming in Single screen, 32 Channels 1080P synchronous Playback			
Search Mode	Time /Date, Motion detection, video analytics, record type, record time, Exact Search, etc			
Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Full Screen			
Encryption	Should support Encrypted recording from IP Camera to NVR			
ONVIF compliance	ONVIF version 2.4 or better and ONVIF Profile S compliant			
High availability	NVR Should support N+1 High availability for Hardware Backup			
Backup Mode	External Hard disk, Network storage, Memory Stick (Not less than 64 GB). Should be able to edit and crop the video file to backup device			
Backup file format	Should be viewable in VLC and Windows Media Player or equivalent			
Operating	0 to 55°C, or better			

Temperature				
Power Supply	Internal Power supply			
Certification	CE, FCC, UL, ROHS, NABL's or any otherGovernment authorized Testing Lab Certification			
Mounting	NVR should be rack mountable with suitable rack mounting bracket to be provided			

Code	Item Description	Qty
33450-B13-020	Network Attached Storage 4 Bays - Tower Type	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Processor	Intel Celeron 1.6 GHz Quad-Core Processor or better			
Memory	4GB DDR4, Expandable up to 8 GB or higher			
Flash Memory	Min 512MB			
Drive Bays	4 hot swappable bays - LFF/SFF SATA HDD. Each drive should support minimum 14 TB capacity or higher			
Gigabit LAN Ports	Min 2 ports			
USB	Min 3 Ports			

Backup Management	Should support Remote server syncing with CIFS/SMB, FTP, Rsync, RTRR and backup versioning. Should support Encryption, compression, file filters and centralized management for backup restorations sync jobs. Should support one touch copy from external drives connected to NAS automatically			
File Sharing	Should support file sharing through email links and policy settings for conflicting file and file type filter. Virtualization-Should support to run multiple OS on the NAS,VM creation, VM backup and restoration Should support Containers station to support directly view, edit and store files of various types anytime on your NAS, including office documents, images and text files on the NAS.			
RAID Management	Should support RAID 10+hot spare,10, 6+hot spare, 6,5+spare,5,1, JBOD, Single Disk, Global hot spare for data redundancy and Online RAID capacity expansion, Online RAID level migration. Storage Pool-The supply of NAS should support SSD caching , iSSCI target, iSCSI LUN Snapshot/backup,			
AD And LDAP Authentication	Thin provisioned volume, Block level iSCSI LUN (iSCSI/CIFS). Domain Controller-The Supply of NAS Should support Windows AD and LDAP server/client authentication.			
E-SATA Port	Min 1 Port			
Form Factor	Tower			
Certification	CE, UL, FCC, ROHS			

Code	Item Description	Qty
33450-B13-021	Network Attached Storage Bays-16 with dual controller	1 no

Parameter	Proposed Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Form Factor	Rack mountable			
Processor	Intel Xeon 6 Core @ 1.1 GHz Processor or better, per controller			
Memory	8 GB per controller, scalable up to 16GB or higher			
Drive Bays	16 hot swappable bays or higher- Each drive should support 12 TB or more capacity or higher Supports SAS, NLSAS and SATA Hard drives simultaneously.			
Operating System	Linux OS			
Storage Expansion	The storage should able to expand to 112 drives in single system or higher			
Raid Management	System should support Hardware RAID levels 0,1,10,5,6,50,60, Hot Spare Support online Raid level migration/reconfiguration, online volume copy			
High availability	High availability design with dual hot swappable controller cards 3# hot swappable redundant Power supply unit or higher 2# redundant hot swappable Fans or higher			
Virtualization features	Should support VMware, Citrix, Hyper-V and Data Core Features			

Interface	2# 10G SFP+ & 4# 1G Base T per controller or higher Support Port Trunking, load balancing, fail over, 802.3ad, DHCP server			
Protocols	Protocol support for TCP/IP, SMB/CIFS, NFS, SNMP v1/v2c/v3, FTP, HTTP, HTTPS, Telnet, SSH, AFP, WebDAV. Support OS for Windows, Linux and Mac.			
User accounts	Windows AD Authentication, Network Information Service, Batch creation of users/group, user quota management, share level and file level security with access control list setting. Up to 100K domain account support, up to 1K concurrent sessions support			
Data Protection	Battery Backup Unit Support for power shortage NVRAM Check and log errors, Hard Disk Power input Control Write-hole Table Protection for video footage and Read/write check			
Device Management	Web client support: IE 7 or above, Mozilla Firefox, safari, Google Chrome. Buzzer, LED, Mute Button, Power Button			
File system and backup	Apple Time Machine support Backup Server, Share Disk Clone, Remote Replication, Online Recovery, File Backup/Restore			
Application Mode	Surveillance Buffer Management support and benefit for more cameras supported, Less Frame Drop and Sequential Design Recording			
Data Protection Features	Faultless Rebuild to reduces Raid rebuilding time, online LUN clone to have multiple data copies			

Management Operation and software	Support multiple paths, zero downtime during the firmware update Automatic error log backup if USB plug in front panel for trouble shooting Supports SNMP/email notification			
Power Management	Power Saving Mode and Schedule Power Off 80 plus certified power supply Power requirement of AC 100V~240V in full range			
Certifications	CE, UL, FCC, ROHS			

Code	Item Description	Qty
33450-B13-022	Video Management Software	1 no

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Recordings			
Should record H265, H.264, MPEG4 or MJPEG in at minimum 5 fps to 30 FPS at minimum Full HD (1080p), 4K resolution.			
Supports RTP over UDP, RTP over TCP and http streaming			
Should support multiple brand IP cameras and encoders.			
Should support dual streaming and recording at min 2 MP and Max 8 MP resolutions			
Option to do recordings on NAS, iSCSi, DAS, local or network drive. Defining different drive for each individual camera.			

Should have ability to record audio along with video in same recording file.			
Option to define multiple recording paths			
Pre-buffer and Post buffer recordings up to 10 minutes.			
Calculate storage size based on number of cameras, days and drives available in the system			
Option to record at min 15 FPS and max 30 FPS on Motion			
Export the desired portion of video in mp4, avi and asf formats in DVD/USB or any external device. Viewing of this recording must be playable on authorized player which shall be provided by software manufacturer or in generic media player on OS Windows, Linux/Unix or Apple Mac.			
Export of recording is possible in client software and remote PC with proper authentication.			
Option for Window-Pop up, Email and sound alarm on video loss during recording			
Storage and Bandwidth calculation: Recording size estimation for each hard disk attached to the server. Option to check disk size of individual camera.			
Image Enhancement on recorded videos. The image enhancement should be able enhance videos of fog, rain and low light conditions.			
The option of email and Video Pop up on Low disk space event should be available. The system should alert user on low disk space event.			
Automatic archiving after set number of days and automatic recording deletion after disk full.			
Encryption (56 to 256 bit) of recordings while export for safe evidence			
Adaptive Streaming. Option to switch stream to lower to higher or vice-versa based on full screen			
Live, Playback & PTZ			

Live View possible for minimum 64 cameras simultaneously on 1 screen or multiple monitors using software video wall			
Configurable Matrix views with size and number of cameras. Pre-defined views from full screen, 1x1 to 8x8			
View sequencing with user driven time interval			
Dual Streaming and Automatic Switching from Low to High Quality on Full screen mode.			
Option to change Live View directly from cameras or from VMS server using RTSP and HTTP options should be available			
It should support live view and Playback by minimum 10 clients- Both local and remote			
It should support event based playback.			
Ability to search based on Date/Time/Camera, Name, ID and Location for more than one camera simultaneously.			
Customized camera views based on :			
User input number of cameras.			
User chosen shape and size			
Digital Zoom			
Both complete live picture and Zoomed picture should be visible simultaneously while zooming.			
Should be available On Live and Playback Videos.			
Zoom should be available on snapshots too.			
PTZ			
PTZ option should be operable through mouse and joystick			
PTZ joystick options should be available			

On screen PTZ control with Click and Zoom facility should be available			
PTZ presets and tours setting should be available			
Software should allow creation of multiple camera sequences. It should be possible to set the dwell time for the cameras within the sequence.			
Software should allow sequences control (pause/play, skip forwards, skip backwards).			
Live view and Playback should be available at the same time with Playback window on top of live view window.			
Instant Playbacks should be available as window pop up on click of an event from Event Screen.			
Image Enhancement Analytic should be available in Playback. Option to sharpen the video image through scrollbar should be available.			
Playback Navigation Tree View with Recording server, camera list, year/months list and the date wise play list should be available.			
Playback option for frame-by-frame should be available.			
Playback should have Video lock feature should be available.			
Ability to make bookmark of any portion of video and view list of all bookmarks should be available.			
Instant Playback and Quick Search of event based recordings should be available.			
Playlist with files listed for each date and time should be available. User can click on any file to play recording.			
E-map client should show icon blink and voice alert of the event. Should be able to take snapshots from Google Map if connected to internet. It should be possible to click on icon in a map to initiate PTZ camera preset, run PTZ pattern, view camera			
Two-way audio communication between camera and VMS and option to send/broadcast Audio to multiple cameras should be available.			

Encryption: Ability to encrypt video while exporting and options of 56 bit, 128 bit and 256 bit encryption should be available			
Mobile Surveillance & Remote Viewing			
Ability to view live video on iOS and Android phones or devices with or without installing proprietary Apps.			
Ability to receive alerts on Mobile phones without SMS using XMPP/MQTT technology should be available.			
PTZ Control on Mobile App and Remote Locations should be available.			
VMS and Mobile App support for multiple sites spread across WAN to be controlled and viewed from central location.			
Remote Administration over internet should be available.			
Streaming			
Option for RTSP, HTTP, RTSP over HTTP streaming or both simultaneously should be available at individual camera level should be available.			
Option to Transcode to lower bit rate stream at recording server level should be available.. The lower bit rate should be done for any individual camera and options of resolution at 640x480, 320x240 and Frame rate at 20 fps, 10 fps should be available.. This helps in viewing video at low bandwidth			
Authentication Parameters (username, password) for streaming to remote clients should be available.			
Administration & Failover			
Automatic discovery of devices using UPnP and/or ONVIF should be available.			
No software limit on number of cameras supported in single recording server			
Feature to add all cameras with single click should be available. Apply settings to multiple cameras of same model with single click.			

Should be able to generate logs & reports in Graphical & Tabular form and export in pdf, excel or more formats			
Failover- Automatic switch of user selected cameras to back-up server in case of failure should be available.			
Automatic Health check-up should be available and activation of optimization modules once CPU reached more than 85%.			
Add multiple recording servers under same management server.			
User role based cameras and feature access. Define users with passwords and access to only specific cameras			
Complete server logs including login access, system settings change, archiving events, video or recording loss and all activity done by administrator or any other user in the system.			
VMS control of cameras and monitoring on client workstations shall be done through the administrator interface.			
System watchdog feature should be available to alert in case of failure of cameras and servers.			
Failover:			
System should support N: 1 or N: N failover. Failover time should not be more than 30 seconds. In case of failover recording lost should less than 30 seconds			
The VMS licensing shall require MAC Id of Server/ Recorder only, not of camera devices			
Camera Support			
Should support multiple brand IP cameras (ONVIF Compliant), encoders and DVRs. No restriction on camera hardware.			
Should support ONVIF protocol including Profile-S, G.			

Code	Item Description	Qty
33450-B13-023	Video Analytics Software with ANPR features	1 no

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Automatic Number Plate Recognition (ANPR) system should enable monitoring of vehicle flow at strategic locations. The system should support real-time detection of vehicles at the deployed locations, recording each vehicle, reading its number plate, database lookup from central server and triggering of alarms/alerts based on the vehicle status and category as specified by the database. The system usage shall be privilege driven using password authentication. System should have following requirements:			
The System should automatically detect a vehicle in the camera view using video detection and activate number plate recognition			
The system should be designed to work for 24x7 unattended operations			
The System should automatically detect the number plate in the captured video feed in real-time.			
The system should perform OCR (optical character recognition) of the number plate characters (English alpha-numeric characters in standard fonts).			
The System should store JPEG image of vehicle and number plate and enter the number plate number into DBMS like MySql etc. database along with date time stamp and site location details.			

The system should be able to handle multiple vehicles simultaneously i.e. if there are more than one vehicle in the camera view the system should be able to detect all of them, extract their number plate numbers and perform OCR on the number plate characters			
System should be able to detect and recognize the English alphanumeric number plate in standard fonts and formats of all vehicles including cars, HCV, LCV and two wheelers.			
System should able to detect single row, double row, multi row, square and rectangular plates as well			
The system should be robust to variation in number Plates in terms of font, size, contrast and color and should work with good accuracy.			
The success rate should be minimum 80%+ in Day and Night			
Alert Generation			
The system should have option to input certain number plates according to the hot listed categories like "Wanted", "Suspicious", "Stolen" unauthorized, VIP etc. by authorized personel.			
Vehicle Detection and Video Capture Module			
The system should be able to generate automatic alarms to alert the control room personnel for further action, in the event of detection of any vehicle falling in the Hot listed categories			
Graphical User Interface			
The system Graphical User Interface should be bi-lingual. It should support both English & Graphical User interface (GUI) should provide following information: -			
a. Image of the vehicle			
b. Image of the number plate			

c. Text conversion of number plate after using OCR (Optical Character Recognition) technology			
d. Date, Time and location of offending vehicle			
e. Event/images/chart of ANPR			
Report			
System should be able to give camera ID / Camera Location etc on report page			
System should be able to give vehicle image with number plate image			
System should be able to give OCR Image/number plate Image			
System should able to give Watch list ("Wanted", "Suspicious", "Stolen" ,"Authorized", "Lost") on report page			
Vehicle Status Alarm Module			
On successful recognition of the number plate, system should be able generate automatic alarm to alert the control room for vehicles which have been marked as "Wanted", "Suspicious", "Stolen", "Expired". (System should have provision/expansion option to add more categories for future need).			
The Instantaneous and automatic generation of alarms. In case of identity of vehicle in any category which is define by user.			
Vehicle Log Module			
The system should enable easy and quick retrieval of snapshots and other data for post incident analysis and investigations. For example a database could be searched using criteria like date, time, location and vehicle number			
The system should be able to generate suitable MIS reports that will provide meaningful data to concerned authorities and facilitate optimum utilization of resources. These reports should include.			

i. Report of vehicle flow at each of the installed locations for Last Day, Last Week and Last Month.			
ii. Report of vehicles in the detected categories at each of the installed locations for Last Day, Last Week and Last Month.			
Vehicle Detection and Video Capture Module			
The system should have Search option to tune the reports based on number plate number, date and time, site location as per the need of the authorities.			
The system should have option to save custom reports for subsequent use. The system should have option to export report being viewed to common format for use outside of the ANPR Software or exporting into other systems.			
The system should provide advanced and smart searching facility of number plates from the database. There should be an option of searching number plates almost matching with the specific number entered (up to 1 and 2 character distance).			

Code	Item Description	Qty
33450-B13-024	Video Analytics Software with Face Recognition features	1 no

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Facial Recognition Software should be able to work in real time			
System should be capable of capturing face images from live feed			
The system should be able to track a subject through it's appearance in front of the camera so as to generate alarm			

The system should be capable of working on partial occlusion of face like glasses, changes of facial expression. The system should able to detect similarity ratio			
The system should permit tracking of multiple faces			
The FR system should be able to be used for various applications like Face detection/recognition based on Black/white list, Attandance using FR, access control using FR, Etc.			
The system should permit enrolment of subjects from Images or live Video			
The system should allow multiple users to be created within the system with custom privileges/groups			
The system should have client server architecture with support for multiple clients who can be simultaneously logged either locally or remotely.			
The system should support diverse image formats like JPEG, PNG etc.			
The system should have the capability to have face image			
The system should comprise a health monitoring dashboard			
The system should allow generation of reports based on detection and identification of alarms with relevant filters like date and time / category etc. The system should permit reports to be exported in txt or xls formats for storage /review.			
The FR system should be able to identify the face and give alerts/outputs within 3 to 5 meter distance			
The FR software system should support to integrate with 3rd party camera (ONVIF Compliant)			
The FR system should be capable of integration with various 3rd party applications and Hardware			
The FRS algorithm components should be upgraded without extra cost			

The FR System should be supplied with suitable Local Processing unit or server as per the number of License required. The costing of the local processing unit should be included with software itself.			
The Local Processing unit should have interfaces to have content backup, 3rd party integration for alarms, etc.			
Should be able to change/replace IP Camera linked with FR software without requiring additional license.			

Code	Item Description	Qty
33450-B13-IP-025	8 Port Switch 10/100/1000 MbpsSemi Managed Switch with 2 SFP Ports	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Port	Min 8 ports, Rj45-10/100/1000Base T, Min 2 SFP			
POE	IEEE 802.3af support in all ports			
Power Supply	Built in			
Layer 2 Features	Spanning Tree (STP) Static Port Trunking			
Layer 2 Multicast Features	Internet Group Management Protocol (IGMP) Snooping ,IGMP			
Security Features	Broadcast/Multicast/Unicast Storm Control			
Management Features	Web-Based GUI Simple Network Management Protocol (SNMP) Trap / Alarm / Log Severity Control			
Certifications	FCC,CE			

Code	Item Description	Qty
33450-B13-IP-026	24 Port Switch 10/100/1000 MbpsSemi Managed Switch with 4 SFP Ports	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Ports	Min 24 ports, Rj45-10/100/1000Base T, Min 2 SFP			
POE	IEEE 802.3af support in all ports			
Power Supply	Built in			
Layer 2 Features	Spanning Tree (STP) Static Port Trunking:			
Layer 2 Multicast Features	Internet Group Management Protocol (IGMP) Snooping			
Security Features	Broadcast/Multicast/Unicast Storm Control			
Management Features	Web-Based GUI Simple Network Management Protocol (SNMP) ,Trap / Alarm / Log Severity Control			
Certifications	FCC,CE			

Code	Item Description	Qty
33450-B13-IP-027	6U Wall Mount Rack	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Height & Dimension	Height 6U, Width 550 and Depth 500mm			
Material Thickness	0.8mm or better			
Loading capacity	30KG ± 10% or better Loading capacity			
Front Door	4mm toughened Glass door with Lock and Key			
Cabinet Material	Powder coated CRCA sheet			
Mounting	Wall Mount equipped with 1.2 mm mounting angle			
Form Factor	Rack Mount/DIN Rail			
General	Rubber Closure for cable entry holes 19"Adjustable rails in the front and rear, Top and bottom cable entry facility Hardware Screw pocket included			

Code	Item Description	Qty
33450-B13-IP-028	**9U Wall Mount Rack**	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Height &	Height 9U, Width 550 and Depth 550mm			

Dimension				
Material Thickness	0.8mm or better			
Loading capacity	35KG ± 10% or better Loading capacity			
Front Door	4mm toughened Glass door with Lock and Key			
Cabinet Material	Powder coated CRCA sheet			
Mounting	Wall Mount equipped with 1.2 mm mounting angle			
Form Factor	Rack Mount/DIN Rail			
General	Rubber Closure for cable entry holes 19"Adjustable rails in the front and rear, Top and bottom cable entry facility Hardware Screw pocket included			

Code	Item Description	Qty
33450-B13-IP-029	**24U Floor Standing Rack**	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Height & Dimension	Height 24U, Width 600 and Depth 800mm			
Material Thickness	1.2mm or better			
Loading capacity	300KG ± 10% or better Loading capacity			
Front Door	4mm toughened Glass door with Lock and Key			
Cabinet Material	Powder coated CRCA sheet			
Mounting	Floor Standing Rack			

Form Factor	Rack Mount/DIN Rail			
General	Rubber Closure for cable entry holes 19"Adjustable rails in the front and rear, Rear/Side cable entry facility with Glands Hardware Screw pocket included			

Code	Item Description	Qty
33450-B13-IP-030	32 inch LED Full HD Display Monitor	**1 No**

Parameters	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Panel Technology	LED Professional Display			
Display Ratio	Aspect ratio of 16:9.			
Native Resolution	Full HD - Resolution of 1920 X 1080 pixelsor higher			
Brightness	330 - nits or higher			
Operation Hours	16/7 or higher			
Viewing Angle (H x V)	178 x 178			
Ports	Min. HDMI X 2 Min.USB X 1 Audio Out x 1 RS232 C - 1 Ethernet 10/100 Mbps(RJ45 Port) or higher			
In-built Speakers	built in - speaker 10W rms x 1 or higher			

Accessories	1)Wall Mount Bracket 2) Power Cable 3) Remote control 4) Manual			
Operating Temperature	0°C to 40° or higher			
Power Supply	100 – 240 v - 50Hz			
Video wall Support	Bezel Should Support for Panel Joining to Connect Video Wall			
Certifications	BIS , CE, FCC, UL			

Code	Item Description	Qty
33450-B13-IP-031	43 inch LED Ultra HD (4K) Display Monitor	**1 No**

Parameters	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Panel Technology	LED Professional Display			
Display Ratio	Aspect ratio of 16:9.			
Native Resolution	UHD (4K) - 3840 X 2160 pixel or higher			
Brightness	300 nits or higher			
Operation Hours	16/7or higher			
Viewing Angle (H x V)	178 x 178			

Ports	Min.HDMI X 2 Min.USB X 1 Audio Out x 1 Ethernet 10/100 Mbps (RJ45)or higher, RS 232C			
In-built Speakers	built in - speaker 10W rms x 2or higher			
Accessories	1)Wall Mount Bracket 2) Power Cable 3) Remote control 4) Manual			
Operating Temperature	0°C to 40° or higher			
Power Supply	100 – 240 v - 50Hz			
Video wall Support	Bezel Should Support for Panel Joining to Connect Video Wall			
Certifications	BIS, CE, FCC, UL			

Code	Item Description	Qty
33450-B13-IP-032	55 inch LED Ultra HD (4K) Display Monitor	**1 No**

Parameters	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Panel Technology	LED Professional Display			
Display Ratio	Aspect ratio of 16:9.			
Native	UHD (4K) - 3840 X 2160 pixel or higher			

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Resolution				
Brightness	350 nits or higher			
Operation Hours	16/7or higher			
Viewing Angle (H x V)	178 x 178			
Ports	Min.HDMI X 2 Min.USB X 1 Audio Out x 1 Ethernet 10/100 Mbps (RJ45) or higher, RS 232C			
In-built Speakers	built in - speaker 10W rms x 2 or higher			
Accessories	1)Wall Mount Bracket 2) Power Cable 3) Remote control 4) Manual			
Operating Temperature	0°C to 40° or higher			
Power Supply	100 – 240 v - 50Hz			
Video wall Support	Bezel Should Support for Panel Joining to Connect Video Wall			
Certifications	BIS, CE, FCC, UL			

Tender Ref: ELCOT/Proc/OT/33450/RC Tender -Group B/2021-22

Code	Item Description	Qty
33450-B13-053	Indoor Microphone	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Type	Permanent indoor-noise monitoring			
Frequency	100 ~ 6000HZ			
Work Area	100m^2			
Interface	Audio input - RCA or Sterio or BNC			

Code	Item Description	Qty
33450-B13-054	Outdoor Microphone	1 no

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Type	Permanent outdoor-noise monitoring			
Frequency	100 ~ 6000HZ			
Work Area	100m^2			
interface	Audio input - RCA or Sterio or BNC			
Protection	IP65/IP66			

S.N	Product Code	Description	Bidder Compliance (Yes/No)
33	33450-B13-IP-033	Cat 6 Cable 23AWG	
34	33450-B13-IP-034	Cat 6 Cable Armored Cable	
35	33450-B13-IP-035	OFC 6 Core Single Mode Fibre Cable	
36	33450-B13-IP-036	OFC 12 Core Single Mode Fibre Cable	
37	33450-B13-IP-037	1" / 2" PVC Conduit with laying Charges	
38	33450-B13-IP-038	2" HDPE Conduit with Laying Charges	
39	33450-B13-IP-039	13 Feet GI Pole	
40	33450-B13-IP-040	15 Feet GI Pole	
41	33450-B13-IP-041	Outdoor weather proof Junction Box	
42	33450-B13-IP-042	4 TB AV Hard Disk	
43	33450-B13-IP-043	6TB AV Hard Disk	
44	33450-B13-IP-044	8 TB AV Hard Disk	
45	33450-B13-IP-045	10 TB AV Hard Disk	
46	33450-B13-IP-046	12 TB AV Hard Disk	
47	33450-B13-IP-047	6 Port LIU Loaded with adapter & SC PigTail	
48	33450-B13-IP-048	12 Port LIU Loaded with adapter & SC PigTail	
49	33450-B13-IP-049	Patch Cord SC-LC	
50	33450-B13-IP-050	10GBPS Module	

51	33450-B13-IP-051	Digging and Refilling of Soil/Tar/ Concrete road with 3FT Depth Per Meter	
52	33450-B13-IP-052	Fibre Splicing	
53	33450-B13-IP-053	Indoor Microphone	
54	33450-B13-IP-054	Outdoor Microphone	
55	33450-B13-IP-055	HDMI Splitter 1 in and 2 Out	
56	33450-B13-IP-056	64GB SD card class 10	
57	33450-B13-IP-057	128GB SD card class 10	
58	33450-B13-IP-058	HDMI Cable per Meter	
59	33450-B13-IP-059	VGA Cable Per Meter	
60	33450-B13-IP-060	Site Survey per site	

A1.5.14 Category B14 –Firewall

Code	Item Description	Qty
33450-B14-001	Next Generation Firewall cum SDWAN Router - Category -1 (Suitable for upto 300 Users)	1 No

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Should be a Rack Mountable Hardware Appliance with Next Generation Firewall Functionalities			
Should support Static Routes & Policy Based Routing and dynamic routing protocol like RIP, OSPF, BGP. The Firewall should also acts as router and Internet Service Provider should be able to terminate the Internet Link directly to the device.			

The following features should be included in the appliance from Day 1: Layer 3 - Layer 4, NAT, VPN, Application Visibility and Control (AVC), User Identity, DLP, Next Generation Intrusion Prevention System (IPS), Zero Day Protection / Advance Malware protection, Web Security Essentials / URL Filtering			
It should handle TCP, UDP, HTTP traffic and Should support 64K or above Packet Size			
Should have Firewall Throughput of 20Gbps, Threat prevention throughput 4 Gbps or above and SDWAN IPSec VPN Throughput of 15 Gbps or Above			
Should support 2.5 Million or above concurrent Sessions and support 400K or above New sessions per second			
Should support 12 Nos. of 1GE RJ45 Ports, 12 nos of 1GE SFP interface and Should support 12 or above WAN Ports			
Should support 2000 IPSEC VPN Site to Site tunnels and support 200 of SSL VPN users			
It should support Hot Swappable Power Supply and should support High Availability Active-Active Configuration			
Should Support 10000 or above NGIPS Signature			
Should have ICSA/NSS/NDDPP/Common Criteria Certifications and Should Support Ipv6 from Day 1			
The Firewall should support virtualization and support 5 virtual instances from day one			
NGFW must support Secure SD - WAN feature along with advance routing protocols such as BGP			
Build-in SDWAN must be able to do load balancing of various links based on source address, User group , protocol and/or applications			
SLA for SDWAN must be defined based on packet loss or latency or jitter.			
Should have 24X7 OEM Warranty Support for 1 Year			

Code	Item Description	Qty
33450-B14-002	Next Generation Firewall cum SDWAN Router - Category -2 (Suitable for upto 100 Users)	1 No

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Should be a Rack Mountable Hardware Appliance with Next Generation Firewall Functionalities			
Should support Static Routes & Policy Based Routing and dynamic routing protocol like RIP, OSPF, BGP. The Firewall should also acts as router and Internet Service Provider should be able to terminate the Internet Link directly to the device.			
The following features should be included in the appliance from Day 1: Layer 3 - Layer 4, NAT, VPN, Application Visibility and Control (AVC), User Identity, DLP, Next Generation Intrusion Prevention System (IPS), Zero Day Protection / Advance Malware protection, Web Security Essentials / URL Filtering			
It should handle TCP, UDP, HTTP traffic and Should support 64K or above Packet Size			
Should have Firewall Throughput of 10Gbps, Threat prevention throughput 1 Gbps or above and SDWAN IPSec VPN Throughput of 10 Gbps or Above			
Should support 1 Million or above concurrent Sessions and support 50K or above New sessions per second			
Should support 8 Nos. of 1GE RJ45 Ports, 8 nos of 1GE SFP interface and Should support 8 or above WAN Ports			
Should support 1000 IPSEC VPN Site to Site Peers and support 100 of SSL VPN users			
It should support Hot Swappable Power Supply and should support High Availability Active-Active Configuration			

Should Support 10000 or above NGIPS Signature			
Should have ICSA/NSS/NDDPP/Common Criteria Certifications and Should Support IPv6 from Day 1			
The Firewall should support virtualization and support 3 virtual partitions from day one			
NGFW must support Secure SD - WAN feature along with advance routing protocols such as BGP			
Build-in SDWAN must be able to do load balancing of various links based on source address, User group , protocol and/or applications			
SLA for SDWAN must be defined based on packet loss or latency or jitter. Even combination of all 3 option must be possible			
Should have 24X7 OEM Warranty Support for 1 Year			

Code	Item Description	Qty
33450-B14-003	Next Generation Firewall cum SDWAN Router - Category -3 (Suitable for upto 50 Users)	1 No

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Should be a Hardware Appliance with Next Generation Firewall Functionalities			
Should support Static Routes & Policy Based Routing and dynamic routing protocol like RIP, OSPF, BGP. The Firewall should also acts as router and Internet Service Provider should be able to terminate the Internet Link directly to the device.			

The following features should be included in the appliance from Day 1: Layer 3 - Layer 4, NAT, VPN, Application Visibility and Control (AVC), User Identity, DLP, Next Generation Intrusion Prevention System (IPS), Zero Day Protection / Advance Malware protection, Web Security Essentials / URL Filtering			
It should handle TCP, UDP, HTTP traffic and Should support 64K or above Packet Size			
Should have Firewall Throughput of 5Gbps, Threat prevention throughput 600 Mbps or above and SDWAN IPSec VPN Throughput of 5 Gbps or Above			
Should support 500K or above concurrent Sessions and support 30K or above New sessions per second			
Should support 8 Nos. of 1GE RJ45 Ports and Should support 5 or above WAN Ports			
Should support 100 IPSEC VPN Site to Site Peers and support 50 of SSL VPN users			
Should Support 10000 or above NGIPS Signature			
Should have ICSA/NSS/NDDPP/Common Criteria Certifications and Should Support IPv6 from Day 1			
The Firewall should support virtualization and support 3 virtual partitions from day one			
NGFW must support Secure SD - WAN feature along with advance routing protocols such as BGP			
Build-in SDWAN must be able to do load balancing of various links based on source address, User group , protocol and/or applications			
SLA for SDWAN must be defined based on packet loss or latency or jitter. Even combination of all 3 option must be possible			
Should have 24X7 OEM Warranty Support for 1 Year			

Code	Item Description	Qty
33450-B14-004	Next Generation Firewall cum SDWAN Router - Category -4 (Suitable for upto 25 Users)	1 No

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Should be a Hardware Appliance with Next Generation Firewall Functionalities			
Should support Static Routes & Policy Based Routing and dynamic routing protocol like RIP, OSPF, BGP. The Firewall should also acts as router and Internet Service Provider should be able to terminate the Internet Link directly to the device.			
The following features should be included in the appliance from Day 1: Layer 3 - Layer 4, NAT, VPN, Application Visibility and Control (AVC), User Identity, DLP, Next Generation Intrusion Prevention System (IPS), Zero Day Protection / Advance Malware protection, Web Security Essentials / URL Filtering			
It should handle TCP, UDP, HTTP traffic and Should support 64K or above Packet Size			
Should have Firewall Throughput of 3Gbps, Threat prevention throughput 400 Mbps or above and SDWAN IPSec VPN Throughput of 3 Gbps or Above			
Should support 500K or above concurrent Sessions and support 30K or above New sessions per second			
Should support 5 Nos. of 1GE RJ45 Ports and Should support 4 WAN Ports			
Should support 100 IPSEC VPN Site to Site Peers and support 25 of SSL VPN users			
Should Support 10000 or above NGIPS Signature			

Should have ICSA/NSS/NDDPP/Common Criteria Certifications and Should Support IPv6 from Day 1			
The Firewall should support minimum 2 virtual partitions from day one			
NGFW must support Secure SD - WAN feature along with advance routing protocols such as BGP			
Build-in SDWAN must be able to do load balancing of various links based on source address, User group , protocol and/or applications			
SLA for SDWAN must be defined based on packet loss or latency or jitter. Even combination of all 3 option must be possible			
Should have 24X7 OEM Warranty Support for 1 Year			

Code	Item Description	Qty
33450-B14-005	Data Center Firewall cum SDWAN Core Router - Category -1 (Suitable for upto 5000 Users)	1 No

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Should be a Rack Mountable Hardware Appliance with Next Generation Firewall Functionalities			
Should support Static Routes & Policy Based Routing and dynamic routing protocol like RIP, OSPF, BGP. The Firewall should also acts as router and Internet Service Provider should be able to terminate the Internet Link directly to the device.			
The following features should be included in the appliance from Day 1: Layer 3 - Layer 4, NAT, VPN, Application Visibility and Control (AVC), User Identity, DLP, Next Generation Intrusion Prevention System (IPS), Zero Day Protection / Advance Malware protection, Web Security Essentials / URL Filtering			

It should handle TCP, UDP, HTTP traffic and Should support 64K or above Packet Size			
Should have Firewall Throughput of 40Gbps, Threat prevention throughput 7 Gbps or above and SDWAN IPSec VPN Throughput of 30 Gbps or Above			
Should support 6 Million or above concurrent Sessions and support 500K or above New sessions per second			
Should support 6 X 1GE SFP, 6 X 10G SFP+ and should support minimum 2 nos. of 40G ports for future upgradation			
Should support 5000 IPSEC VPN Site to Site tunnels and support 2500 of SSL VPN users			
It should support Hot Swappable Power Supply and should support High Availability Active-Active Configuration			
Should Support 10000 or above NGIPS Signature			
Should have ICSA/NSS/NDDPP/Common Criteria Certifications and Should Support Ipv6 from Day 1			
The Firewall should support virtualization and support 25 virtual instances from day one			
NGFW must support Secure SD - WAN feature along with advance routing protocols such as BGP			
Build-in SDWAN must be able to do load balancing of various links based on source address, User group , protocol and/or applications			
SLA for SDWAN must be defined based on packet loss or latency or jitter.			
Should have external hardware/Virtual Appliance/Software Log Management system with 50GB/Day logging capacity			
Should have 24X7 OEM Warranty Support for 1 Year			

Code	Item Description	Qty
33450-B14-006	Data Center Firewall cum SDWAN Core Router - Category -2 (Suitable for upto 2500 Users)	1 No

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Should be a Rack Mountable Hardware Appliance with Next Generation Firewall Functionalities			
Should support Static Routes & Policy Based Routing and dynamic routing protocol like RIP, OSPF, BGP. The Firewall should also acts as router and Internet Service Provider should be able to terminate the Internet Link directly to the device.			
The following features should be included in the appliance from Day 1: Layer 3 - Layer 4, NAT, VPN, Application Visibility and Control (AVC), User Identity, DLP, Next Generation Intrusion Prevention System (IPS), Zero Day Protection / Advance Malware protection, Web Security Essentials / URL Filtering			
It should handle TCP, UDP, HTTP traffic and Should support 64K or above Packet Size			
Should have Firewall Throughput of 25Gbps, Threat prevention throughput 5 Gbps or above and SDWAN IPSec VPN Throughput of 20 Gbps or Above			
Should support 6 Million or above concurrent Sessions and support 400K or above New sessions per second			
Should support 6 X 1GE SFP, 2 X 10G SFP+ and 6 X 1 G RJ45 Ports			
Should support 2000 IPSEC VPN Site to Site tunnels and support 2000 of SSL VPN users			
It should support Hot Swappable Power Supply and should support High Availability Active-Active Configuration			
Should Support 10000 or above NGIPS Signature			
Should have ICSA/NSS/NDDPP/Common Criteria Certifications and Should Support			

Ipv6 from Day 1			
The Firewall should support virtualization and support 10 virtual instances from day one			
NGFW must support Secure SD - WAN feature along with advance routing protocols such as BGP			
Build-in SDWAN must be able to do load balancing of various links based on source address, User group , protocol and/or applications			
SLA for SDWAN must be defined based on packet loss or latency or jitter.			
Should have external hardware/Virtual Appliance/Software Log Management system with 50 GB/Day logging capacity			
Should have 24X7 OEM Warranty Support for 1 Year			

Code	Item Description	Qty
33450-B14-007	SD-WAN Manager for Central Management and Monitoring	1 No

Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Should be a Hardware / Virtual Appliance with support for Active - Passive architecture			
Should provide centralized management functionality for all SD-WAN Devices			
Should provides comprehensive solution to manage, visualize, provision, automate configuration and monitor the proposed SDWAN solution infrastructure from a single graphical interface.			
Should support Centralised Network and Security log management and reporting with customised reports and automated alerting			

Should be able to configure application-based forwarding policy and security rules on all the SDWAN device			
Should support Workflow Management – Audit and approve of the change management by different level.			
Licensing should be based on no. of Devices, not based on end users.			
Should support 10 SDWAN Routers of any size. Should be scalable upto 5000 by adding multiples of 10 SDWAN Router device license without replacing the appliance.			
The SDWAN manager should be from the same OEM of SDWAN Routers			
Prices for 10 user upgrade to be quoted separately			
Should have 24X7 OEM Warranty Support for 1 Year			

Code	Item Description	Qty
33450-B14-008	Web Application Firewall (Category-1)	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Web application firewall should be rack mountable appliance and provide specialized application threat protection.			
Solution should protect against common threats such as those identified in the OWASP top 10			
Should protect against application-level attacks targeted at web applications.			
Solution should be certified "Recommended" by NSS Lab's independent testing latest report. Should be ICSA lab Certified			
Should provide controls to prevent identity theft, financial fraud and corporate espionage.			

dual-stack support for both IPv4 to IPv6 and IPv6 to IPv4 communication.			
Should monitor and enforce government regulations, industry best practices, and internal policies.			
Should support 20,000HTTP/HTTPS Concurrent connections and Should support 7,000 or more HTTP transactions per second			
Device should have less than 6 Millisecond Latency			
Should deliver 50 Mbps or more of WAF HTTP throughput. WAF throughput refers to Protection throughput when all Protection Profiles are enable to safeguard backend application.			
Should support minimum 4 X 10/100/1000 RJ45 and Should have 32GB or more of SSD/SATA internal Storage			
should support different deployment modes: Inline Transparent, Reverse Proxy and Non-Inline Sniffing			
The Solution should at least include the predefined signatures for : Cross-Site Scripting (XSS), SQL Injection and other code injection, Remote File Inclusion (RFI), Local File Inclusion (LFI), OS Commands, Trojans/Virus, Exploits, Sensitive Information Disclosure, Credit Cards Data Leaks			
Should have a Web Vulnerability Scanner feature to detect existing vulnerabilities like SQL Injection, Cross Site Scripting, Source code disclosure, OS Commanding in the web applications.			
Should have Data Leak Prevention module to analyse all outbound traffic by alerting/blocking any credit card leakage and information disclosure. Should provide controls to meet PCI compliance requirements for web application servers			
Solution Should support to create own granular signatures and DLP patterns together with predefined rules for any type of events.			
Solution Should have the ability to prevent, detect and restore web defacement using Anti Web Defacement feature			

Solution should copy the content of the webservers to its own hard drive and compare on a definable time schedule if files have been changed on the webserver			
Should enforce strict RFC compliance check to prevent attacks such as encoding attacks, buffer overflows and other application specific attacks.			
Should support automatic signature updates to protect against known and potential application security threats.			
Solution Should support XML Application protection			
Ability to define different policies for different applications, create custom attack signatures or events and to combine detection and prevention. Solution Must provide ability to allow or deny a specific URL access.			
Solution should support Normalization methods such as URL Decoding, Null Byte string, termination, Converting back slash to forward slash character etc..			
solution should be capable of enforcing application logic by defining a set of page access rules			
Should be having an option to validate the inputs. There should be customizable option to prevent tampering web sites with hidden inputs			
Should have the capability to Automatically and dynamically build a security model of protected applications by continuously monitoring real time user activity.			
Advance Machine Learning to be used to build Security Models. Bidder to explain in detail functioning of these Machine Learning Models.			
Should provide a statistical view on collected application traffic			
Default policies should be available in various classifications, Alert Only, Medium Security, High Security			
The solution should offer Layer 7 DDOS capabilities			
The solution should offer an on-board Anti-Virus solution and the database should be updated automatically, should NOT introduce additional software or hardware deployments nor 3rd-party integration requirements			

Solution should be capable of detecting and distinguishing two sets of Bots from the Internet: Known search engines, Bad robots (scanners, crawlers, spiders). Advance Machine Learning Methods to be utilised to understand Bot Traffic.			
Solution should have the option to verify the HTTP RFC standards			
WAF appliance should have application-aware load-balancing engine to distribute traffic and route content across multiple web servers.			
The solution should have configurable persistency features to maintain sessions to the load balanced backend servers			
The solution should support a connection draining mode in order to allow maintenance of a protected server without disrupting the client experience with the application			
The solution should be capable of publishing web applications and offering backend Single Sign On access			
The solution should support different authentication schemes such as Local, LDAP, NTLM and RADIUS for the web applications			
The solution Allows efficient bandwidth utilization and response time to users by compressing data retrieved from web servers			
The solution should be able to terminate SSL and Should Passively decrypt SSL			
All major cipher suites should be supported by the SSL v3 implementation.			
Should support for hardware-based SSL acceleration or SSL off loading			
Should support High Availability in active /Passive, Configuration Sync modes & Active-Active Mode. Active-Active Deployment to be natively supported without need of any external solution.			
Proposed Hardware device should natively support Hardware failure bypass functionality.			
Should support Secure Administrative Access using HTTPS and SSH and Role Based Access Control for Management			

Should support multi-tenancy feature via administrative domains			
Should have a tight Integration with APT where files can be submitted for Zero Day Analysis.			
The Solution should have 24X7 Support and warranty for 1 year.			

Code	Item Description	Qty
33450-B14-009	Web Application Firewall (Category-2)	1 No

Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Web application firewall should be rack mountable appliance and provide specialized application threat protection.			
Solution should protect against common threats such as those identified in the OWASP top 10			
Should protect against application-level attacks targeted at web applications.			
Solution should be certified "Recommended" by NSS Lab's independent testing latest report. Should be ICSA lab Certified			
Should provide controls to prevent identity theft, financial fraud and corporate espionage.			
dual-stack support for both IPv4 to IPv6 and IPv6 to IPv4 communication.			
Should monitor and enforce government regulations, industry best practices, and internal policies.			
Should support 50,000HTTP/HTTPS Concurrent connections and Should support 15,000 or more HTTP transactions per second			
Device should have less than 6 Millisecond Latency			

Should deliver 200 Mbps or more of WAF HTTP throughput. WAF throughput refers to Protection throughput when all Protection Profiles are enable to safeguard backend application.			
Should support minimum 4 X 1G RJ45, 2X 1G SFP and Should have 400GB or more of SSD/SATA internal Storage			
should support different deployment modes: Inline Transparent, Reverse Proxy and Non-Inline Sniffing			
should support multi-tenancy feature via administrative domains for domain owners to manage their own applications separately from others on the same device.			
The Solution should at least include the predefined signatures for the below			
Cross-Site Scripting (XSS), SQL Injection and other code injection, Remote File Inclusion (RFI), Local File Inclusion (LFI), OS Commands, Trojans/Virus			
Exploits, Sensitive Information Disclosure, Credit Cards Data Leaks			
Should have a Web Vulnerability Scanner feature to detect existing vulnerabilities like SQL Injection, Cross Site Scripting, Source code disclosure, OS Commanding in the web applications.			
Should have Data Leak Prevention module to analyse all outbound traffic by alerting/blocking any credit card leakage and information disclosure. Should provide controls to meet PCI compliance requirements for web application servers			
Solution Should support to create own granular signatures and DLP patterns together with predefined rules for any type of events.			
Solution Should have the ability to prevent, detect and restore web defacement using Anti Web Defacement feature			
Solution should copy the content of the webservers to its own hard drive and compare on a definable time schedule if files have been changed on the webserver			
Should enforce strict RFC compliance check to prevent attacks such as encoding attacks, buffer overflows and other application specific attacks.			

Should support automatic signature updates to protect against known and potential application security threats.			
Solution Should support XML Application protection			
Ability to define different policies for different applications, create custom attack signatures or events and to combine detection and prevention. Solution Must provide ability to allow or deny a specific URL access.			
Solution should support Normalization methods such as URL Decoding, Null Byte string, termination, Converting back slash to forward slash character etc..			
solution should be capable of enforcing application logic by defining a set of page access rules			
Should be having an option to validate the inputs. There should be customizable option to prevent tampering web sites with hidden inputs			
Should have the capability to Automatically and dynamically build a security model of protected applications by continuously monitoring real time user activity.			
Advance Machine Learning to be used to build Security Models. Bidder to explain in detail functioning of these Machine Learning Models.			
Should provide a statistical view on collected application traffic			
Default policies should be available in various classifications, Alert Only, Medium Security, High Security			
The solution should offer Layer 7 DDOS capabilities			
The solution should offer an on-board Anti-Virus solution and the database should be updated automatically. should NOT introduce additional software or hardware deployments nor 3rd-party integration requirements			
Solution should be capable of detecting and distinguishing two sets of Bots from the Internet: Known search engines, Bad robots (scanners, crawlers, spiders). Advance Machine Learning Methods to be utilised to understand Bot Traffic. Bidder to explain in detail.			

Solution should have the option to verify the HTTP RFC standards			
WAF appliance should have application-aware load-balancing engine to distribute traffic and route content across multiple web servers.			
The solution should have configurable persistency features to maintain sessions to the load balanced backend servers			
The solution should support a connection draining mode in order to allow maintenance of a protected server without disrupting the client experience with the application			
The solution should be capable of publishing web applications and offering backend Single Sign On access			
The solution should support different authentication schemes such as Local, LDAP, NTLM and RADIUS for the web applications			
The solution Allows efficient bandwidth utilization and response time to users by compressing data retrieved from web servers			
The solution should be able to terminate SSL and Should Passively decrypt SSL			
All major cipher suites should be supported by the SSL v3 implementation.			
Should support for hardware-based SSL acceleration or SSL off loading			
Should support High Availability in active /Passive, Configuration Sync modes & Active-Active Mode. Active-Active Deployment to be natively supported without need of any external solution.			
Proposed Hardware device should natively support Hardware failure bypass functionality.			
Should support Secure Administrative Access using HTTPS and SSH and Role Based Access Control for Management			
Should support multi-tenancy feature via administrative domains			
Should have a tight Integration with APT where files can be submitted for Zero Day Analysis.			
The Solution should have 24X7 Support and warranty for 1 year.			

A1.5.15 Category B15 – Laptop

Code	Item Description	Qty
33450-B15-001	Laptop Intel Pentium / AMD	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14 inch display 1366X768 or higher			
Processor	Intel Pentium Dual Core or Equivalent / AMD Processor with processor speed of 2.0 GHz or higher.			
Memory	8 GB DDR4 SDRAM @ 2666 MHz or Higher. Expandable up to minimum 32GB with minimum one free slot			
Hard Disk	Minimum of 500 GB SATA with 5400 rpm or higher			
Battery Life	Standard Rechargeable 4 or 6 cell Li-Ion (40 WHr) with minimum 3 hours backup			
Ports	Minimum 3 USB, Headphone/speaker out/Mic Combo Port, Ethernet (10/100/1000 Mbps) , AC power, in built speaker, VGA / HDMI, Audio Line In. If either VGA or HDMI ports are not available then converters need to be provided.			
Wireless	Wireless 802.11 b/g/n			
BlueTooth	Bluetooth 4.0 or above			
Integrated Web Cam	Web Camera Required			

OS Compliance	Windows & Linux			
Key Board	Normal Keyboard with Integrated Touch Pad			
Accessories	Power cable with three pin socket and plug, Power adapter and charger, User manual, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certification	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-002	13.3" Laptop with i5 G series Processor, SSD	1 No

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	13.3 inches LED Backlit			
Processor	Intel® Core™ i5-1135 G7 Processor or higher			
Memory	8 GB DDR4 RAM (2666 MHz) - expandable upto 32 GB with minimum 1 free Slot (Onboard RAM not acceptable)			
Hard Disk	256 GB SSD or Higher			
Battery Life	Standard Rechargeable detachable Li-Ion (45 WHr) battery with minimum 7 hours backup			

Ports	USB - 3 nos with atleast one 3.0 port Ethernet (10/100/1000 Mbps) , AC power, in built speaker, VGA / HDMI, Audio Line In If either VGA or HDMI portis not available then converters need to be provided.			
Wireless	WiFi 802.11 b/g/n/a			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

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Code	Item Description	Qty
33450-B15-003	13.3" Laptop with i7 G series Processor, SSD	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	13.3 inches LED Backlit			
Processor	Intel® Core™ i7-1165 G7 Processor or higher			
Memory	16 GB DDR4 RAM (2666 MHz) - expandable upto 32 GB with minimum 1 free Slot (Onboard RAM not acceptable)			
Hard Disk	512 GB SSD or Higher			
Battery Life	Standard Rechargeable detachable Li-Ion (45 WHr) battery with minimum 7 hours backup			
Ports	USB - 3 nos with atleast one 3.0 port Ethernet (10/100/1000 Mbps) , AC power, in built speaker, VGA / HDMI, Audio Line In If either VGA or HDMI port is not available then converters need to be provided.			
Wireless	WiFi 802.11 b/g/n/a			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			

Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-004	14" Laptop with i3 G series Processor	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14" inches LED Backlit			
Processor	Intel Core™ i3-1115 G4 Processor or better			
Memory	8 GB DDR4 RAM (2666 MHz) - expandable upto 32 GB with minimum 1 free Slot (Onboard RAM not acceptable)			
Hard Disk	1 TB ,SATA HDD,5400 RPM or higher			
Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 5 hours backup			
Ports	USB - 3 nos with atleast one 3.0 port Ethernet (10/100/1000 Mbps) , AC power, in built speaker, VGA / HDMI, Audio Line In If either VGA or HDMI port is not available then converters need to be provided.			

Wireless	WiFi 802.11 b/g/n/a			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-005	14" Laptop with i5 G series Processor, SSD	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14 inches LED Backlit			
Processor	Intel® Core™ i5-1135 G7 Processor or higher			
Memory	8 GB DDR4 RAM (2666 MHz) - expandable upto 32 GB with minimum 1 free Slot (Onboard RAM not acceptable)			
Hard Disk	256 GB SSD or Higher			

Battery Life	Standard Rechargeable detachable Li-Ion (45 WHr) battery with minimum 7 hours backup			
Ports	USB - 3 nos with atleast one 3.0 port Ethernet (10/100/1000 Mbps) , AC power, in built speaker, VGA / HDMI, Audio Line In If either VGA or HDMI port is not available then converters need to be provided.			
Wireless	WiFi 802.11 b/g/n/a			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-006	14" Laptop with i5 G series Processor, FHD, SSD	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14" FHD (1920 x 1080 or higher) LED Backlit			
Processor	Intel® Core™ i5-1135 G7 Processor			
Memory	16 GB DDR4 SDRAM (2666 MHz) - expandable upto 32 GB with minimum 1 free slot (Onboard RAM not acceptable)			
Hard Disk	256 GB SSD or Higher			
Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 5 hours backup			
Ports	USB - 3 Nos or higher, with atleast one type C USB, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker. (If VGA Port is not given, converter for converting from HDMI/Display Port to VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket,			

	Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-007	14" Laptop with i5 G series Processor, HDD	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14 inches LED Backlit			
Processor	Intel® Core™ i5-1135 G7 Processor or higher			
Memory	8 GB DDR4 RAM (2666 MHz) - expandable upto 32 GB with minimum 1 free Slot (Onboard RAM not acceptable)			
Hard Disk	1TB SATA HDD or Higher			
Battery Life	Standard Rechargeable detachable Li-Ion (45 WHr) battery with minimum 7 hours backup			
Ports	USB - 3 Nos or higher, with atleast one type C USB, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker. (If VGA Port is not given, converter for converting from HDMI/Display Port to			

	VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-008	14" Laptop with i7 G series Processor, HDD with 16GB	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14 inches LED Backlit			
Processor	Intel® Core™ i7-1165 G7 processor or better			
Memory	16 GB DDR4 SDRAM (2666 MHz) - expandable upto 32 GB with minimum 1 free slot (Onboard RAM not acceptable)			
Hard Disk	1TB SATA HDD or Higher			

Battery Life	Standard Rechargeable detachable Li-Ion (45 WHr) battery with minimum 7 hours backup			
Ports	USB - 3 Nos or higher, with atleast one type C USB, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker. (If VGA Port is not given, converter for converting from HDMI/Display Port to VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Spill resistance Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-009	14" Laptop with i7 G series Processor, SSD with 16GB	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14" inches LED Backlit			
Processor	Intel® Core™ i7-1165 G7 processor or higher			
Memory	16 GB DDR4 SDRAM (2666 MHz) - expandable upto 16 GB with minimum 1 free slot (Onboard RAM not acceptable)			
Hard Disk	256 GB SSD or Higher			
Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 5 hours backup			
Ports	USB - 3 Nos or higher, with atleast one type C USB, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker. (If VGA Port is not given, converter for converting from HDMI/Display Port to VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			

OS Compliance by OEM	Windows & Linux			
Key Board	Spill resistance Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-010	14" Laptop with i7 G series Processor, FHD, M.2 SSDwith 16GB	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14" FHD (1920 x 1080 or higher) LED Backlit			
Processor	Intel® Core™ i7-1165 G7 processor or better			
Memory	16 GB DDR4 SDRAM (2666 MHz) - expandable upto 16 GB with minimum 1 free slot (Onboard RAM not acceptable)			
Hard Disk	512 GB m.2 SSD or Higher			
Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 5 hours backup			

Ports	USB - 3 Nos or higher, with atleast one type C USB, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker. (If VGA Port is not given, converter for converting from HDMI/Display Port to VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-011	14" Laptop with AMD Ryzen 3 Processor	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14" inches LED Backlit			
Processor	AMD Ryzen 3 - 4300U or better			
Memory	8 GB DDR4 SDRAM (2666 MHz) - expandable upto 16 GB with minimum 1 free slot (Onboard RAM not acceptable)			
Hard Disk	1 TB SATA HDD, 5400 RPM or higher			
Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 5 hours backup			
Ports	USB - 3 Nos., or higher with atleast one 3.0, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker.(If VGA Port is not given, converter for converting from HDMI/Display Port to VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a or higher			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			

Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-012	14" Laptop with AMD Ryzen 5 Processor	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14" inches LED Backlit			
Processor	AMD Ryzen 5 - 4650 U or better			
Memory	8 GB DDR4 SDRAM (2666 MHz) - expandable upto 16 GB with minimum 1 free slot (Onboard RAM not acceptable)			
Hard Disk	1TB, 5400 RPM or higher			
Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 5 hours backup			
Ports	USB - 3 Nos., or higher with atleast one 3.0, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker. (If VGA Port is not given, converter for converting from HDMI/Display Port to VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a or higher			
Bluetooth	Bluetooth 4.1 or above			

Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-013	14" Laptop with AMD Ryzen 7 Processor	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14" inches LED Backlit			
Processor	AMD Ryzen 7 - 7570 U or better			
Memory	16 GB DDR4 SDRAM (2666 MHz) - expandable upto 16 GB with minimum 1 free slot (Onboard RAM not acceptable)			
Hard Disk	1TB, 5400 RPM or higher			

Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 5 hours backup			
Ports	USB - 3 Nos., or higher with atleast one 3.0, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker.(If VGA Port is not given, converter for converting from HDMI/Display Port to VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a or higher			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-014	Light weight Laptop with i5 G series Processor	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	14" inches or higher LED Backlit - FullHD Display with Touch Screen			
Processor	Intel® Core™ i5-1135 G7 processor or better			
Memory	8 GB DDR4 SDRAM (2666 MHz) - expandable upto 16 GB with minimum 1 free slot (Onboard RAM not acceptable)			
Hard Disk	256 GB SSD or Higher			
Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 9 hours backup			
Weight	Less than 1.25 Kg including battery			
Ports	USB - 3 Nos., or higher with atleast one 3.0, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker.(If VGA Port is not given, converter for converting from HDMI/Display Port to VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a or higher			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			

Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-015	15.6" Laptop with i3 G series Processor, SSD	1 No

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	15.6" inches or higher LED Backlit - FullHD Display with Touch Screen			
Processor	Intel® Core™ i3-1115 G4 processor or better			
Memory	8 GB DDR4 SDRAM (2666 MHz) - expandable upto 16 GB with minimum 1 free slot (Onboard RAM not acceptable)			
Hard Disk	256 GB SSD or Higher			

Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 9 hours backup			
Ports	USB - 3 Nos., or higher with atleast one 3.0, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker.(If VGA Port is not given, converter for converting from HDMI/Display Port to VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a or higher			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-016	15.6" Laptop with i5 G series Processor, SSD	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	15.6" LED Backlit			
Processor	Intel Core™ i5-1115 G4 Processor or better			
Memory	8 GB DDR4 SDRAM (2666 MHz) - expandable upto 16 GB with minimum 1 free slot (Onboard RAM not acceptable)			
Hard Disk	256 GB SSD or Higher			
Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 5 hours backup			
Ports	USB - 3 Nos., or higher with atleast one 3.0, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker.(If VGA Port is not given, converter for converting from HDMI/Display Port to VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a or higher			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			

Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-017	15.6" Laptop with i7 G series Processor, FHD, SSDwith 16GB	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	15.6" FHD (1920 x 1080 or higher) LED Backlit			
Processor	Intel® Core™ i7-1165 G7 Processor or higher			
Memory	16 GB DDR4 SDRAM (2666 MHz) - expandable upto 64 GB with minimum 1 free slot (Onboard RAM not acceptable)			
Hard Disk	256GB SSD or Higher			
Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 5 hours backup			
Ports	USB - 3 Nos., or higher with atleast one 3.0, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker.(If VGA Port is not given, converter for converting from HDMI/Display Port to VGA is to be provided)			
Wireless	WiFi 802.11 b/g/n/a or higher			

Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-018	Convertible 360 Degree Laptop - i5 G series Processor, SSD	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Type	The device should be capable of working in tablet mode on rotating the screen 360 degrees.Device should be foldable to the keyboard and work in a tablet mode			
Display	13.3"/14 inches LED Backlit			
Processor	Intel® Core™ i5-1135 G7 processor or better			
Memory	16 GB DDR4 SDRAM (2666 MHz)			

Hard Disk	256 GB SSD or Higher			
Battery Life	Standard Rechargeable detachable Li-Ion (40 WHr) battery with minimum 5 hours backup			
Weight	Less than 1.7 Kg including battery			
Ports	USB - 3 Nos or higher, with atleast one type C USB, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker. (If VGA Port is not given, HDMI / Mini Display / Display Port to VGA convertor to be provided. If RJ45 port is not given, USB to Ethernet convertor to be provided.)			
Wireless	WiFi 802.11 b/g/n/a or higher			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			
Key Board	Spill resistance Keyboard with Integrated Touch Pad			
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).			
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC			
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.			
Operating System	Pre-loaded with BOSS Linux			

Code	Item Description	Qty
33450-B15-019	2 in 1 (Detachable) Laptop with i5 G series Processor, SSD	**1 No**

Parameter	Specification	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Type	The Laptop should be capable of working in detachable mode upon removing keyboard. Device should work in tablet mode.			
Display	12.3" /13" inches LED Backlit			
Processor	Intel® Core™ i5-1130 G7 processor or better			
Memory	16 B DDR4/LPDDR3 SDRAM-2666 MHz or higher			
Hard Disk	256 GB SSD or Higher			
Battery Life	Standard Rechargeable detachable Li-Ion (35 WHr) battery with minimum 5 hours backup			
Weight	Tablet - Less than 900g Keyboard - Less than 400g			
Ports	USB - 3 Nos or higher, with atleast one type C USB, RJ45, VGA, HDMI / Mini Display / Display Port, Mic, Speaker. (If VGA Port is not given, HDMI / Mini Display / Display Port to VGA convertor to be provided. If RJ45 port is not given, USB to Ethernet convertor to be provided.)			
Wireless	WiFi 802.11 b/g/n/a or higher			
Bluetooth	Bluetooth 4.1 or above			
Web Cam	720p or Higher			
OS Compliance by OEM	Windows & Linux			

Key Board	Spill resistance Keyboard with Integrated Touch Pad
Accessories	Battery Charger cum Power Adapter (3 pin plug and 3 pin socket, Good quality Carry Case (Sample subject to ELCOT's approval).
Certifications	Hazardous – RoHS, Energy efficient - Energy star, Safety – BIS, Environment – EPEAT/ETDC
Operating Temperature	Operating Temperature – 0º- 45ºC, AC power adaptor – Input 170V- 270V, 40 HZ - 60 HZ.
Operating System	Pre-loaded with BOSS Linux

Code	Item Description	Qty
33450-B15-020	Surface Laptop with 256 GB SSD	**1 No**

Parameter	Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	13.5" PixelSense™ Display			
Resolution	2256 x 1504			
Processor	Quad Core 11th Gen Intel® Core™ i5-1135G7 processor			
Memory	16GB LPDDR4x RAM			
Storage	256GB SSD			
Camera	720p HD f2.0 camera (front-facing)			
Graphics	Quad Core 11th Gen Intel® Core™: Intel® Iris® Xe Graphics			

WiFi	WiFi 6: 802.11ax compatible			
Bluetooth	Bluetooth® Wireless 5.0 technology			
Battery Life	Up to 17 hours of battery life (for typical device usage)			
Operating System	Windows 10 Pro			

Code	Item Description	Qty
33450-B15-021	Surface Laptop with 512 GB SSD	**1 No**

Parameter	Specifications	As Per Brochure	Bidders Offer	Bidder Compliance (Yes/No)
Display	13.5" PixelSense™ Display			
Resolution	2256 x 1504			
Processor	Quad Core 11th Intel® Core™ i7-1185G7 processor			
Memory	16GB LPDDR4x RAM			
Storage	512GB SSD			
Camera	720p HD f2.0 camera (front-facing)			
Graphics	Quad Core 11th Gen Intel® Core™: Intel® Iris® Xe Graphics			
WiFi	WiFi 6: 802.11ax compatible			
Bluetooth	Bluetooth® Wireless 5.0 technology			
Battery Life	Up to 17 hours of battery life (for typical device usage)[1]			
Operating System	Windows 10 Pro			

A1.6 Undertaking for Certificate of Registration as per GFR Rule

Ref: Date:

To
The Managing Director,
Electronics Corporation of Tamil Nadu Ltd,
MHU Complex, II Floor,
692, Anna Salai,
Nandanam,Chennai-600 035.

Dear Sir,

Sub:Tender for Supply, Installation and commissioning of **Microsoft Software, Anti-Virus, Computer Stationery, IT Consumables, Apple Products, Server & related items, Biometric Systems, SSL, Digital Signature certificates, Cisco or Equivalent Products, Linux Products, Information Kiosks, High End Plotters & Scanners, IP Camera, Firewall & Laptop** to Government Departments on Rate Contract basis– Declaration Letter – Regarding.

Ref: Tender Reference **ELCOT/Proc/OT/33450/ Tender-Group B/2021-22**
I/We, < Bidder > have read the clause regarding restrictions on procurement from a Bidder which shares a land border with India.

I/We hereby certify that I/We, <Bidder >is not from any such country or, if from such a Country, has been registered with Competent Authority.

I/We hereby certify that I/We in the event of becoming a successful bidder shall not sub-contract works to any Contractor from a Country which shares a land border with India unless such Contractor is registered with the Competent Authority, as defined vide APPENDIX 7 of the tender document.

I/We hereby certify that I/We fulfil all requirements in this regard and eligible to be considered

For <Bidder>

Authorised signature:

Name of the authorised person:

Designation:

Name of Bidder

Stamp of bidder

NOTE: 1. Letter should be submitted on the Letter head of the BIDDER and should be signed by the Authorised Signatory.

2. Any deviation would lead to summary rejection of bids.

3. Wherever Applicable, valid Registrationcertificate obtained from the Competent Authority shall be attached.

A1.7	Declaration

I/We agree that the offer shall remain open for acceptance for a minimum period as stipulated in the Tender from the date of opening of the tender and thereafter until it is withdrawn by us by notice in writing duly addressed to the authority of opening the tender and sent by registered post with acknowledgement due or otherwise delivered at the office of the authority. The EMD amount shall not bear any interest and shall be liable to be forfeited to ELCOT should I/We fail to abide by the stipulations to keep the offer open for a period mentioned above or fail to sign and complete the contract document as required by ELCOT and furnish the Security Deposit as specified in the terms and conditions of the contract. The EMD amount may be adjusted towards SD or refunded to me/us unless the same or any part thereof has been forfeited as aforesaid.

I/We agree to adhere with the schedule of implementation and deliver the items as specified in the tender.

I/We declare that the Price bid has been submitted without any conditions and strictly as per the Terms and Conditions of the tender document and I/We am/are aware that the Price bid is liable to be rejected if it contains any other conditions.

I/We declare that the information furnished in the tender is true to the best of my/our knowledge. If any false/fictitious information is found I/We agree to the rejection of the bids and consequence action.

	Annexure-2 PRICE BID – B2.1 to B2.15 with Warranty						

A2.1	Price Bid – Category B1 – Microsoft Software						
S.N	Product Code	Description	Quantity/ Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B1-001	Office Standard 2019	1 no				
2	33450-B1-002	Office Professional Plus 2019	1 no				
3	33450-B1-003	Office 365 E1	1 no				
4	33450-B1-004	Office 365 E3	1 no				
5	33450-B1-005	Exchange Online Kiosk	1 no				
6	33450-B1-006	Exchange Online (Plan 1)	1 no				
7	33450-B1-007	Exchange Online (Plan 2)	1 no				
8	33450-B1-008	Exchange Online Archiving for Exchange Online	1 no				
9	33450-B1-009	Exchange Online Protection	1 no				
10	33450-B1-010	Microsoft 365 Apps for enterprise	1 no				
11	33450-B1-011	Microsoft 365 Business Standard	1 no				
12	33450-B1-012	Microsoft 365 Apps for business	1 no				
13	33450-B1-013	M365 F1	1 no				

14	33450-B1-014	Power BI Pro	1 no				
15	33450-B1-015	Power BI Premium P1	1 no				
16	33450-B1-016	Power BI Premium P3	1 no				
17	33450-B1-017	Power BI Premium P5	1 no				
18	33450-B1-018	Project Plan 3	1 no				
19	33450-B1-019	Project Plan 5	1 no				
20	33450-B1-020	Project Online Essentials	1 no				
21	33450-B1-021	SQL Server 2019 Enterprise Core - 2 Core License Pack	1 no				
22	33450-B1-022	SQL Server 2019 Standard Core - 2 Core License Pack	1 no				
23	33450-B1-023	SQL Server 2019 Standard Edition	1 no				
24	33450-B1-024	SQL Server 2019 - 1 Device CAL	1 no				
25	33450-B1-025	Windows Server 2019 Remote Desktop Server CAL - 1 Device CAL	1 no				
26	33450-B1-026	Windows Server 2019 Remote Desktop Services External Connector	1 no				
27	33450-B1-027	Windows Server 2019 External Connector	1 no				
28	33450-B1-028	Windows Server 2019 Datacenter Core - 16 Core License Pack	1 no				

29	33450-B1-029	Windows Server 2019 Datacenter Core - 2 Core License Pack	1 no					
30	33450-B1-030	Windows Server 2019 Standard - 16 Core License Pack	1 no					
31	33450-B1-031	Windows Server 2019 Standard - 2 Core License Pack	1 no					
32	33450-B1-032	Windows Server 2019 Client Access License - 1 Device CAL	1 no					
33	33450-B1-033	Available in AZURE pricelist and filter the Meter Category column to Visual Studio	1 no					
34	33450-B1-034	Windows GGWA - Windows 10 Professional	1 no					
35	33450-B1-035	Visual Studio Professional 2019	1 no					
36	33450-B1-036	Dynamics 365 Team Members	1 no					
37	33450-B1-037	Azure Monetary Commitment	1 no					
		Total						

Note:

1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**

2) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.2   **Price Bid – Category B2- Anti-Virus**

S.N	Product Code	Description	Quantity/Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B2-001	Anti Virus for Desktop and laptop-Single User-One Year Subscription	1 no				
2	33450-B2-002	Anti Virus for Desktop and LaptopSingle User-Three Year Subscription	1 no				
3	33450-B2-003	Anti Virus for Desktop and LaptopThree User-one Year Subscription	1 no				
4	33450-B2-004	Anti Virus for Desktop and Laptop Three User Three Year Subscription	1 no				
5	33450-B2-005	Anti Virus for Desktop and Laptop Five User One Year Subscription	1 no				

6	33450-B2-006	Anti Virus for Desktop and Laptop Five User Three Year Subscription	1 no				
7	33450-B2-007	Anti Virus for Desktop and Laptop Ten User One Year Subscription	1 no				
8	33450-B2-008	Anti Virus for Desktop and Laptop Ten User Three Year Subscription	1 no				
9	33450-B2-009	Anti Virus for Desktop and Laptop Total Security-Single User-One Year Subscription	1 no				
10	33450-B2-010	Anti Virus for Desktop and Laptop Total Security-Single User-Three Year Subscription	1 no				
11	33450-B2-011	Anti Virus for Desktop and Laptop Total Security-Two User-One Year Subscription	1 no				
12	33450-B2-012	Anti Virus for Desktop and Laptop Total Security-Two User-Three Year Subscription	1 no				
13	33450-B2-013	Anti Virus for Desktop and Laptop Total Security-Three User-One Year Subscription	1 no				

14	33450-B2-014	Anti Virus for Desktop and Laptop Total Security-Three User-Three Year Subscription	1 no				
15	33450-B2-015	Anti Virus for Desktop and Laptop Total Security-Five User-One Year Subscription	1 no				
16	33450-B2-016	Anti Virus for Desktop and Laptop Total Security-Five User-Three Year Subscription	1 no				
17	33450-B2-017	Anti Virus for Desktop and Laptop Total Security-Ten User-One Year Subscription	1 no				
18	33450-B2-018	Anti Virus for Desktop and Laptop Total Security-Ten User-ThreeYear Subscription	1 no				
		End Point Security					
19	33450-B2-019	End point Security Business - Single User-One Year Subscription	1 no				
20	33450-B2-020	End point Security Business - Single User-Three Year Subscription	1 no				

21	33450-B2-021	End point Security Business -Five User-One Year Subscription	1 no				
22	33450-B2-022	End point Security Business -Five User-Three Year Subscription	1 no				
23	33450-B2-023	End point Security Business -Ten User-One Year Subscription	1 no				
24	33450-B2-024	End point Security Business - Ten User-Three Year Subscription	1 no				
25	33450-B2-025	End point Security Business - Fifty User-One Year Subscription	1 no				
26	33450-B2-026	End point Security Business - Fifty User-Three Year Subscription	1 no				
27	33450-B2-027	End point Security Business - Hundred user -One Year Subscription	1 no				
28	33450-B2-028	End point Security Business - Hundred user - Three Year Subscription	1 no				
29	33450-B2-029	End point Security Total -Single User-One Year Subscription	1 no				
30	33450-B2-030	End point Security Total -Single User-Three Year Subscription	1 no				

31	33450-B2-031	End point Security Total -Five User-One Year Subscription	1 no				
32	33450-B2-032	End point Security Total -Five User-Three Year Subscription	1 no				
33	33450-B2-033	End point Security Total -Ten User-One Year Subscription	1 no				
34	33450-B2-034	End point Security Total -Ten User-Three Year Subscription	1 no				
35	33450-B2-035	End point Security Total -Fifty User-One Year Subscription	1 no				
36	33450-B2-036	End point Security Total -Fifty User-Three Year Subscription	1 no				
37	33450-B2-037	End point Security Total - Hundred User-One Year Subscription	1 no				
38	33450-B2-038	End point Security Total - Hundred User Three Year Subscription	1 no				
39	33450-B2-039	End point Security Enterprise Suite -Single User-One Year Subscription	1 no				
40	33450-B2-040	End point Security Enterprise Suite -Single User-Three Year Subscription	1 no				

41	33450-B2-041	End point Security Enterprise Suite -Five User-One Year Subscription	1 no				
42	33450-B2-042	End point Security Total -Five User-Three Year Subscription	1 no				
43	33450-B2-043	End point Security Enterprise Suite -Ten User - One Year Subscription	1 no				
44	33450-B2-044	End point Security Enterprise Suite -Ten User-Three Year Subscription	1 no				
45	33450-B2-045	End point Security Enterprise Suite -Fifty User One Year Subscription	1 no				
46	33450-B2-046	End point Security Total -Fifty User-Three Year Subscription	1 no				
47	33450-B2-047	End point Security Total - Hundred User-One Year Subscription	1 no				
48	33450-B2-048	End point Security Total - Hundred User-Three Year Subscription	1 no				
		Total					

Note:

1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**

2) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.3 Price Bid – Category B3 –Computer Stationery

S.N	Product Code	Description	Quantity/Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B3-001	10" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
2	33450-B3-002	10" x 12"x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
3	33450-B3-003	10" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
4	33450-B3-004	11" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 os.)	1 no				
5	33450-B3-005	11" x 12"x 1 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
6	33450-B3-006	11" x 12"x 2 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				

7	33450-B3-007	11" x 12"x 3 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
8	33450-B3-008	11" x 12"x 4 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
9	33450-B3-009	11" x 12"x 1 70 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
10	33450-B3-010	11" x 12 "x 2 70 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
11	33450-B3-011	11" x 12"x 3 70 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
12	33450-B3-012	11" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
13	33450-B3-013	11" x 12 "x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
14	33450-B3-014	11" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
15	33450-B3-015	12" x 12"x 1 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
16	33450-B3-016	12" x 12"x 2 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				

17	33450-B3-017	12" x 12"x 3 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
18	33450-B3-018	12" x 12"x 4 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
19	33450-B3-019	12" x 12"x 1 70 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
20	33450-B3-020	12" x 12"x 2 70 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
21	33450-B3-021	12" x 12"x 3 70 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
22	33450-B3-022	12" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
23	33450-B3-023	12" x 12"x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
24	33450-B3-024	12" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
25	33450-B3-025	15" x 12"x 1 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
26	33450-B3-026	15" x 12"x 2 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
27	33450-B3-027	15" x 12"x 3 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				

28	33450-B3-028	15" x 12"x 4 60 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
29	33450-B3-029	15" x 12"x 1 70 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
30	33450-B3-030	15" x 12"x 2 70 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
31	33450-B3-031	15" x 12"x 3 70 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
32	33450-B3-032	15" x 12"x 1 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
33	33450-B3-033	15" x 12"x 2 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
34	33450-B3-034	15" x 12"x 3 80 GSM Cream Wove (1 Unit = 1000 Nos.)	1 no				
35	33450-B3-035	Single colour single side printing (1 Unit = 1000 Nos.)	1 no				
36	33450-B3-036	With One serial number in one page (1 Unit = 1000 Nos. of sheets)	1 no				
37	33450-B3-037	70 GSM Copier Paper - (A4 Size) (1 Ream - 500 Nos.of	1 no				

		sheets)					
38	33450-B3-038	75 GSM Copier Paper - (A4 Size) (1 Ream - 500 Nos. of sheets)	1 no				
39	33450-B3-039	80 GSM Copier Paper - (A3 Size) (1 Ream - 500 Nos.of sheets)	1 no				
40	33450-B3-040	80 GSM Copier Paper - (A4 Size) (1 Ream - 500 Nos. of sheets)	1 no				
41	33450-B3-041	80 GSM Copier Paper - (Legal Size) (1 Ream - 500 Nos. of sheets)	1 no				
42	33450-B3-042	White Window Covers size 11.5 X 26.5 cm, with ELCOT Logo & Address	1 no				
43	33450-B3-043	Brown Craft Covers - size 26.5 X 31 cm, with ELCOT Logo & Address	1 no				

44	33450-B3-044	Brown Craft Covers - size 43.5 X 29 cm, with ELCOT Logo & Address	1 no				
45	33450-B3-045	Covers:- Brown Craft Covers - size 30 X 12.5 cm, 11.5" X 4.75" with ELCOT Logo & Address	1 no				
46	33450-B3-046	Cloth Covers - size 37 X 28 cm, with ELCOT Logo & Address	1 no				
47	33450-B3-047	Cloth Covers - size 30 X 25 cm, with ELCOT Logo & Address	1 no				
48	33450-B3-048	Continuation sheet (Executive Bond Paper) (100 sheets in each pad)	1 no				
49	33450-B3-049	Scribbling pad – size 21.5 X 13 cm (20 sheets per pad) with ELCOT Logo in the top of the right corner in each sheet and in the front cover.	1 no				

50	33450-B3-050	Voucher pads - size 22 X 14 cm, with ELCOT Logo in the top of the right corner in each sheet and in the front cover. (100 sheets in each pad)	1 no				
51	33450-B3-051	Leave Application Form size 22 x 14cm (100 sheets in each pad)	1 no				
52	33450-B3-052	ON Duty Slip 18 x 13cm (100 Sheets in each pad)	1 no				
53	33450-B3-053	Visitors pass (22 X 14 cm)	1 no				
54	33450-B3-054	Telephone Message 18 x 13cm (100 Sheets in each pad)	1 no				
55	33450-B3-055	CPL /OT Form size 22 x 14cm (100 sheets in each pad)	1 no				
56	33450-B3-056	Vehicle Requisition Form size 22 x 14cm (100 sheets in each pad)	1 no				
57	33450-B3-057	Permission Slip size 22 x 14cm (100 sheets in each pad)	1 no				
58	33450-B3-058	Petrol Coupon of size 22 x 14cm (100 sheets in each pad) (Colour)	1 no				

59	33450-B3-059	A4 size MD's letter heads multi colour printing with logo for Plastic Pollution Free, Tamil Nadu, Executive Bond 100 GSM Paper (100 sheets in each pad)	1 no				
60	33450-B3-060	A4 size letter heads with Logo for Plastic Pollution Free Tamil Nadu (Executive Bond Paper) (100 sheets in each pad)	1 no				
61	33450-B3-061	Synthetic Visiting Cards (Executive Double Colour)	1 no				
62	33450-B3-062	ELCOT Brown Folder with tag (Procurement) with Printing	1 no				
63	33450-B3-063	ELCOT Folder with Printing (Legal Size)	1 no				
64	33450-B3-064	ELCOT Folder with Printing (A4 Size)	1 no				
65	33450-B3-065	Office Tag File with printing	1 no				
66	33450-B3-066	Urgent / Ordinary Pad	1 no				
67	33450-B3-067	Preprinted OP Slip 120 GSM Parchment paper with Logo 3"X4"x1 slip- (1 Unit = 500 slips)	1 no				

68	33450-B3-068	Preprinted OP case Record 80 GSM TNPL paper with Logo 9"X8"x1 part - (1 Unit = 500 Nos)	1 no				
69	33450-B3-069	Preprinted Lab Report 80 GSM TNPL paper with Logo 9"X8"x1 part - (1 Unit = 500 Nos)	1 no				
		Grand Total					

Note:
1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**
2) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.4   Price Bid – Category B4 –IT Consumables

S.N	Product Code	Description	Quantity /Unit	Basic Unit Price for OEM products in Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)	Basic Unit Price for Compatible Toner	GST in % for Col no.9	Basic Unit Price for Refilling of Toners	GST in % for Col no.11
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	33450-B4-001	Toner for (KYOCERA FS 6525/ FS 6530) - TK-479	1 no								
2	33450-B4-002	Drum Kit for (KYOCERA FS 6525/ FS 6530) - MK-479	1 no								
3	33450-B4-003	Fixing Kit for (KYOCERA FS 6525/ FS 6530) - FK-475	1 no								
4	33450-B4-004	DP HINGE for (KYOCERA FS 6525/ FS6530/ FS 8525) - LEFT HINGE	1 no								
5	33450-B4-005	DP BASE for (KYOCERA FS 6525/ FS6530/ FS 8525) - BASE DP	1 no								

6	33450-B4-006	Power Supply PCB for (KYOCERA FS 6525/ FS6530) - PART LOW VOLTAGE PCB 230V	1 no								
7	33450-B4-007	Power Supply Sub board (KYOCERA FS 6525/ FS 6530) - PART LOW SUB VOLTAGE PCB 230	1 no								
8	33450-B4-008	Toner Cartridge for (KYOCERA TASKalfa 1800/ 1801) - TK-4109	1 no								
9	33450-B4-009	Drum Kit for (KYOCERA TASKalfa 1800/ 1801) - MK-4105	1 no								
10	33450-B4-010	Fixing Kit for (KYOCERA TASKalfa 1800/ 1801) - FK-4105	1 no								
11	33450-B4-011	Black Toner for (KYOCERA TASKalfa 2551ci) - TK-8329K	1 no								
12	33450-B4-012	Yellow Toner for (KYOCERA TASKalfa 2551ci) - TK-8329Y	1 no								
13	33450-B4-013	Magenta Toner for (KYOCERA TASKalfa 2551ci) - TK-8329M	1 no								

14	33450-B4-014	Cyan Toner for (KYOCERA TASKalfa 2551ci) - TK-8329C	1 no								
15	33450-B4-015	Black Drum Kit for (KYOCERA TASKalfa 2551ci) - Maintenance kit MK-8325A	1 no								
16	33450-B4-016	Colour Drum Kit for (KYOCERA TASKalfa 2551ci) - Maintenance kit MK-8325B	1 no								
17	33450-B4-017	Toner Cartridge for (KYOCERA ECOSYS M4125idn/ M4132idn) - TK-6110	1 no								
18	33450-B4-018	Drum kit for (KYOCERA ECOSYS M4125idn/ M4132idn) - Maintenance kit MK-6119	1 no								
19	33450-B4-019	Fixing Kit for (KYOCERA ECOSYS M4125idn/ M4132idn) - FK-6115	1 no								
20	33450-B4-020	DP HINGE for (KYOCERA ECOSYS M4125idn/ M4132idn) - LEFT HINGE	1 no								

21	33450-B4-021	DP BASE for (KYOCERA ECOSYS M4125idn/ M4132idn) - BASE DP	1 no									
22	33450-B4-022	Toner Cartridge for (KYOCERA TASKalfa 3212i) - TK-7120	1 no									
23	33450-B4-023	Toner Cartridge for (KYOCERA TASKalfa 4012i) - TK-7220	1 no									
24	33450-B4-024	Drum kit for (KYOCERA TASKalfa 3212i/ 4012i) - Maintenance kit MK-7125	1 no									
25	33450-B4-025	Wireless Kit for (KYOCERA TASKalfa 3212i/ 4012i) - IB-36	1 no									
26	33450-B4-026	Fixing Kit for (KYOCERA TASKalfa 3212i/ 4012i) - FK-7125	1 no									
27	33450-B4-027	Developing Unit for (KYOCERA TASKalfa 3212i/ 4012i) - DV-7125	1 no									
28	33450-B4-028	Main Charge Roller (KYOCERA TASKalfa 3212i/ 4012i) - MC-7125	1 no									
29	33450-B4-029	Toner Cartridge for (KYOCERA TASKalfa	1 no									

		6002i/ 6003i/ 5002i/ 5003i) - TK-6329										
30	33450-B4-030	Drum Kit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - Maintenance kit MK-6335	1 no									
31	33450-B4-031	Fixing Kit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - FK-8560	1 no									
32	33450-B4-032	Transfer Unit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - TR-6500	1 no									
33	33450-B4-033	Developing Unit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - DV-8560K	1 no									
34	33450-B4-034	Wireless Kit for (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - IB-36	1 no									
35	33450-B4-035	Main Charge Roller (KYOCERA TASKalfa 6002i/ 6003i/ 5002i/ 5003i) - MC-8550	1 no									

36	33450-B4-036	Black Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110K	1 no									
37	33450-B4-037	Cyan Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110C	1 no									
38	33450-B4-038	Yellow Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110M	1 no									
39	33450-B4-039	Magenta Toner Cartridge for (KYOCERA ECOSYS M8124cidn) - TK-8110Y	1 no									
40	33450-B4-040	Black Drum Kit for (KYOCERA ECOSYS M8124cidn) - Maintenance kit MK-8115A	1 no									
41	33450-B4-041	Colour Drum Kit for (KYOCERA ECOSYS M8124cidn) - Maintenance kit MK-8115B	1 no									
42	33450-B4-042	Transfer Belt for (KYOCERA ECOSYS M8124cidn) - TR-8115A	1 no									
43	33450-B4-043	Fuser Unit for (KYOCERA ECOSYS M8124cidn) - FK-8115	1 no									

44	33450-B4-044	Developing Unit for (KYOCERA ECOSYS M8124cidn) - DV-8115K	1 no								
45	33450-B4-045	Black Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339K	1 no								
46	33450-B4-046	Cyan Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339C	1 no								
47	33450-B4-047	Yellow Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339M	1 no								
48	33450-B4-048	Magenta Toner Cartridge for (KYOCERA TASKalfa 3252ci) - TK-8339Y	1 no								
49	33450-B4-049	Black Drum Kit for (KYOCERA TASKalfa 3252ci) - Maintenance kit MK-8335A	1 no								
50	33450-B4-050	Colour Drum Kit for (KYOCERA TASKalfa 3252ci) - Maintenance kit MK-8335B	1 no								
51	33450-B4-051	Transfer Belt for (KYOCERA ECOSYS 3252ci) - TK-8550	1 no								

52	33450-B4-052	Fuser Unit for (KYOCERA ECOSYS 3252ci) - FK-8530	1 no							
53	33450-B4-053	Developing Unit for (KYOCERA ECOSYS 3252ci) - Maintenance kit MK-8335D	1 no							
54	33450-B4-054	Black Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529K	1 no							
55	33450-B4-055	Cyan Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529C	1 no							
56	33450-B4-056	Yellow Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529M	1 no							
57	33450-B4-057	Magenta Toner Cartridge for (KYOCERA TASKalfa 4052ci) - TK-8529Y	1 no							
58	33450-B4-058	Black Drum Kit for (KYOCERA TASKalfa 4052ci) - Maintenace kit MK-8515A	1 no							
59	33450-B4-059	Colour Drum Kit for (KYOCERA TASKalfa 4052ci) - Maintenace kit MK-8515B	1 no							

60	33450-B4-060	Transfer Belt for (KYOCERA TASKalfa 4052ci) - TR-8550	1 no							
61	33450-B4-061	Fuser Unit for (KYOCERA TASKalfa 4052ci) - FK-8550	1 no							
62	33450-B4-062	Developing Unit for (KYOCERA TASKalfa 4052ci) - DV-8560K	1 no							
63	33450-B4-063	Black Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349K	1 no							
64	33450-B4-064	Cyan Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349C	1 no							
65	33450-B4-065	Yellow Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349M	1 no							
66	33450-B4-066	Magenta Toner Cartridge for (KYOCERA TASKalfa 2552ci/ 2553ci) - TK-8349Y	1 no							
67	33450-B4-067	Black Drum Kit for (KYOCERA TASKalfa 2552ci/ 2553ci) - Maintenance kit MK-8335A	1 no							

68	33450-B4-068	Colour Drum Kit for (KYOCERA TASKalfa 2552ci/ 2553ci) - Maintenance kit MK-8335B	1 no									
69	33450-B4-069	Transfer Belt for (KYOCERA TASKalfa 2552ci/ 2553ci) - TR-8550	1 no									
70	33450-B4-070	Fuser Unit for (KYOCERA TASKalfa 2552ci/ 2553ci) - FK-8350	1 no									
71	33450-B4-071	Developing Unit for (KYOCERA TASKalfa 2552ci/ 2553ci) - Maintenance kit MK-8335D	1 no									
72	33450-B4-072	Black Toner for FS 8525ci - TK-899K	1 no									
73	33450-B4-073	Yellow Toner for FS 8525ci - TK-899C	1 no									
74	33450-B4-074	Magenta Toner for FS 8525ci - TK-899M	1 no									
75	33450-B4-075	Cyan Toner for FS 8525ci - TK-899Y	1 no									
76	33450-B4-076	Black Drum Kit for FS 8525ci - Maintenance kIt MK-896A	1 no									

77	33450-B4-077	Colour Drum Kit for FS 8525ci - Maintenance kIt MK-896B	1 no									
78	33450-B4-078	Transfer Belt for FS 8525ci - TR-896A	1 no									
79	33450-B4-079	Fuser Unit for FS 8525ci - FK-896	1 no									
80	33450-B4-080	Developing Unit for FS 8525ci - DV-896K	1 no									
81	33450-B4-081	Toner for Canon iR2006n/ iR 2004n/ iR2002n - NPG 59	1 no									
82	33450-B4-082	Drum Kit for Canon iR2006n/ iR 2004n/ iR2002n - NPG 59	1 no									
83	33450-B4-083	Toner for Canon iR 2525w/ iR 2520/ iR2530 - NPG 51	1 no									
84	33450-B4-084	Drum Kit for Canon iR 2525w/ iR 2520/ iR2530 - NPG 51	1 no									
85	33450-B4-085	Toner for Canon iR 2625/ iR 2630/ iR 2645 - NPG 84	1 no									
86	33450-B4-086	Drum Kit for Canon iR 2625/ iR 2630/ iR 2645 - NPG 84	1 no									

87	33450-B4-087	Black Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	1 no								
88	33450-B4-088	Cyan Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	1 no								
89	33450-B4-089	Yellow Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	1 no								
90	33450-B4-090	Magenta Toner for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	1 no								
91	33450-B4-091	Black Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	1 no								
92	33450-B4-092	Cyan Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	1 no								
93	33450-B4-093	Yellow Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	1 no								
94	33450-B4-094	Magenta Drum Kit for Canon iR c3020/ iR c3120/ iR c3525/ iR c3530 - NPG 67	1 no								

95	33450-B4-095	Black Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	1 no								
96	33450-B4-096	Cyan Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	1 no								
97	33450-B4-097	Yellow Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	1 no								
98	33450-B4-098	Magenta Toner for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	1 no								
99	33450-B4-099	Black Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	1 no								
100	33450-B4-100	Cyan Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	1 no								

101	33450-B4-101	Yellow Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	1 no								
102	33450-B4-102	Magenta Drum Kit for Canon iR adv c5560i/ iR adv c5550i/ iR adv c5540i/ iR adv c5535i - NPG 71	1 no								
103	33450-B4-103	Toner for Canon iR adv 6575i/ iR adv 6565i/ iR adv 6555i - NPG 54	1 no								
104	33450-B4-104	Drum Kit for Canon iR adv 6575i/iR adv 6565i/ iR adv 6555i - NPG 54	1 no								
105	33450-B4-105	Toner for Canon iR adv 4525/ iR adv 4535/ iR adv 4545/ iR adv 4551 - NPG 73	1 no								
106	33450-B4-106	Drum Kit for Canon iR adv4525/ iR adv 4535/ iR adv 4545/ iR adv 4551 - NPG 73	1 no								
107	33450-B4-107	Toner Cartridge for Canon 6230DN - 326	1 no								
108	33450-B4-108	Toner Cartridge for Canon MF246DN/ Canon LBP 151DW / Canon MF241D/	1 no								

		Canon MF237w - 337										
109	33450-B4-109	Toner Cartridge for Canon L170/ MF4720W/ MF4820D/ MF4750 - 328	1 no									
110	33450-B4-110	Toner Cartridge for Canon MF266DN/ Canon MF 269DN/ Canon LBP 161dn/ Canon LBP 162dw - 051	1 no									
111	33450-B4-111	Drum Cartridge for Canon MF266DN/ Canon MF 269DN/ Canon LBP 161dn/ Canon LBP 162dw - 051	1 no									
112	33450-B4-112	Toner Cartridge for Canon LBP 214DW - 052	1 no									
113	33450-B4-113	Black Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046	1 no									
114	33450-B4-114	Cyan Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046	1 no									
115	33450-B4-115	Magenta Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046	1 no									
116	33450-B4-116	Yellow Toner Cartridge for Canon LBP 654cx/ Canon MF735CX - 046	1 no									

117	33450-B4-117	Black Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045	1 no								
118	33450-B4-118	Cyan Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045	1 no								
119	33450-B4-119	Magenta Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045	1 no								
120	33450-B4-120	Yellow Toner Cartridge for Canon MF 631CN/ LBP 613cdw - 045	1 no								
121	33450-B4-121	Toner Cartridge for Canon LBP 8100N/ Canon LBP 8780CX - 333	1 no								
122	33450-B4-122	Black Toner Cartridge for Canon LBP 841 CDN - 333E	1 no								
123	33450-B4-123	Cyan Toner Cartridge for Canon LBP 841 CDN - 333E	1 no								
124	33450-B4-124	Magenta Toner Cartridge for Canon LBP 841 CDN - 333E	1 no								
125	33450-B4-125	Yellow Toner Cartridge for Canon LBP 841 CDN - 333E	1 no								
126	33450-B4-126	Black Toner Cartridge for Canon MF746CX - 055	1 no								

127	33450-B4-127	Cyan Toner Cartridge for Canon MF746CX - 055	1 no									
128	33450-B4-128	Magenta Toner Cartridge for Canon MF746CX - 055	1 no									
129	33450-B4-129	Yellow Toner Cartridge for Canon MF746CX - 055	1 no									
130	33450-B4-130	Toner Cartridge for Canon LBP 312x - 041	1 no									
131	33450-B4-131	Toner Cartridge for CanonLBP351x/ CanonLBP352x - 039	1 no									
132	33450-B4-132	Toner cartridge for digital copier Ricoh MP2014D / MP2014AD - 2014HS	1 no									
133	33450-B4-133	Toner cartridge for digital copier RICOH MP 2001SP / MP2501SP - 2501S	1 no									
134	33450-B4-134	Toner for Ricoh Aficio 2000L /2000LE/2020D Photo Copier - 1230D	1 no									
135	33450-B4-135	Toner Cartridges for Ricoh Aficio MP 3350 Photo Copier - 23230D	1 no									

136	33450-B4-136	Developer for digital copier Ricoh MP2014D / MP2014AD / MP 2001SP / MP2501SP / Aficio 2000L / Aficio 2000LE/ Aficio 2020D / Afficio MP 3350SP	1 no									
137	33450-B4-137	OPC Drum for digital copier Ricoh MP2014D / MP2014AD / MP 2001SP / MP2501SP / Aficio 2000L / Aficio 2000LE/ Aficio 2020D / Afficio MP 3350SP	1 no									
138	33450-B4-138	Hot Roller for digital copier Ricoh MP2014D / MP2014AD	1 no									
139	33450-B4-139	Hot Roller for digital copier RICOH MP 2001SP / MP2501SP	1 no									
140	33450-B4-140	Charge Roller for digital copier Ricoh MP2014D / MP2014AD / RICOH MP 2001SP / MP2501SP	1 no									
141	33450-B4-141	Cleaning blade for digital copier Ricoh MP2014D / MP2014AD	1 no									

142	33450-B4-142	Cleaning Blade for digital copier RICOH MP 2001SP / MP2501SP	1 no								
143	33450-B4-143	Photoconductor unit for digital copier RICOH MP 2001SP / MP2501SP	1 no								
144	33450-B4-144	Photoconductor Development unit for digital copier Ricoh MP2014D / MP2014AD	1 no								
145	33450-B4-145	Toner Cartridges for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	1 no								
146	33450-B4-146	Developer for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	1 no								
147	33450-B4-147	Drum for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	1 no								
148	33450-B4-148	Cleaning blade for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	1 no								
149	33450-B4-149	Fusing Unit for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	1 no								

150	33450-B4-150	Fusing Sleeve for Ricoh MP 4054 / MP 4055 / MP 5054 & MP5055	1 no								
151	33450-B4-151	Toner (black) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S Black	1 no								
152	33450-B4-152	Toner (cyan) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S cyan	1 no								
153	33450-B4-153	Toner (yellow) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S yellow	1 no								
154	33450-B4-154	Toner (magenta) cartridge RICOH MPC 2503SP / MPC 2504SP - MP 2503S Magenta	1 no								
155	33450-B4-155	Development Unit (black) cartridge RICOH MPC 2503SP / MPC 2504SP	1 no								
156	33450-B4-156	Development Unit (cyan) cartridge RICOH MPC 2503SP / MPC 2504SP	1 no								

157	33450-B4-157	Development Unit (yellow) cartridge RICOH MPC 2503SP / MPC 2504SP	1 no								
158	33450-B4-158	Development Unit (magenta) cartridge RICOH MPC 2503SP / MPC 2504SP	1 no								
159	33450-B4-159	Drum kit for RICOH MPC 2503SP / MPC 2504SP (K, C, Y & M)	1 no								
160	33450-B4-160	Toner for Ricoh Aficio MPC 2550 / MPC 2551Colour Photo Copier - C2551S Black	1 no								
161	33450-B4-161	Toner for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier - C2551S Cyan	1 no								
162	33450-B4-162	Toner for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier - C2551S Yellow	1 no								
163	33450-B4-163	Toner for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier - C2551S Magenta	1 no								
164	33450-B4-164	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551	1 no								

		Colour Photo Copier-Black									
165	33450-B4-165	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-yellow	1 no								
166	33450-B4-166	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Meganta	1 no								
167	33450-B4-167	Drum Kit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Cyan	1 no								
168	33450-B4-168	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Black	1 no								
169	33450-B4-169	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-yellow	1 no								
170	33450-B4-170	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-Magenta	1 no								
171	33450-B4-171	Development Unit for Ricoh Aficio MPC 2550 / MPC 2551 Colour Photo Copier-	1 no								

		Cyan									
172	33450-B4-172	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Black	1 no								
173	33450-B4-173	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Cyan	1 no								
174	33450-B4-174	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Yellow	1 no								
175	33450-B4-175	Toner for Ricoh Aficio MPC 3002 Colour Photo Copier - MP C3502S Magenta	1 no								
176	33450-B4-176	Drum Kit for Ricoh Aficio MPC 3002 Colour Photo Copier-Black	1 no								
177	33450-B4-177	Drum Kit for Ricoh Aficio MPC 3002 Colour Photo Copier-Cyan / Yellow / Magenta	1 no								
178	33450-B4-178	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Black	1 no								

179	33450-B4-179	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Cyan	1 no								
180	33450-B4-180	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Yellow	1 no								
181	33450-B4-181	Development Unit for Ricoh Aficio MPC 3002 Colour Photo Copier-Magenta	1 no								
182	33450-B4-182	Black Toner Cartridge for Samsung - ML 2161/SCX 3401/ML 2166W/SCX 3046W - Samsung MLT-D101S Black	1 no								
183	33450-B4-183	Black Toner Cartridge for Samsung - ML 1666/ML 1866/1676/SCX 3201 - Samsung MLT-D1043S	1 no								
184	33450-B4-184	Black Toner Cartridge for Samsung - ML 2951ND/XIP,SCX 4728FD,SCX 4728D / SCX 4701ND - Samsung MLT-D103S	1 no								

185	33450-B4-185	Black Toner Cartridge (High Yield) for Samsung - SL-M2071 / 2071W / 2071FW / SL-M2021 / 2021W / 2020W/ 2022W / 2070 / 2070W / 2078W - Samsung MLT-D111L H- Yield	1 no									
186	33450-B4-186	Black Toner Cartridge for Samsung - ML-3312ND, SCX-4835FR, SCX- 5639FR/SCX-5739FW,ML-3310ND,ML-3710ND , Black Toner Std	1 no									
187	33450-B4-187	Black Toner Cartridge for Samsung - SL-M3320ND/SL-M2820ND/SL-M4020ND/SL-M3370FD/SL-M3870FD - Samsung MLT- D203S	1 no									
188	33450-B4-188	Black Toner Cartridge (High Yield) for Samsung - ML 2830W, ML 2830DW - Samsung MLT-D115L H-Yield	1 no									

189	33450-B4-189	Black Toner Cartridge for (High Yield) Samsung - SL-M2626/SL-2826ND/SL-2876ND/SL-2876FD	1 no									
190	33450-B4-190	Black Toner Cartridge for Samsung - ML 2851ND	1 no									
191	33450-B4-191	Black Toner Cartridge for Samsung - ML 1610/ML-2010/ML-2571N - Samsung MLT- D119S	1 no									
192	33450-B4-192	Black Toner Cartridge for Samsung - 1911/ML 2581N/SCX-4601/SCX4623FH/FN/SF65 1P - Samsung MLT-D1053S	1 no									
193	33450-B4-193	Black Toner Cartridge for Samsung - ML 1640/ML 2240 SERIES - Samsung MLT- D108S	1 no									
194	33450-B4-194	Black Toner Cartridge for Samsung - SCX 4725/SCX-4021S/XIP,SCX-4321NS/XIP,SCX-4521FS/XIP,SCX	1 no									

		4521NS/XIP - Samsung SCX-D4725A									
195	33450-B4-195	Black Toner Cartridge (High Yield) Samsung - ML 2951ND/XIP,SCX 4728FD,SCX 4728D / SCX 4701ND - Samsung MLT-D103L H- Yield	1 no								
196	33450-B4-196	Black Toner Cartridge (High Yield) for Samsung - SL-K2200/K2200ND - Samsung MLT-D707L H-Yield	1 no								
197	33450-B4-197	Black Toner Cartridge for Samsung - S-IN- SCX 8128NA /XIP - Samsung MLT-D709S	1 no								
198	33450-B4-198	Black Toner Cartridge for Samsung - SL-K3250NR/XIP - Samsung MLT-D704S	1 no								
199	33450-B4-199	Black Toner Cartridge for Samsung - SL-K4350LX/XIP - Samsung MLT-D708S	1 no								

200	33450-B4-200	Black Toner Cartridge(High Yield) for Samsung - SL-K4350LX/XIP - Samsung MLT-D708L H-Yield	1 no									
201	33450-B4-201	Black Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT-K506S	1 no									
202	33450-B4-202	Cyan Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT-C506S	1 no									
203	33450-B4-203	Magenta Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT-M506S	1 no									
204	33450-B4-204	Yellow Toner Cartridge for Samsung - CLP 680 / CLX 6260 - Samsung CLT-Y506S	1 no									
205	33450-B4-205	Black Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT-K609S	1 no									

206	33450-B4-206	Yellow Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT-Y609S	1 no								
207	33450-B4-207	Cyan Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT-C609S	1 no								
208	33450-B4-208	Magenta Toner Cartridge for Samsung - CLP 770 ND/CLP 775ND - Samsung CLT- M609S	1 no								
209	33450-B4-209	Black Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-K406S	1 no								
210	33450-B4-210	Yellow Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-Y406S	1 no								
211	33450-B4-211	Magenta Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES -	1 no								

		Samsung CLT-M406S									
212	33450-B4-212	Cyan Toner Cartridge for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-C406S	1 no								
213	33450-B4-213	Black Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT- K409S	1 no								
214	33450-B4-214	Cyan Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT- C409S	1 no								
215	33450-B4-215	Magenta Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT- M409S	1 no								
216	33450-B4-216	Yellow Toner Cartridge for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT- Y409S	1 no								
217	33450-B4-217	Black Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung	1 no								

		CLT-K809S									
218	33450-B4-218	Yellow Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung CLT-Y809S	1 no								
219	33450-B4-219	Cyan Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung CLT-C809S	1 no								
220	33450-B4-220	Magenta Toner Cartridge for Samsung - SCX-8128NA/XIP - Samsung CLT-M809S	1 no								
221	33450-B4-221	Black Toner Cartridge for Samsung - SL-X3220NR/SL-X3280NR - Samsung CLT- K804S	1 no								
222	33450-B4-222	Cyan Toner Cartridge for Samsung - SL-X3220NR/SL-X3280NR - Samsung CLT- C804S	1 no								
223	33450-B4-223	Yellow Toner Cartridge for Samsung - SL-X3220NR/SL-X3280NR - Samsung CLT- Y804S	1 no								

224	33450-B4-224	Magenta Toner Cartridge for Samsung - SL-X3220NR/SL-X3280NR - Samsung CLT- M804S	1 no									
225	33450-B4-225	Imaging Unit for Samsung - SL-M2626/SL-2826ND/SL-2876ND/SL-2876FD	1 no									
226	33450-B4-226	Imaging Unit for Samsung - CLP-360/365/368 CLX-3300/3305 SERIES - Samsung CLT-R406	1 no									
227	33450-B4-227	Imaging Unit for Samsung - CLP - 310 /315 CLX - 3173 - Samsung CLT-R409	1 no									
228	33450-B4-228	Imaging Unit for Samsung - SL- K2200/K2200ND - Samsung MLT-R707	1 no									
229	33450-B4-229	Imaging Unit for Samsung - S-IN-SCX 8128NA /XIP , Imaging Unit - Samsung MLT -R709	1 no									

230	33450-B4-230	Imaging Unit for Samsung - SL- K3250NR/XIP - Samsung MLT-R704	1 no									
231	33450-B4-231	Imaging Unit for Samsung - SCX- 8128NA/XIP - Samsung CLT-R809	1 no									
232	33450-B4-232	Imaging Unit for Samsung - SL- X3220NR/XIP - Samsung CLT-R804	1 no									
233	33450-B4-233	Imaging Unit for Samsung - SL- K4350LX/XIP - Samsung MLT-R708	1 no									
234	33450-B4-234	Cyan Imaging Unit for Samsung - CLX- 9250ND/9350ND - Samsung CLT-R607C	1 no									
235	33450-B4-235	Black Imaging Unit for Samsung - CLX- 9250ND/9350ND - Samsung CLT-R607K	1 no									
236	33450-B4-236	Magenta Imaging Unit for Samsung - CLX- 9250ND/9350ND - Samsung CLT-R607M	1 no									

237	33450-B4-237	Yellow Imaging Unit for Samsung - CLX-9250ND/9350ND - Samsung CLT-R607Y	1 no								
238	33450-B4-238	WASTE TONER BOX for Samsung - SCX-8128NA/XIP, SCX-8123NA - Samsung MLT -W709	1 no								
239	33450-B4-239	Paper Transfer Belt for Samsung - CLP 620/CLP 670/CLX 6220 - Samsung CLT- T508	1 no								
240	33450-B4-240	Toner Collection Unit for Samsung - SL-X3220NR/XIP - Samsung CLT-W808	1 no								
241	33450-B4-241	Paper Transfer Belt for Samsung - CLP 610 ND / 660 / CLX 6210 / CLX 6240 - Samsung CLP-T660B	1 no								
242	33450-B4-242	Toner Collection Unit for Samsung - CLP-680ND/XIP - Samsung CLT-W506	1 no								

243	33450-B4-243	Ribbon Cartridge for Lipi Line Matrix Printer Model 6306/6215/6218 Yield - 4 Million Characters	1 no							
244	33450-B4-244	Ribbon Cartridge for LIPI Line matrix Printer Model - 6605/6610/6620/ 6805/6810/681/6820 Yield - 9000 Pages	1 no							
245	33450-B4-245	Ribbon Cartridge for LIPI Line matrix Printer Model - 6605/6610/6620/ 6805/6810/681/6820 Yield - 17000 Pages	1 no							
246	33450-B4-246	Ribbon Cartridge for LIPI Line matrix Printer Model RIBBON STANDARD OPEN PRINT HD 1 PACK 03H/06H/08H/HD –P-8000 HD Printer Yield – 18000 Pages	1 no							
247	33450-B4-247	Ribbon Cartridge for Lipi High Speed Dot matrix printer Model-T2155/T2170/T2265+/2280	1 no							

		+ Yield - 20 Million Characters									
248	33450-B4-248	Ribbon Cartridge for Lipi High Speed Dot matrix Printer Model T2610 – 5 Million Characters	1 no								
249	33450-B4-249	Ribbon Cartridge for Lipi High Speed Dot matrix printer Model- T2155/T2170/T2265+/2280+ -15 Million Characters	1 no								
250	33450-B4-250	Ribbon Cartridge for Lipi Pass Book Printer Model PB2	1 no								
251	33450-B4-251	Toner for Brother Printer - HL-L2321D, HL-L2361DN, HL-2366DW, DCP-L2520D, DCP-L2541DW, MFC-L2701D, MFC-2701DW, Model TN-2365, Yeild - 2500 Pages	1 no								

252	33450-B4-252	Drum for Brother Printer - HL-L2321D, HL-L2361DN, HL-2366DW, DCP-L2520D, DCP-L2541DW, MFC-L2701D, MFC-2701DW, Model DR-2365, Yeild - 12000 Pages	1 no									
253	33450-B4-253	Toner for Brother Printer - HL-L2351DW, DCP-L2531DW, Model TN-2465, Yeild -3000 Pages	1 no									
254	33450-B4-254	Toner for Brother Printer - HL-L2351DW, DCP-L2531DW, Model TN-2469, Yeild -4000 PGS	1 no									
255	33450-B4-255	Drum for Brother Printer - HL-L2351DW, DCP-L2531DW, Model DR-2465, Yeild -12000 Pages	1 no									
256	33450-B4-256	Toner for Brother Printer - HL-B2000D, HL-B2080DW, DCP-B7500D, DCP-B7535DW, MFC-B7715DW, Model TN-B021, Yeild -2600 Pages	1 no									

257	33450-B4-257	Drum for Brother Printer - HL-B2000D, HL-B2080DW, DCP-B7500D, DCP-B7535DW, MFC-B7715DW, Model DR-B021, Yeild -12000 Pages	1 no								
258	33450-B4-258	Toner for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model TN-3428, Yeild - 3000 Pages	1 no								
259	33450-B4-259	Toner for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model TN-3448, Yeild - 8000 PGS	1 no								
260	33450-B4-260	Toner for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model TN-3478, Yeild - 12000 PGS	1 no								

261	33450-B4-261	Drum for Brother Printer - HL-L5000D, HL-L5100DN, HL-L6200DW, DCP-L5600DN, MFC-L5900DW, Model DR-3455, Yeild - 30000 Pages	1 no								
262	33450-B4-262	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model TN-267BK, Yeild -3000 PGS	1 no								
263	33450-B4-263	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model TN-267C, Yeild -2300 PGS	1 no								
264	33450-B4-264	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model TN-267M, Yeild -2300 PGS	1 no								
265	33450-B4-265	Toner for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model TN-267Y, Yeild -2300 PGS	1 no								

266	33450-B4-266	Black Drum for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Yeild -30000 Pages	1 no								
267	33450-B4-267	Yellow Drum for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Composite Yeild - 18000 Pages Each	1 no								
268	33450-B4-268	Cyan Drum for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Yeild -18000 Pages Each	1 no								
269	33450-B4-269	Megenta for Brother Printer - HL-L3270CDW, DCP-L3551CDW, MFC-L3735CDW, Model DR-263CL, Yeild -18000 Pages Each	1 no								
270	33450-B4-270	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-	1 no								

		261BK, Yeild -2500 Pages									
271	33450-B4-271	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-261C, Yeild -1400 PGS	1 no								
272	33450-B4-272	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-261M, Yeild -1400 PGS	1 no								
273	33450-B4-273	Toner for Brother Printer - HL-3150CDN,MFC-9140CDW, Model TN-261Y, Yeild -1400 PGS	1 no								
274	33450-B4-274	Black Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each	1 no								
275	33450-B4-275	Cyan Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each	1 no								

276	33450-B4-276	Megenta Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each	1 no								
277	33450-B4-277	Yellow Drum for Brother Printer - HL-3150CDN,MFC-9140CDW, Model DR-261CL, Composite Yeild -15000 Pages Each	1 no								
278	33450-B4-278	Toner for Brother Printer - HL-5440D,HL-5450DN,MFC-8910DW, Model TN-3220, Yeild - 3000 Pages	1 no								
279	33450-B4-279	Toner for Brother Printer - HL-5440D,HL-5450DN,MFC-8910DW, Model TN-3350, Yeild - 8000 PGS	1 no								
280	33450-B4-280	Toner for Brother Printer - HL-5440D,HL-5450DN,MFC-8910DW, Model TN-3370, Yeild -	1 no								

		12000 PGS										
281	33450-B4-281	Toner for Brother Printer - FAX-2840, Model TN-2260, Yeild -1200 Pages	1 no									
282	33450-B4-282	Toner for Brother Printer - FAX-2840, Model TN-2280, Yeild -2600 PGS	1 no									
283	33450-B4-283	Drum for Brother Printer - FAX-2840, Model DR-2255, Yeild -12000 Pages	1 no									
284	33450-B4-284	Toner for Brother Printer - HL-1111,1201,1211w,1511,1514 ,1601,1811,1911,1616 Model TN-1020, Yeild -1500 PGS	1 no									
285	33450-B4-285	Drum for Brother Printer - HL-1111,,1201,1211w,1511,1514,1601,1811,1911,1616 Model DR-1020, Yeild -10000 PGS	1 no									
286	33450-B4-286	Black Ink for Epson Printer Model - M100 / M105,Yeild-6000 Pages	1 no									

287	33450-B4-287	Black Ink for Epson Printer Model - M1100, M1120, M1140, M1170, M1180, M2110, M2120, M2140, M2170, M3140, M3170, M3180 - Yeild-6000 Pages	1 no								
288	33450-B4-288	Black Ink for Epson Printer Model - L130 - Yeild-4500 pages	1 no								
289	33450-B4-289	Cyan Ink for Epson Printer Model - L130 - Yeild-7500 pages	1 no								
290	33450-B4-290	Megenta Ink for Epson Printer Model - L130 - Yeild-7500 pages	1 no								
291	33450-B4-291	Yellow Ink for Epson Printer Model - L130 - Yeild-7500 pages	1 no								
292	33450-B4-292	Black Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150, L3156, L5190 - Yeild-4500 pages	1 no								
293	33450-B4-293	Cyan Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150,	1 no								

		L3156, L5190 - Composite Yeild-7500 pages									
294	33450-B4-294	Megenta Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150, L3156, L5190 - Composite Yeild-7500 pages	1 no								
295	33450-B4-295	Yellow Ink for Epson Printer Model - L1110, L3110, L3115, L3116, L3150, L3156, L5190 - Composite Yeild-7500 pages	1 no								
296	33450-B4-296	Black Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Yeild-7500 pages	1 no								
297	33450-B4-297	Cyan Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Composite Yeild-6000 pages	1 no								
298	33450-B4-298	Megenta Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Composite Yeild-6000 pages	1 no								

299	33450-B4-299	Yellow Ink for Epson Printer Model - L4150, L4160, L6160, L6170, L6190, L14150,Composite Yeild-6000 pages	1 no								
300	33450-B4-300	Black Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Yeild-7500 pages	1 no								
301	33450-B4-301	Cyan Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Composite Yeild-6000 pages	1 no								
302	33450-B4-302	Megenta Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Composite Yeild-6000 pages	1 no								
303	33450-B4-303	Yellow Ink for Epson Printer Model - L6570, L6580, L15150, L15160,Composite Yeild-6000 pages	1 no								
304	33450-B4-304	Black Ink for Epson Printer Model - L1300,Yeild-7100 pages (A4)	1 no								

305	33450-B4-305	Cyan Ink for Epson Printer Model - L1300,Composite Yeild-5500 pages (A4)	1 no								
306	33450-B4-306	Megenta Ink for Epson Printer Model-L1300,Composite Yeild-5500 pages (A4)	1 no								
307	33450-B4-307	Yellow Ink for Epson Printer Model-L1300,Composite Yeild-5500 pages (A4)	1 no								
308	33450-B4-308	Black Ink for Epson Printer Model-L1455,Yeild-7500 pages (A4)	1 no								
309	33450-B4-309	Cyan Ink for Epson Printer Model-L1455,Composite Yeild-6000 pages (A4)	1 no								
310	33450-B4-310	Megenta Ink for Epson Printer Model-L1455,Composite Yeild-6000 pages (A4)	1 no								
311	33450-B4-311	Yellow Ink for Epson Printer Model-L1455,Composite Yeild-6000 pages (A4)	1 no								
312	33450-B4-312	Black Ink for Epson Printer Model-WF-M5298, WF-M5799,Yeild-XL Pack:	1 no								

		40,000 Pages										
313	33450-B4-313	Maintanence Box Ink Epson Printer Model-WF-M5298, WF-M5799	1 no									
314	33450-B4-314	Black Ink for Epson Printer Model-WF-C5790,Yeild-XL Pack: 10,000 Pages	1 no									
315	33450-B4-315	Cyan Ink for Epson Printer Model-WF-C5790,Composite Yeild-XL Pack: 5000 Pages	1 no									
316	33450-B4-316	Megenta Ink for Epson Printer Model-WF-C5790,Composite Yeild-XL Pack: 5000 Pages	1 no									
317	33450-B4-317	Yellow Ink for Epson Printer Model-WF-C5790,Composite Yeild-XL Pack: 5000 Pages	1 no									
318	33450-B4-318	Maintanence Box for Epson Printer Model-WF-C5790	1 no									
319	33450-B4-319	Black Ink for Epson Printer Model-WF-C579R,Yeild-50,000 pages	1 no									

320	33450-B4-320	CYan Ink for Epson Printer Model-WF-C579R,Composite Yeild-20,000 pages	1 no									
321	33450-B4-321	Megenta Ink for Epson Printer Model-WF-C579R,Composite Yeild-20,000 pages	1 no									
322	33450-B4-322	Yellow Ink for Epson Printer Model-WF-C579R,Composite Yeild-20,000 pages	1 no									
323	33450-B4-323	Maintanence Box for Epson Printer Model-WF-C579R	1 no									
324	33450-B4-324	Black Ink for Epson Printer Model-WF-C869R,Yeild-86,000 pages (A4)	1 no									
325	33450-B4-325	Cyan Ink for Epson Printer Model-WF-C869R,Composite Yeild-84,000 pages	1 no									
326	33450-B4-326	Megenta Ink for Epson Printer Model-WF-C869R,Composite Yeild-84,000 pages	1 no									

327	33450-B4-327	Yelow Ink for Epson Printer Model-WF-C869R,Composite Yeild-84,000 pages	1 no							
328	33450-B4-328	Maintanence Ink for Epson Printer Model-WF-C869R	1 no							
329	33450-B4-329	Black Ink for Epson Printer Model-WF-C878R, WF-C879R,Yeild-86,000 pages (A4)	1 no							
330	33450-B4-330	Cyan Ink for Epson Printer Model-WF-C878R, WF-C879R,Composite Yeild-20,000 pages	1 no							
331	33450-B4-331	Megenta Ink for Epson Printer Model-WF-C878R, WF-C879R,Composite Yeild-20,000 pages	1 no							
332	33450-B4-332	Yellow Ink for Epson Printer Model-WF-C878R, WF-C879R,Composite Yeild-20,000 pages	1 no							
333	33450-B4-333	Maintanence Boxfor Epson Printer Model-WF-C878R, WF-C879R	1 no							

334	33450-B4-334	Black Ink for Epson Printer Model-WF-M20590,Yeild-60,000 pages(A4) x 2 nos	1 no								
335	33450-B4-335	Cyan Ink for Epson Printer Model-WF-M20590,Composite Yeild-20,000 pages	1 no								
336	33450-B4-336	Megenta Ink for Epson Printer Model-WF-M20590,Composite Yeild-20,000 pages	1 no								
337	33450-B4-337	Yellow Ink for Epson Printer Model-WF-M20590,Composite Yeild-20,000 pages	1 no								
338	33450-B4-338	Maintanence Box for Epson Printer Model-WF-M20590	1 no								
339	33450-B4-339	Black Ink for Epson Printer Model-WF-C17590,Yeild-50,000 Pages(A4) x 2 nos	1 no								
340	33450-B4-340	Cyan Ink for Epson Printer Model-WF-C17590,Composite Yeild-50,000 Pages	1 no								

341	33450-B4-341	Megenta Ink for Epson Printer Model-WF-C17590,Composite Yeild-50,000 Pages	1 no								
342	33450-B4-342	Yellow Ink for Epson Printer Model-WF-C17590,Composite Yeild-50,000 Pages	1 no								
343	33450-B4-343	Maintanence Box for Epson Printer Model-WF-C17590	1 no								
344	33450-B4-344	Black Ink for Epson Printer Model-WF-C20590,Yeild-50,000 Pages(A4) x 2 nos	1 no								
345	33450-B4-345	Cyan Ink for Epson Printer Model-WF-C20590,Composite Yeild-50,000 Pages	1 no								
346	33450-B4-346	Megenta Ink for Epson Printer Model-WF-C20590,Composite Yeild-50,000 Pages	1 no								
347	33450-B4-347	Yellow Ink for Epson Printer Model-WF-C20590,Composite Yeild-50,000 Pages	1 no								

348	33450-B4-348	Maintanence Box for Epson Printer Model-WF-C20590	1 no								
349	33450-B4-349	Black Ink for Epson Printer Model-WF-C20600,Yeild-50,000 Pages(A4) x 2 nos	1 no								
350	33450-B4-350	Cyan Ink for Epson Printer Model-WF-C20600,Composite Yeild-50,000 Pages	1 no								
351	33450-B4-351	Megenta Ink for Epson Printer Model-WF-C20600,Composite Yeild-50,000 Pages	1 no								
352	33450-B4-352	Yellow Ink for Epson Printer Model-WF-C20600,Composite Yeild-50,000 Pages	1 no								
353	33450-B4-353	Maintanence Box for Epson Printer Model-WF-C20600	1 no								
354	33450-B4-354	Black Ink for Epson Printer Model-WF-C20750,Yeild-50,000 Pages(A4) x 2 nos	1 no								
355	33450-B4-355	Cyan Ink for Epson Printer Model-WF-C20750,Composite Yeild-	1 no								

		50,000 Pages										
356	33450-B4-356	Yellow Ink for Epson Printer Model-WF-C20750,Composite Yeild-50,000 Pages	1 no									
357	33450-B4-357	Megenta Ink for Epson Printer Model-WF-C20750,Composite Yeild-50,000 Pages	1 no									
358	33450-B4-358	Maintanence Box for Epson Printer Model-WF-C20750	1 no									
359	33450-B4-359	Black Ink for Epson Printer Model-WF-C21000,Yeild-50,000 Pages(A4) x 2 nos	1 no									
360	33450-B4-360	Cyan Ink for Epson Printer Model-WF-C21000,Composite Yeild-50,000 Pages	1 no									
361	33450-B4-361	Megenta Ink for Epson Printer Model-WF-C21000,Composite Yeild-50,000 Pages	1 no									
362	33450-B4-362	Yellow Ink for Epson Printer Model-WF-C21000,Composite Yeild-50,000 Pages	1 no									

363	33450-B4-363	Epson - Black Fabric Ribbon Cartridge (17.7 Metres) Ribbon Life - 3 Million Characters for printer-LX 310	1 no								
364	33450-B4-364	Epson - Black Fabric Ribbon Cartridge (17.7 Metres) Ribbon Life - 3 Million Characters for printer-LQ 310	1 no								
365	33450-B4-365	Epson - Black Fabric Ribbon Cartridge (16.75 Metres) Ribbon Life - 9 Million Characters for printer-DLQ-3000/3000+/3500	1 no								
366	33450-B4-366	Epson - Black – Fabric Ribbon Cartridge (17.0 Meters) Ribbon Life – 7.50 Million Characters for printer-FX-890/FX-890II/N	1 no								
367	33450-B4-367	Epson - Fabric Ribbon Cartridge (32 Metres) Ribbon Life - 12 Million Characters (14 dpc) for printer-FX-2175/FX-2175II/N	1 no								

368	33450-B4-368	Epson - Fabric Ribbon Cartridge (32 Metres) Ribbon Life - 12 Million Characters (14 dpc) for printer-FX-2190/FX-2190II/N	1 no									
369	33450-B4-369	Epson - Fabric Ribbon Cartridge, (70 Metres) Ribbon Life - 15 Million Characters (48 dpc) for printer-DFX-9000	1 no									
370	33450-B4-370	Epson - 24 Pin 1.3 cm / 1/2" Fabric Ribbon Cartridge (12.40 Metres/40.68 Feet) Ribbon Life - 2 Million Characters (48 dpc) for printer-LQ-670/N	1 no									
371	33450-B4-371	Epson - 24 Pin Narrow Fabric Ribbon Cartridge (10 Metres) Ribbon Life - 2.5 Million Characters (48 dpc) for printer-LQ-1310	1 no									
372	33450-B4-372	Epson - Fabric Ribbon Cartridge (32 Metres) Ribbon Life - 8 Million Characters (48 dpc) for	1 no									

		printer-LQ-2090/LQ-2090II/N										
373	33450-B4-373	Epson - Black - Ribbon Cartridge, (60 Metres) Ribbon Life - 8 Million Characters (48 dpc) for printer-LQ-2190	1 no									
374	33450-B4-374	Printronix P7 EC Ribbon Cartridges	1 no									
375	33450-B4-375	HP LaserJet Pro MFP M128fn,M128fw,M126nw, M226dw,M202dw,M1108, M1106 - HP CC388A Blk Contr LJ Toner Cartridge	1 no									
376	33450-B4-376	HP LaserJet ProMFP M138FNW,M136NW - HP 110A Blk Original Laser Toner Crtg	1 no									
377	33450-B4-377	HP LaserJet ProM403dn,M427fdw - HP 28A Black Original LaserJet Toner Cartridge	1 no									
378	33450-B4-378	HP LaserJet ProM429fdw,M405dn - HP 77A Black LaserJet Toner Cartridge	1 no									

379	33450-B4-379	HP LaserJet Pro M104a Printer - HP 18A Blk Contract LJ Toner Cartridge	1 no									
380	33450-B4-380	HP LaserJet Pro M104a Printer - HP 19A Original LaserJet Imaging Drum	1 no									
381	33450-B4-381	HP LaserJet Pro M203, M227 - HP 30A Black LaserJet Toner Cartridge	1 no									
382	33450-B4-382	HP LaserJet Pro M203, M228 - HP 32A LaserJet Imaging Drum	1 no									
383	33450-B4-383	HP LaserJet Pro M436dn,M436nda - HP 56A Black Original LaserJet Toner Cartridge	1 no									
384	33450-B4-384	HP LaserJet Pro M436dn,M436nda - HP 56X Black Original LaserJet Toner Cartridge	1 no									
385	33450-B4-385	HP LaserJet Pro M436dn,M436nda - HP 57A Original LaserJet Imaging Drum	1 no									
386	33450-B4-386	HP LaserJet Pro M440dn.M440nda - HP 57A	1 no									

		Original LaserJet Imaging Drum									
387	33450-B4-387	HP LaserJet Pro M440dn.M440nda - HP 335A Black Original LaserJet Toner Cartridge	1 no								
388	33450-B4-388	HP LaserJet Pro M440dn.M440nda - HP 335X Black Original LaserJet Toner Cartridge	1 no								
389	33450-B4-389	HP Color LaserJet Pro MFP M479dw - HP 416A Black LaserJet Toner Cartridge	1 no								
390	33450-B4-390	HP Color LaserJet Pro MFP M479dw - HP 416A Cyan LaserJet Toner Cartridge	1 no								
391	33450-B4-391	HP Color LaserJet Pro MFP M479dw - HP 416A Yellow LaserJet Toner Cartridge	1 no								
392	33450-B4-392	HP Color LaserJet Pro MFP M479dw - HP 416A Magenta LaserJet Toner Cartridge	1 no								

393	33450-B4-393	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Black LaserJet Toner Cartridge	1 no								
394	33450-B4-394	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Cyan LaserJet Toner Cartridge	1 no								
395	33450-B4-395	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Yellow LaserJet Toner Cartridge	1 no								
396	33450-B4-396	HP Color LaserJet Pro M154nw,M180n - HP 204A Original Magenta LaserJet Toner Cartridge	1 no								
397	33450-B4-397	HP Color LaserJet Pro M254dw - HP 202A Original Black LaserJet Toner Cartridge	1 no								
398	33450-B4-398	HP Color LaserJet Pro M254dw - HP 202A Original Cyan LaserJet Toner Cartridge	1 no								
399	33450-B4-399	HP Color LaserJet Pro M254dw - HP 202A	1 no								

		Original Yellow LaserJet Toner Cartridge										
400	33450-B4-400	HP Color LaserJet Pro M254dw - HP 202A Original Magenta LaserJet Toner Cartridge	1 no									
401	33450-B4-401	HP Color LaserJet Pro MFP M377dw - HP 410A Black Original LaserJet Cartridge	1 no									
402	33450-B4-402	HP Color LaserJet Pro MFP M377dw - HP 410A Cyan Original LaserJet Cartridge	1 no									
403	33450-B4-403	HP Color LaserJet Pro MFP M377dw - HP 410A Yellow Original LaserJet Cartridge	1 no									
404	33450-B4-404	HP Color LaserJet Pro MFP M377dw - HP 410A Magenta Original LaserJet Cartridge	1 no									
405	33450-B4-405	HP Color LaserJet Pro M452dw,M477fdw - HP 410A Black Original LaserJet Cartridge	1 no									

406	33450-B4-406	HP Color LaserJet Pro M452dw ,M477fdw - HP 410A Cyan Original LaserJet Cartridge	1 no								
407	33450-B4-407	HP Color LaserJet Pro M452dw,M477fdw - HP 410A Yellow Original LaserJet Cartridge	1 no								
408	33450-B4-408	HP Color LaserJet Pro M452dw,M477fdw - HP 410A Magenta Original LaserJet Cartridge	1 no								
409	33450-B4-409	HP LaserJet Pro MFP M72625dn,M72630dn - HP Black Contract LaserJet Toner	1 no								
410	33450-B4-410	HP LaserJet Pro E72535dn - HP W9005MC Black Managed LaserJet Tone	1 no								
411	33450-B4-411	HP LaserJet Pro E72535dn,72625dn,72630dn - HP W9006MC Black Managed LaserJet Imaging Drum	1 no								
412	33450-B4-412	HP Color LaserJet Pro CP5225dn - HP 307A Black	1 no								

		Original LaserJet Cartridge											
413	33450-B4-413	HP Color LaserJet Pro CP5225dn - HP 307A Cyan Original LaserJet Cartridge	1 no										
414	33450-B4-414	HP Color LaserJet Pro CP5225dn - HP 307A Yellow Original LaserJet Cartridge	1 no										
415	33450-B4-415	HP Color LaserJet Pro CP5225dn - HP 307A Magenta Original LaserJet Cartridge	1 no										
416	33450-B4-416	HP LaserJet Pro M700,M712 - HP 14A Black LaserJet Toner Cartridge	1 no										
417	33450-B4-417	HP LaserJet M1566,,1606 - HP 78A Black LaserJet Toner Cartridge	1 no										
418	33450-B4-418	HP LaserJet M1020,M1005,M3015, - HP 12A Black LaserJet Toner Cartridge	1 no										
419	33450-B4-419	HP LaserJet M607,M608 - HP 37A Black LaserJet Toner Cartridge	1 no										

420	33450-B4-420	HP Laser jet MFP 82560dn - HP Black Managed LaserJet Toner	1 no								
421	33450-B4-421	HP Laser jet MFP 82560dn - HP Black Managed LaserJet Imaging Drum	1 no								
422	33450-B4-422	HP Laser jet MFP E77830dn - HP W9040MC Black Managed LaserJet Toner	1 no								
423	33450-B4-423	HP Laser jet MFP E77830dn - HP W9041MC Cyan Managed LaserJet Toner	1 no								
424	33450-B4-424	HP Laser jet MFP E77830dn - HP W9042MC Yellow Managed LaserJet Toner	1 no								
425	33450-B4-425	HP Laser jet MFP E77830dn - HP W9043MC Magenta Managed LaserJet Toner	1 no								
426	33450-B4-426	HP Laser jet MFP E87640dn,E87660 - HP W9050MC Black Managed LaserJet Toner	1 no								
427	33450-B4-427	HP Laser jet MFP E87640dn,E87660 - HP W9051MC Cyan Managed	1 no								

		LaserJet Toner									
428	33450-B4-428	HP Laser jet MFP E87640dn,E87660 - HP W9052MC Yellow Managed LaserJet Toner	1 no								
429	33450-B4-429	HP Laser jet MFP E87640dn,E87660 - HP W9053MC Magenta Managed LaserJet Toner	1 no								
430	33450-B4-430	HP Laser jet M551 - HP 507A Black Managed LaserJet Toner	1 no								
431	33450-B4-431	DVD-R Media 4.7 GB, Jewel Box	1 no								
432	33450-B4-432	DVD- R/W Media, 4.7 GB, Jewel Box	1 no								
433	33450-B4-433	External DVD Writer (1year warranty)	1 no								
434	33450-B4-434	1 TB External Hard Disk Drive (1year warranty)	1 no								
435	33450-B4-435	2 TB External Hard Disk Drive (1year warranty)	1 no								
436	33450-B4-436	4 TB External Hard Disk Drive (1year warranty)	1 no								

437	33450-B4-437	500 GB SSD External Hard Drive (1year warranty)	1 no								
438	33450-B4-438	1 TB SSD External Hard Drive (1year warranty)	1 no								
439	33450-B4-439	16 GB Pen Drive (1year warranty) Class 10	1 no								
440	33450-B4-440	32 GB Pen Drive (1year warranty) Class 10	1 no								
441	33450-B4-441	64 GB Pen Drive (1year warranty) Class 10	1 no								
442	33450-B4-442	128 GB Pen drive (1year warranty) Class 10	1 no								
443	33450-B4-443	16 GB Pen Drive With Type C and USB2.0	1 no								
444	33450-B4-444	32 GB Pen drive With Type C and USB2.0	1 no								
445	33450-B4-445	64 GB Pendrive With Type C and USB2.0	1 no								
446	33450-B4-446	128 GB Pendrive With Type C and USB2.0	1 no								
447	33450-B4-447	USB Mouse with pad (1 year warranty)	1 no								
448	33450-B4-448	Membrane Keyboard (1 year warranty)	1 no								
449	33450-B4-449	Mechanical Keyboard (1	1 no								

		year warranty)										
450	33450-B4-450	Wireless Keyboard and Mouse Combo (1 year warranty)	1 no									
451	33450-B4-451	Wireless Keyboard (1 year warranty)	1 no									
452	33450-B4-452	Wireless mouse (1year warranty)	1 no									
453	33450-B4-453	Mic with Stand (Table top for conference room)	1 no									
454	33450-B4-454	Head Phone With Mike	1 no									
455	33450-B4-455	Wireless Head Phone	1 no									
456	33450-B4-456	Speaker 2.1	1 no									
457	33450-B4-457	Bluetooth Speaker 20W with USB ports	1 no									
458	33450-B4-458	USB Speaker 5W	1 no									
459	33450-B4-459	VGA Cable 1.5 Meter	1 no									
460	33450-B4-460	VGA Cable 5 Meter	1 no									
461	33450-B4-461	VGA Cable 10 Meter	1 no									
462	33450-B4-462	VGA Cable 15 Meter	1 no									
463	33450-B4-463	HDMI Cable 1.5 Meter	1 no									
464	33450-B4-464	HDMI Cable 5 Meter	1 no									
465	33450-B4-465	HDMI Cable 10 Meter	1 no									
466	33450-B4-466	HDMI Cable 15 Meter	1 no									

467	33450-B4-467	Power Cable 10 Meter	1 no								
468	33450-B4-468	Power Cable 15 Meter	1 no								
469	33450-B4-469	Monitor 19 inch (1 year warranty)	1 no								
470	33450-B4-470	Monitor 21 inch (1 year warranty)	1 no								
471	33450-B4-471	Monitor 24 inch (1 year warranty)	1 no								
472	33450-B4-472	Monitor 27 inch (1 year warranty)	1 no								
473	33450-B4-473	Wifi Modem 150Mbps or above	1 no								
474	33450-B4-474	Wifi Modem 300Mbps or above	1 no								
475	33450-B4-475	Wifi Modem 1200Mbps or above	1 no								
476	33450-B4-476	10,000 mah Power Bank for Android Tablets (1 year warranty)	1 no								
477	33450-B4-477	2 Port VGA Splitter	1 no								
478	33450-B4-478	2 Port HDMI Splitter	1 no								
479	33450-B4-479	4 Port USB Hub	1 no								
480	33450-B4-480	PCI Ethernet Card for Wifi	1 no								
481	33450-B4-481	Wifi External Adapter	1 no								
482	33450-B4-482	MY book 2 TB Extrenal	1 no								

483	33450-B4-483	MY book 4 TB Extrenal	1 no								
484	33450-B4-484	MY book 6 TB Extrenal	1 no								
485	33450-B4-485	MY book 8 TB Extrenal	1 no								
486	33450-B4-486	Branded Laptop Carry Case	1 no								
487	33450-B4-487	Branded Sling Bag for Tablets	1 no								
		Total									

Note:

1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**

2) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.5   Price Bid – Category B5 – Apple Products

S.N	Product Code	Description	Quantity /Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		iPad					
1	33450-B5-001	iPad 10.2" Wifi + Cellular 128GB Storage	1 no				
2	33450-B5-002	iPad Air 10.9" Wifi + Cellular 256GB Storage	1 no				
3	33450-B5-003	iPad Pro 11" Wifi + Cellular 512GB Storage	1 no				
4	33450-B5-004	iPad Pro 12.9" Wifi + Cellular 512GB Storage	1 no				
		Laptop					
5	33450-B5-005	Mac Book Air 13" with 256 GB SSD	1 no				
6	33450-B5-006	Mac Book Air 13" with 512 GB SSD	1 no				
7	33450-B5-007	Mac Book Pro 13" with 256 GB SSD	1 no				
8	33450-B5-008	MacBook Pro 13" with 512 GB SSD	1 no				
		iMac (Desktop)					
9	33450-B5-009	iMac 24" (Desktop)	1 no				
		Accessories					

10	33450-B5-010	Apple Pencil (1st Gen) for iPad	1 no				
11	33450-B5-011	Apple Pencil (2nd Gen) for iPad Air and iPad Pro	1 no				
12	33450-B5-012	Smart Keyboard for iPad (8th generation)	1 no				
13	33450-B5-013	Smart Keyboard Folio for iPad Pro 11-inch (3rd generation) and iPad Air (4th generation) - US English	1 no				
14	33450-B5-014	AirPods with Charging Case	1 no				
15	33450-B5-015	Honeywell Type-C Ultra Doc	1 no				
16	33450-B5-016	MS office Home and Student for Mac	1 no				
17	33450-B5-017	Brief - 13" bag	1 no				
18	33450-B5-018	Flip Cases for i-pad (10.2"/10.9"/11"/12.9")	1 no				
19	33450-B5-019	Rugged Cases for i-pad (10.2"/10.9"/11"/12.9")	1 no				
		Total					

Note:
1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**
2) **Warranty: One year minimum warranty or Product Standard warranty whichever is higher**
3) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.6   Price Bid – Category B6-Server and related items

S.N	Product Code	Description	Quantity/ Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B6-001	Desktop server	1 No.				
2	33450-B6-002	Tower Server Model : 1	1 No.				
3	33450-B6-003	Tower Server Model : 2	1 No.				
4	33450-B6-004	Rack 1U Model : 1	1 No.				
5	33450-B6-005	Rack 2U Model : 1	1 No.				
6	33450-B6-006	Rack 2U Model : 2	1 No.				
7	33450-B6-007	Rack 4U Model:1	1 No.				
8	33450-B6-008	Rack 1U (AMD)	1 No.				
9	33450-B6-009	Rack 2U (AMD)	1 No.				

10	33450-B6-010	High End Server Model:1	1 No.				
11	33450-B6-011	High End Server Model:2	1 No.				
12	33450-B6-012	High End Server Model:3	1 No.				
13	33450-B6-013	High End Server Model:4	1 No.				
14	33450-B6-014	Rack 4U Model:1 - T	1 No.				
15	33450-B6-015	Rack 2U Model 2 - T	1 No.				
16	33450-B6-016	RACK - 2U- 4 Processor -T	1 No.				
17	33450-B6-017	Rack 4U Model : 2 - T	1 No.				
18	33450-B6-018	Rack 2U Model : 1 - AT	1 No.				
19	33450-B6-019	Rack 2U Model : 1 - BT	1 No.				
		Addon items					
20	33450-B6-020	Intel Xeon Silver 4208 Processor	1 No.				
21	33450-B6-021	Intel® Xeon® Silver 4110 Processor	1 No.				
22	33450-B6-022	Intel® Xeon® Gold 5115 Processor	1 No.				

23	33450-B6-023	Intel® Xeon® Gold 5215 Processor	1 No.				
24	33450-B6-024	Intel® Xeon® Gold 6138 Processor	1 No.				
25	33450-B6-025	Intel® Xeon® Gold 6148 Processor	1 No.				
26	33450-B6-026	Intel® Xeon® Gold 6240 Processor	1 No.				
27	33450-B6-027	AMD EPYC 72F3 Processor	1 No.				
28	33450-B6-028	AMD EPYC 7262 Processor	1 No.				
29	33450-B6-029	AMD EPYC 7313 Processor	1 No.				
30	33450-B6-030	AMD EPYC 7413 Processor	1 No.				
31	33450-B6-031	AMD EPYC 7513 Processor	1 No.				
32	33450-B6-032	AMD EPYC 7713 Processor	1 No.				
33	33450-B6-033	16 GB DDR4 RDIMM ECC Memory	1 No.				
34	33450-B6-034	32 GB DDR4 ECC RDIMM Memory	1 No.				
35	33450-B6-035	64 GB DDR4 ECC RDIMM Memory	1 No.				
36	33450-B6-036	128GB DDR ECC LRDIMM	1 No.				

		Memory					
37	33450-B6-037	600GB SAS 12G 15K	1 No.				
38	33450-B6-038	900GB SAS 12G 15K	1 No.				
39	33450-B6-039	1.2TB SAS 12G 10K	1 No.				
40	33450-B6-040	2.4TB SAS 12G 10K	1 No.				
41	33450-B6-041	480GB SATA 6G SSD	1 No.				
42	33450-B6-042	960GB SATA 6G Mixed UseSSD	1 No.				
43	33450-B6-043	1.6TB SSD SAS Mix Use 12Gbps SSD	1 No.				
44	33450-B6-044	3.84TB SSD SATA Read Intensive 6Gbps SSD	1 No.				
45	33450-B6-045	3.84TB SSD SAS Read Intensive 12Gbps	1 No.				
46	33450-B6-046	7.68TB SSD SAS Read Intensive 12Gbps	1 No.				
47	33450-B6-047	1.6TB Enterprise NVMe Mixed Use AG Drive	1 No.				
48	33450-B6-048	6.4TB Enterprise NVMe Mixed Use AG Drive	1 No.				
49	33450-B6-049	2TB 7.2K RPM NLSAS 12Gbps Hot-Plug Hard Drive	1 No.				

50	33450-B6-050	4TB 7.2K RPM NLSAS 12Gbps Hot-Plug Hard Drive	1 No.				
51	33450-B6-051	8TB 7.2K RPM SAS 12Gbps Hot-plug Hard Drive	1 No.				
52	33450-B6-052	12TB 7.2K RPM SAS 12Gbps Hot-plug Hard Drive	1 No.				
53	33450-B6-053	16TB 7.2K RPM SAS 12Gbps Hot-plug Hard Drive	1 No.				
54	33450-B6-054	16Gb Single Port Fibre Channel Host Bus Adapter	1 No.				
55	33450-B6-055	16Gb Dual Port Fibre Channel Host Bus Adapter	1 No.				
56	33450-B6-056	Ethernet 10Gb 2 port Adapter	1 No.				
57	33450-B6-057	Ethernet 10Gb - 4 port Adapter	1 No.				
58	33450-B6-058	Ethernet 1Gb 2 port Adapter	1 No.				
59	33450-B6-059	Ethernet 1Gb - 4 port Adapter	1 No.				
60	33450-B6-060	Ethernet 10Gb 2 port SFP+ Adapter	1 No.				
61	33450-B6-061	10G SFP+ LC SR Transceiver	1 No.				
62	33450-B6-062	10G SFP+ LC LR Transceiver	1 No.				

63	33450-B6-063	2m Multimode OM3 LC/LC Optical Cable	1 No.				
64	33450-B6-064	5m Multimode OM3 LC/LC Optical Cable	1 No.				
65	33450-B6-065	15m Multimode OM3 LC/LC Optical Cable	1 No.				
66	33450-B6-066	1x4 USB/PS2 KVM Console Switch	1 No.				
67	33450-B6-067	1x4 KVM Console 6ft PS2 cable	1 No.				
68	33450-B6-068	1x4 KVM Console 6ft USB cable	1 No.				
69	33450-B6-069	0X1X8 G3 KVM Console Switch	1 No.				
70	33450-B6-070	0X2X16 G3 KVM Console Switch	1 No.				
71	33450-B6-071	1x1x8 G4 KVM IP Console Switch	1 No.				
72	33450-B6-072	1x2x16 G4 KVM IP Console Switch	1 No.				
73	33450-B6-073	KVM SFF USB Adapter	1 No.				
74	33450-B6-074	8 Pack KVM SFF USB Adapter	1 No.				
75	33450-B6-075	3ft Qty 4 KVM Cat5 cable	1 No.				

76	33450-B6-076	6ft Qty 4 KVM Cat5 cable	1 No.				
77	33450-B6-077	12ft Qty 4 KVM Cat5 cable	1 No.				
78	33450-B6-078	20ft Qty 4 KVM Cat5 cable	1 No.				
79	33450-B6-079	KVM SFF USB Interface Adapter	1 No.				
80	33450-B6-080	KVM Console USB 2.0 Virtual Media CAC Interface Adapter	1 No.				
81	33450-B6-081	KVM Console USB/Display Port Interface adapter	1 No.				
82	33450-B6-082	KVM Console USB Interface adapter	1 No.				
83	33450-B6-083	Membrane keyboard	1 No.				
84	33450-B6-084	Mechanical keyboard	1 No.				
85	33450-B6-085	Billingual keyboard	1 No.				
86	33450-B6-086	Wireless keyboard	1 No.				
87	33450-B6-087	USB Mouse	1 No.				
88	33450-B6-088	HDD Enclosure	1 No.				

89	33450-B6-089	GPU Riser Kit	1 No.				
90	33450-B6-090	TCO-07 certified 18.5" / 19" TFT Monitor	1 No.				
91	33450-B6-091	10GbE Optical Transceivers SFP+ 10Gb SR	1 No.				
92	33450-B6-092	Intel Omni-Path Host Fabric Adapter 100 Series 1 Port PClex16	1 No.				
93	33450-B6-093	Omni Path Cable, Passive Copper 2 Mtr	1 No.				
94	33450-B6-094	Omni Path Cable, Passive Copper 5 Mtr	1 No.				
95	33450-B6-095	NVIDIA® Tesla™ M10 32GB, Passive, Double Wide, Full Height GPU	1 No.				
96	33450-B6-096	NVIDIA Ampere A100, PCIe, 250W, 40GB Passive, Double Wide, Full Height GPU	1 No.				
		Inlieu Items					
97	33450-B6-097	Intel Xeon Silver 4214 Processor inlieu of Silver 4208 processor	1 No.				
98	33450-B6-098	Intel Xeon Silver 4216 Processor inlieu of Silver 4208 processor	1 No.				

99	33450-B6-099	Intel Xeon Gold 6248 Processor inlieu of Gold 6240 processor	1 No.				
100	33450-B6-100	Intel Gold 5115 Inlieu of Silver 4110	1 No.				
101	33450-B6-101	Intel Gold 6138 inlieu of Silver 4110	1 No.				
102	33450-B6-102	Intel Gold 6148 In lieu of Silver 4110	1 No.				
103	33450-B6-103	Intel Gold 6138 inlieu of Gold 5115	1 No.				
104	33450-B6-104	Intel Gold 6148 inlieu of Gold 5115	1 No.				
105	33450-B6-105	Intel Gold 6148 inlieu of Gold 6138	1 No.				
106	33450-B6-106	Intel Gold 6338 in lieu of Gold 6330	1 No.				
107	33450-B6-107	Intel Platinum 8352M in lieu of Gold 6330	1 No.				
108	33450-B6-108	Intel Platinum 8380 in lieu of Gold 6330	1 No.				
109	33450-B6-109	Intel Platinum 8352M in lieu of Gold 6338	1 No.				
110	33450-B6-110	Intel Platinum 8380 in lieu of Gold 6338	1 No.				

111	33450-B6-111	Intel Platinum 8380 in lieu of Platinum 8352M	1 No.				
112	33450-B6-112	Intel Gold 5215 in lieu of Intel Silver 4208	1 No.				
113	33450-B6-113	Intel Gold 6240 in lieu of Intel Silver 5215	1 No.				
114	33450-B6-114	Intel Gold 6240 in lieu of Intel Gold 5215	1 No.				
115	33450-B6-115	Intel Xeon Gold 6248 Processor in lieu of Gold 6240 Processor	1 No.				
116	33450-B6-116	Intel Xeon Gold 6252 Processor in lieu of Gold 6240 Processor	1 No.				
117	33450-B6-117	Intel Xeon Platinum 8270 Processor in lieu of Gold 6240 Processor	1 No.				
118	33450-B6-118	Intel Xeon Platinum 8276 Processor in lieu of Gold 6240 Processor	1 No.				
119	33450-B6-119	AMD EPYC 7313 in lieu of EPYC 7262	1 No.				
120	33450-B6-120	AMD EPYC 7413 in lieu of EPYC 7262	1 No.				
121	33450-B6-121	AMD EPYC 7513 in lieu of EPYC 7262	1 No.				

122	33450-B6-122	AMD EPYC 7713 in lieu of EPYC 7262	1 No.				
123	33450-B6-123	AMD EPYC 7313 in lieu of EPYC 72F3	1 No.				
124	33450-B6-124	AMD EPYC 7413 in lieu of EPYC 72F3	1 No.				
125	33450-B6-125	AMD EPYC 7513 in lieu of EPYC 72F3	1 No.				
126	33450-B6-126	AMD EPYC 7713 in lieu of EPYC 72F3	1 No.				
127	33450-B6-127	32GB Ram inlieu of 16Gb Ram	1 No.				
128	33450-B6-128	64GB Ram inlieu of 16Gb ram	1 No.				
129	33450-B6-129	64GB ram inlieu of 32Gb ram	1 No.				
		Total					

Note:

1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**

2) **Warranty: One year minimum warranty or Product Standard warranty whichever is higher**

3) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.7	Price Bid – Category B7-Biometric Systems

S.N	Product Code	Description	Quantity/Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		(Aadhaar Based)					
1	33450-B7-001	Android Tablet based Aadhaar Enabled Biometric Attendance Systems integrated with STQC Certified Finger Print Scanner	1 no				
2	33450-B7-002	Linux based Aadhaar Enabled Biometric Attendance Systems integrated with STQC Certified Finger Print Scanner	1 no				
3	33450-B7-003	Finger Print Enrolment Device (4+4+2 Fingers) with STQC Certified	1 no				
4	33450-B7-004	PALM Print Device Specification (Palm and 10 Fingers) with STQC Certified	1 no				

5	33450-B7-005	Single Fingerprint reader with STQC certified	1 no				
6	33450-B7-006	Single IRIS Scanner with STQC Certified	1 no				
7	33450-B7-007	Dual IRIS Scanner with with STQC Certified	1 no				
(Non- Aadhaar Based)							
8	33450-B7-008	Linux based Biometric Attendance Systems(Non Aadhaar) (500 Users) with Battery Backup and Proximity Card Reader	1 no				
9	33450-B7-009	Linux Based Biometric Attendance Systems (Non Aadhaar) (1000 Users) with Battery Backup and Proximity Card Reader	1 no				
10	33450-B7-010	Linux Based Biometric Attendance Systems (Non Aadhaar) (2000 Users) with Battery Backup and Proximity Card Reader	1 no				
11	33450-B7-011	Linux Based Biometric Attendance Systems (Non Aadhaar) (10000 Users) with Battery Backup and Proximity Card Reader	1 no				

12	33450-B7-012	Linux Based Bio Metric System (Non Aadhaar) - with Face Recognition 500 User	1 no				
13	33450-B7-013	Linux Based Bio Metric System (Non Aadhaar) - with Face Recognition 1000 User	1 no				
14	33450-B7-014	Linux Based Bio Metric System (Non Aadhaar) - with Face Recognition 2000 User	1 no				
15	33450-B7-015	LINUX Tablet based Biometric Attendance Systems Long range Face 3000 User (2 meters)	1 no				
16	33450-B7-016	LINUX Tablet based Biometric Attendance Systems Long range Face 1000 User	1 no				
17	33450-B7-017	Multi Door Access Controller - Finger + Card (up to 4 Doors)	1 no				
18	33450-B7-018	Mifare Smart Card Based Door Controller for Access Control and Time Attendance (for Enrolment)	1 no				

19	33450-B7-019	Finger Print and Card Based Door Controller for Access Control and time Attendance with STQC Certified fingerprint sensor	1 no				
20	33450-B7-020	Single Fingerprint Device	1 no				
21	33450-B7-021	ID Card Printer	1 no				
		ADD ON					
22	33450-B7-022	Multi Door Access Controller - USB Single Finger Print Scanner for Enrolment (ADD ON For 032)	1 no				
23	33450-B7-023	Multi Door Access Controller - USB Card reader for Enrolment (ADD ON For 032)	1 no				
24	33450-B7-024	Finger Print Reader for Entry and Exit (ADD ON For 032)	1 no				
25	33450-B7-025	Proximity Card Reader for Entry and Exit (ADD ON For 032)	1 no				
26	33450-B7-026	Fingerprint and Mifare card based exit reader (ADD ON For 038)	1 no				
27	33450-B7-027	Wifi Facility for Linux Based Bio Metric Attendance System	1 no				

28	33450-B7-028	GPRS for Linux Based Bio Metric Attendance System	1 no				
29	33450-B7-029	Metal Enclosure with Lock and key (Linux Based Biometric Attendance System)	1 no				
30	33450-B7-030	Electronic Magnetic Lock (for Single Door) with suitable bracket and standard accessories	1 no				
31	33450-B7-031	Electronic Magnetic Lock (for Double Door) with suitable bracket and standard accessories	1 no				
32	33450-B7-032	Exit Manual Switch	1 no				
33	33450-B7-033	Finger Print Reader Optical (Non Aadhar based ADD ON)	1 no				
34	33450-B7-034	RFID Reader (proximity Card)	1 no				
35	33450-B7-035	RFID Reader (HID Card)	1 no				
36	33450-B7-036	RFID reader (Mifare Card)	1 no				
37	33450-B7-037	RFID Reader (HID Card) with Finger Print	1 no				
38	33450-B7-038	RFID reader (Mifare Card) with finger Print	1 no				

39	33450-B7-039	RFID reader (proximity Card) with finger Print	1 no				
40	33450-B7-040	USB Mifare card Reader for Enrolment	1 no				
41	33450-B7-041	USB HID card Reader for Enrolment	1 no				
42	33450-B7-042	Metal Enclosure with Lock and Key (Tablet based Biometric Attendance system)	1 no				
		INLIEU ITEMS					
43	33450-B7-043	HID Card Reader in lieu of Proximity card reader.	1 no				
44	33450-B7-044	Mifare Card reader in lieu of Proximity Card Reader	1 no				
		Total					

Note:
1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**
2) **Warranty: One year minimum warranty or Product Standard warranty whichever is higher**
3) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.8   Price Bid – Category B8–SSL, Digital Signature Certificates

S.N	Product Code	Description	Quantity /Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B8-001	Class-3 Digital Signature Certificates	1 no				
2	33450-B8-002	Cryptographic Token	1 no				
3	33450-B8-003	Server Certificate (Secure Sockets Layer- SSL	1 no				
4	33450-B8-004	Form Signing SDK and Encryption SDK	1 no				
5	33450-B8-005	Form Signing SDK	1 no				
6	33450-B8-006	Encryption SDK	1 no				
7	33450-B8-007	Class-3 Digital Signature Certificate for Signature - Individual	1 no				
8	33450-B8-008	Class-3 Digital Signature Certificate for Encryption - Individual	1 no				

9	33450-B8-009	Class-3 Digital Signature Certificate for Signature - Organisation	1 no				
10	33450-B8-010	Class-3 Digital Signature Certificate for Encryption - Organisation	1 no				
11	33450-B8-011	Class-3 Digital Signature Certificate COMBO for Organisation (Signature + Encryption)	1 no				
12	33450-B8-012	Server Certificate (Secure Sockets Layer- SSL) Single Server Single Domain	1 no				
13	33450-B8-013	Server Certificate (Secure Sockets Layer- SSL) Single Server Multi Domain	1 no				
14	33450-B8-014	Wildcard SSL Certificate	1 no				
		Total					

Note:
1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**
2) **Warranty: One year minimum warranty or Product Standard warranty whichever is higher**
3) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.9   Price Bid – Category B9–Cisco or Equivalent Products

S.N	Product Code	Description	Quantity/Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B9-001	Core Switch – Type 1 -Cisco Catalyst 9400 or Equivalent	1 no				
2	33450-B9-002	Core Switch – Type 2 - Cisco Catalyst 9600 or Equivalent	1 no				
3	33450-B9-003	Distribution Switch - Type 1 Cisco 9300 or Equivalent	1 no				
4	33450-B9-004	Distribution Switch - Type 2 Cisco 9300 or Equivalent	1 no				
5	33450-B9-005	Access Switch - Type 1- 24 Port (PoE) Cisco 9200 or Equivalent	1 no				

6	33450-B9-006	Access Switch - Type 2- 24 Port (Non-PoE) Cisco 9200 or Equivalent	1 no				
7	33450-B9-007	Access Switch - Type 3- 48 Port (PoE) Cisco 9200 or Equivalent	1 no				
8	33450-B9-008	Access Switch - Type 4- 48 Port (Non-PoE) Cisco 9200 or Equivalent	1 no				
9	33450-B9-009	Wireless LAN Controller Cisco 9800 (Up to 500 Access Point)	1 no				
10	33450-B9-010	Wireless LAN Controller Cisco 9800 (Up to 2000 Access Point)	1 no				
11	33450-B9-011	Access Point – Type 1 Cisco 9100 or Equivalent	1 no				
12	33450-B9-012	Access Point – Type 2 Cisco 9100 or Equivalent	1 no				
13	33450-B9-013	Access Point – Type 3 Cisco 9100 or Equivalent	1 no				
14	33450-B9-014	Access Point – Type 4 (Cloud Managed) Cisco Meraki MR36 or Equivalent	1 no				

15	33450-B9-015	Access Point – Type 5 (Cloud Managed) Cisco Meraki MR46 or Equivalent	1 no				
16	33450-B9-016	Access Switch - Type 1 (Cloud Managed) 24 Port (Non-PoE) Cisco Meraki MR125 or Equivalent	1 no				
17	33450-B9-017	Access Switch - Type 2 (Cloud Managed) 48 Port (Non-PoE) Cisco Meraki MR125 or Equivalent	1 no				
18	33450-B9-018	Access Switch - Type 3 (Cloud Managed) 24 Port (PoE) Cisco Meraki MR125 or Equivalent	1 no				
19	33450-B9-019	Access Switch - Type 4 (Cloud Managed) 48 Port (PoE) Cisco Meraki MR125 or Equivalent	1 no				
20	33450-B9-020	Access Switch - Type 5 (Cloud Managed) 8 Port (PoE) Cisco Meraki MR 120 or Equivalent	1 no				
21	33450-B9-021	Router Type 1 : CISCO 4451 Series or Equivalent	1 no				
22	33450-B9-022	Router Type 2 : CISCO 4331 Series or Equivalent	1 no				

23	33450-B9-023	Router Type 3 : CISCO 4321 Series or Equivalent	1 no				
24	33450-B9-024	Cisco Firepower Small Office (Model FPR-2130 or equivalent)	1 no				
25	33450-B9-025	Cisco Firepower Medium Office (Model FPR-4112 or equivalent)	1 no				
26	33450-B9-026	Cisco Firepower Large Office (Model FPR-4115 or equivalent)	1 no				
27	33450-B9-027	Rack Server - C220M5 or Equivalent/higher	1 no				
28	33450-B9-028	Cisco Blade Chassis 5108	1 no				
29	33450-B9-029	Cisco Blade server B220M5 or Equivalent/Higher	1 no				
30	33450-B9-030	Cisco Webex Meeting Suites	1 no				
32	33450-B9-031	Cisco Cisco Desk Pro	1 no				
33	33450-B9-032	Cisco Video Conference for small and Medium Room (Cisco WebEx Kit Mini)	1 no				
34	33450-B9-033	Cisco WebEx Room Kit	1 no				

35	33450-B9-034	Cisco Video Conference for Medium Conference Room Cisco WebEx Kit+ with 1 Nos of PTZ camera	1 no				
36	33450-B9-035	Cisco WebEx Desk USB Camera	1 no				
37	33450-B9-036	Cisco Cisco Meeting Server (Multiparty Conference Unit)	1 no				
38	33450-B9-037	Cisco IP PABX for 1000 Users	1 no				
39	33450-B9-038	Cisco IP Phone 7821	1 no				
40	33450-B9-039	Cisco IP Phone 8841	1 no				
41	33450-B9-040	Access Point (CISCO 9120 or equivalent)	1 no				
42	33450-B9-041	Firewall Cisco FPR4112-NGFW-K9 or equivalent	1 no				
43	33450-B9-042	Core Switch – Type 1 - Specification (Model : CISCO Catalyst 9400 or Equivalent)	1 no				
44	33450-B9-043	Router Type 1 : Specification (Model : ISR4451-X/K9 or Equivalent)	1 no				

45	33450-B9-044	Wireless LAN Controller Cisco 9800 (Up to 2000 Access Point) - Specification (Model : CISCO Catalyst 9800-40 or Equivalent)	1 no				
46	33450-B9-045	Distribution Switch - Type 1 Cisco 9300 or Equivalent	1 no				
47	33450-B9-046	Access Switch - Type 4- 48 Port (Non-PoE) Cisco 9200 or Equivalent	1 no				
		Total					

Note:

1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**

2) **Warranty: One year minimum warranty or Product Standard warranty whichever is higher**

3) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.10.1   Price Bid – Category B10-Linux Products

S.N	Product Code	Description	Quantity/Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B10-001	Red Hat Enterprise Linux for Virtual Datacenters, Premium - 1 Year	1 No.				
2	33450-B10-002	Red Hat Enterprise Linux for Virtual Datacenters, Premium - 3 Years	1 No.				
3	33450-B10-003	Red Hat Enterprise Linux for Virtual Datacenters, Standard - 1 Year	1 No.				
4	33450-B10-004	Red Hat Enterprise Linux for Virtual Datacenters, Standard - 3 Years	1 No.				
5	33450-B10-005	Red Hat Enterprise Linux Server, Premium (Physical or Virtual Nodes) - 1 year	1 No.				

6	33450-B10-006	Red Hat Enterprise Linux Server, Premium (Physical or Virtual Nodes) - 3 years	1 No.				
7	33450-B10-007	Red Hat Enterprise Linux Server, Standard (Physical or Virtual Nodes) - 1 year	1 No.				
8	33450-B10-008	Red Hat Enterprise Linux Server, Standard (Physical or Virtual Nodes) -3 years	1 No.				
9	33450-B10-009	Red Hat Enterprise Linux Server with Smart Management, Premium (Physical or Virtual Nodes) - 1 year	1 No.				
10	33450-B10-010	Red Hat Enterprise Linux Server with Smart Management, Premium (Physical or Virtual Nodes) - 3 years	1 No.				
11	33450-B10-011	Red Hat Enterprise Linux Server with Smart Management, Standard (Physical or Virtual Nodes) - 1 Year	1 No.				
12	33450-B10-012	Red Hat Enterprise Linux Server with Smart Management, Standard (Physical or Virtual Nodes) - 3 Years	1 No.				

13	33450-B10-013	Red Hat Enterprise Linux Extended Life Cycle Support (Physical or Virtual Nodes)	1 No.				
14	33450-B10-014	Red Hat Enterprise Linux Extended Life Cycle Support (Unlimited Guests)	1 No.				
15	33450-B10-015	Red Hat Enterprise Linux for SAP Applications, Premium (Physical or Virtual Nodes) - 1 Year	1 No.				
16	33450-B10-016	Red Hat Enterprise Linux for SAP Applications, Premium (Physical or Virtual Nodes) - 3 Years	1 No.				
17	33450-B10-017	Red Hat Enterprise Linux for SAP Applications, Standard (Physical or Virtual Nodes) - 1 Year	1 No.				
18	33450-B10-018	Red Hat Enterprise Linux for SAP Applications, Standard (Physical or Virtual Nodes) - 3 Years	1 No.				
19	33450-B10-019	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Premium - 1 Year	1 No.				

20	33450-B10-020	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Premium - 3 Years	1 No.				
21	33450-B10-021	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Standard - 1 Year	1 No.				
22	33450-B10-022	Red Hat Enterprise Linux for SAP Applications for Virtual Datacenters, Standard - 3 Years	1 No.				
23	33450-B10-023	Red Hat Enterprise Linux for SAP Solutions, Premium (Physical or Virtual Nodes) - 1 Year	1 No.				
24	33450-B10-024	Red Hat Enterprise Linux for SAP Solutions, Premium (Physical or Virtual Nodes) - 3 Years	1 No.				
25	33450-B10-025	Red Hat Enterprise Linux for SAP Solutions, Standard (Physical or Virtual Nodes) - 1 Year	1 No.				
26	33450-B10-026	Red Hat Enterprise Linux for SAP Solutions, Standard (Physical or Virtual Nodes) - 3 Years	1 No.				

27	33450-B10-027	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Premium - 1 Year	1 No.				
28	33450-B10-028	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Premium - 3 Years	1 No.				
29	33450-B10-029	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Standard - 1 Year	1 No.				
30	33450-B10-030	Red Hat Enterprise Linux for Virtual Datacenters for SAP Solutions, Standard - 3 Years	1 No.				
31	33450-B10-031	High Availability -1 year	1 No.				
32	33450-B10-032	High Availability -3 years	1 No.				
33	33450-B10-033	High Availability for Unlimited Guests -1 year	1 No.				
34	33450-B10-034	High Availability for Unlimited Guests -3 years	1 No.				
35	33450-B10-035	Resilient Storage -1 year	1 No.				
36	33450-B10-036	Resilient Storage -3 years	1 No.				
37	33450-B10-037	Resilient Storage for Unlimited Guests -1 year	1 No.				

38	33450-B10-038	Resilient Storage for Unlimited Guests -3 years	1 No.				
39	33450-B10-039	Smart Management -1 year	1 No.				
40	33450-B10-040	Smart Management -3 years	1 No.				
41	33450-B10-041	Smart Management for Unlimited Guests -1 year	1 No.				
42	33450-B10-042	Smart Management for Unlimited Guests -3 years	1 No.				
43	33450-B10-043	Red Hat Enterprise Virtualization (2- sockets), Premium -1 year	1 No.				
44	33450-B10-044	Red Hat Enterprise Virtualization (2- sockets), Premium -1 year	1 No.				
45	33450-B10-045	Red Hat JBoss Enterprise Application Platform, 4-Core Premium - 1 Year	1 No.				
46	33450-B10-046	Red Hat JBoss Enterprise Application Platform, 4-Core Premium - 3 Years	1 No.				
47	33450-B10-047	Red Hat JBoss Enterprise Application Platform, 4-Core Standard - 1 Year	1 No.				
48	33450-B10-048	Red Hat JBoss Enterprise Application Platform, 4-Core Standard - 3 Years	1 No.				

49	33450-B10-049	Red Hat JBoss Enterprise Application Platform, 16-Core Premium -1 year	1 No.				
50	33450-B10-050	Red Hat JBoss Enterprise Application Platform, 16-Core Premium -3 years	1 No.				
51	33450-B10-051	Red Hat JBoss Enterprise Application Platform, 16-Core Standard -1 year	1 No.				
52	33450-B10-052	Red Hat JBoss Enterprise Application Platform, 16-Core Standard -3 years	1 No.				
53	33450-B10-053	Red Hat JBoss Enterprise Application Platform, 64-Core Premium -1 year	1 No.				
54	33450-B10-054	Red Hat JBoss Enterprise Application Platform, 64-Core Premium -3 years	1 No.				
55	33450-B10-055	Red Hat JBoss Enterprise Application Platform, 64-Core Standard -1 year	1 No.				
56	33450-B10-056	Red Hat JBoss Enterprise Application Platform, 64-Core Standard -3 years	1 No.				

57	33450-B10-057	Red Hat JBoss Enterprise Application Platform, Extended Life Cycle Support Add-On, 4-Core Premium	1 No.				
58	33450-B10-058	Red Hat JBoss Enterprise Application Platform, Extended Life Cycle Support Add-On, 4-Core Standard	1 No.				
59	33450-B10-059	Red Hat JBoss Enterprise Application Platform ELS Program, 16-Core Standard	1 No.				
60	33450-B10-060	Red Hat JBoss Enterprise Application Platform ELS Program, 16-Core Premium	1 No.				
61	33450-B10-061	Red Hat JBoss Enterprise Application Platform ELS Program, 64-Core Standard	1 No.				
62	33450-B10-062	Red Hat JBoss Enterprise Application Platform ELS Program, 64-Core Premium	1 No.				
63	33450-B10-063	Red Hat JBoss Web Server, 16-Core Premium - 1 year	1 No.				
64	33450-B10-064	Red Hat JBoss Web Server, 16-Core Premium - 3 years	1 No.				

65	33450-B10-065	Red Hat JBoss Web Server, 16-Core Standard - 1 year	1 No.				
66	33450-B10-066	Red Hat JBoss Web Server, 16-Core Standard - 3 years	1 No.				
67	33450-B10-067	Red Hat JBoss Web Server Plus, 16-Core Premium -1 year	1 No.				
68	33450-B10-068	Red Hat JBoss Web Server Plus, 16-Core Premium -3 years	1 No.				
69	33450-B10-069	Red Hat JBoss Web Server Plus, 16-Core Standard -1 year	1 No.				
70	33450-B10-070	Red Hat JBoss Web Server Plus, 16-Core Standard -3 years	1 No.				
71	33450-B10-071	Red Hat Process Automation Manager, Premium (16 Cores) - 1 Year	1 No.				
72	33450-B10-072	Red Hat Process Automation Manager, Premium (16 Cores) - 3 Years	1 No.				
73	33450-B10-073	Red Hat Process Automation Manager, Standard (16 Cores) - 1 Year	1 No.				

74	33450-B10-074	Red Hat Process Automation Manager, Standard (16 Cores) - 3 Years	1 No.				
75	33450-B10-075	Red Hat Decision Manager, Premium (16 Cores) - 1 Year	1 No.				
76	33450-B10-076	Red Hat Decision Manager, Premium (16 Cores) - 3 Years	1 No.				
77	33450-B10-077	Red Hat Decision Manager, Standard (16 Cores) - 1 Year	1 No.				
78	33450-B10-078	Red Hat Decision Manager, Standard (16 Cores) - 3 Years	1 No.				
79	33450-B10-079	Red Hat Fuse, 4-Core Premium - 1 Year	1 No.				
80	33450-B10-080	Red Hat Fuse, 4-Core Premium - 3 Years	1 No.				
81	33450-B10-081	Red Hat Fuse, Premium (16 Cores) - 1 Year	1 No.				
82	33450-B10-082	Red Hat Fuse, Premium (16 Cores) -3 Years	1 No.				
83	33450-B10-083	Red Hat Fuse, 4-Core Standard - 1 Year	1 No.				
84	33450-B10-084	Red Hat Fuse, 4-Core Standard - 3 Years	1 No.				

85	33450-B10-085	Red Hat Fuse, Standard (16 Cores) - 1 Year	1 No.				
86	33450-B10-086	Red Hat Fuse, Standard (16 Cores) - 3 Years	1 No.				
87	33450-B10-087	Red Hat Fuse, Extended Lifecycle Support Add-On, Premium (4 Cores)	1 No.				
88	33450-B10-088	Red Hat Fuse, Extended Life Cycle Support Add-On, Standard (4 Cores)	1 No.				
89	33450-B10-089	Red Hat Fuse ELS Program, Premium (16 Cores)	1 No.				
90	33450-B10-090	Red Hat Fuse ELS Program, Standard (16 Cores)	1 No.				
91	33450-B10-091	Red Hat 3scale API Management, Premium (4 Cores) - 1 Year	1 No.				
92	33450-B10-092	Red Hat 3scale API Management, Premium (4 Cores) - 3 Years	1 No.				
93	33450-B10-093	Red Hat 3scale API Management, Standard (4 Cores) - 1 Year	1 No.				
94	33450-B10-094	Red Hat 3scale API Management, Standard (4 Cores) - 3 Years	1 No.				

95	33450-B10-095	Red Hat 3scale API Management, Premium (16 Cores) - 1 Year	1 No.				
96	33450-B10-096	Red Hat 3scale API Management, Premium (16 Cores) - 3 Years	1 No.				
97	33450-B10-097	Red Hat 3scale API Management, Standard (16 Cores) - 1 Year	1 No.				
98	33450-B10-098	Red Hat 3scale API Management, Standard (16 Cores) - 3 Years	1 No.				
99	33450-B10-099	Red Hat OpenShift Container Platform, Premium (2 Cores or 4 vCPUs, for Windows) - 1 Year	1 No.				
100	33450-B10-100	Red Hat OpenShift Container Platform, Premium (2 Cores or 4 vCPUs, for Windows) - 3 Years	1 No.				
101	33450-B10-101	Red Hat OpenShift Container Platform (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 1 Year	1 No.				
102	33450-B10-102	Red Hat OpenShift Container Platform (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 3 Years	1 No.				

103	33450-B10-103	Red Hat OpenShift Container Platform (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 1 Year	1 No.				
104	33450-B10-104	Red Hat OpenShift Container Platform (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 3 Years	1 No.				
105	33450-B10-105	Red Hat OpenShift Container Platform Premium (2 Cores or 4 vCPUs) - 1 Year	1 No.				
106	33450-B10-106	Red Hat OpenShift Container Platform Premium (2 Cores or 4 vCPUs) - 3 Years	1 No.				
107	33450-B10-107	Red Hat OpenShift Container Platform Standard (2 Cores or 4 vCPUs) - 1 Year	1 No.				
108	33450-B10-108	Red Hat OpenShift Container Platform Standard (2 Cores or 4 vCPUs) - 3 Years	1 No.				
109	33450-B10-109	Red Hat Ansible Automation, Standard (100 Managed Nodes) - 1 Year	1 No.				

110	33450-B10-110	Red Hat Ansible Automation, Standard (100 Managed Nodes) - 3 Years	1 No.				
111	33450-B10-111	Red Hat Ansible Automation, Premium (100 Managed Nodes) - 1 Year	1 No.				
112	33450-B10-112	Red Hat Ansible Automation, Premium (100 Managed Nodes) - 3 Years	1 No.				
113	33450-B10-113	Red Hat OpenStack Platform, Premium (2-sockets) - 1 Year	1 No.				
114	33450-B10-114	Red Hat OpenStack Platform, Premium (2-sockets) - 3 Years	1 No.				
115	33450-B10-115	Red Hat OpenStack Platform, Standard (2-sockets) - 1 Year	1 No.				
116	33450-B10-116	Red Hat OpenStack Platform, Standard (2-sockets) - 3 Years	1 No.				
117	33450-B10-117	Red Hat OpenStack Platform (without guest OS), Premium (2-sockets) - 1 Year	1 No.				
118	33450-B10-118	Red Hat OpenStack Platform (without guest OS), Premium (2-sockets) - 3 Years	1 No.				

119	33450-B10-119	Red Hat OpenStack Platform (without guest OS), Standard (2-sockets) - 1 Year	1 No.				
120	33450-B10-120	Red Hat OpenStack Platform (without guest OS), Standard (2-sockets) - 3 Years	1 No.				
121	33450-B10-121	Red Hat OpenShift Kubernetes Engine, Premium (2 Cores or 4 vCPUs) - 1 Year	1 No.				
122	33450-B10-122	Red Hat OpenShift Kubernetes Engine, Premium (2 Cores or 4 vCPUs) - 3 Years	1 No.				
123	33450-B10-123	Red Hat OpenShift Kubernetes Engine, Standard (2 Cores or 4 vCPUs) - 1 Year	1 No.				
124	33450-B10-124	Red Hat OpenShift Kubernetes Engine, Standard (2 Cores or 4 vCPUs) - 3 Years	1 No.				
125	33450-B10-125	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 1 Year	1 No.				

126	33450-B10-126	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Premium (1-2 sockets up to 64 cores) - 3 Years	1 No.				
127	33450-B10-127	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 1 Year	1 No.				
128	33450-B10-128	Red Hat OpenShift Kubernetes Engine (Bare Metal Node), Standard (1-2 sockets up to 64 cores) - 3 Years	1 No.				
129	33450-B10-129	Consulting : Consulting Unit	1 No.				
130	33450-B10-130	Training : Training Unit	1 No.				
131	33450-B10-131	Red Hat Learning Subscription Standard	1 No.				
132	33450-B10-132	Red Hat Enterprise Linux Automation with Ansible Classroom Training	1 No.				
133	33450-B10-133	Red Hat System Administration I Classroom Training	1 No.				
134	33450-B10-134	Red Hat JBoss Application Administration I Classroom Training	1 No.				

	33450-B10-135	Red Hat OpenStack Administration I: Core Operations for Domain Operators Classroom Training					
135			1 No.				
136	33450-B10-136	Containers, Kubernetes, and Red Hat OpenShift Administration II Classroom Training					
			1 No.				
		Total					

Note:

1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**
2) **Warranty: One year minimum warranty or Product Standard warranty whichever is higher**
3) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.11   Price Bid – Category B11- Information Kiosks

S.N	Product Code	Description	Quantity/ Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST(Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B11-001	Kiosk	1 No.				
2	33450-B11-002	Intel Core i5 processor inlieu of i3 processor	1 No.				
		Total					

Note:
1) The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted
2) Warranty: One year minimum warranty or Product Standard warranty whichever is higher
3) The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.

A2.12   Price Bid – Category B12- High End Plotters & Scanners

S.N	Product Code	Description	Quantity/Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B12-SP001	A4 ADF 8ppm Portable Scanner	1 No.				
2	33450-B12-SP002	A4 Flatbed with ADF 20 PPM Scanner	1 No.				
3	33450-B12-SP003	A4 ADF 30PPM Scanner	1 No.				
4	33450-B12-SP004	A4 Flatbed with ADF 40 PPM Scanner	1 No.				
5	33450-B12-SP005	A4 ADF 60PPM Scanner	1 No.				
6	33450-B12-SP006	A4 ADF 60 PPM Scanner with CCD	1 No.				
7	33450-B12-SP007	A4 ADF 70PPM Scanner	1 No.				

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8	33450-B12-SP008	A3 ADF 60 PPM Scanner with network	1 No.				
9	33450-B12-SP009	A3 Flatbed with ADF 70 PPM Scanner	1 No.				
10	33450-B12-SP010	A3 ADF 120PPM Scanner	1 No.				
11	33450-B12-SP011	A0 – 36 "LED Monocrome Plotter & Color Scanner	1 No.				
12	33450-B12-SP012	A1 24" inch Plotter (color)	1 No.				
13	33450-B12-SP013	A0 – 36 " Inkjet Plotter & Color Scanner	1 No.				
14	33450-B12-SP014	A4 Flatbed Scanner	1 No.				
		Total					

Note:
1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**
2) **Warranty: One year minimum warranty or Product Standard warranty whichever is higher**
3) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.13 Price Bid – Category B13–IP Camera

S.N	Product Code	Description	Quantity /Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B13-CAM-001	2 MP Fixed Lens Dome Camera	1 no				
2	33450-B13-CAM-002	2 MP Fixed Lens Bullet Camera	1 no				
3	33450-B13-CAM-003	5 MP Fixed Lens Bullet Camera	1 no				
4	33450-B13-CAM-004	2 MP MVF Dome Camera	1 no				
5	33450-B13-CAM-005	2 MP MVF Bullet Camera	1 no				
6	33450-B13-CAM-006	5 MP MVF Bullet Camera with Analytics	1 no				
7	33450-B13-CAM-007	5 MP Box Camera	1 no				
8	33450-B13-CAM-008	5 MP MVF Dome Camera	1 no				
9	33450-B13-CAM-009	5 MP MVF Bullet Camera	1 no				
10	33450-B13-CAM-010	8 MP MVF Dome Camera	1 no				

11	33450-B13-CAM-011	8 MP MVF Bullet Camera	1 no				
12	33450-B13-CAM-012	2 MP 20x PTZ Camera	1 no				
13	33450-B13-CAM-013	2 MP 30x Auto Tracking PTZ Camera	1 no				
14	33450-B13-CAM-014	5 MP 30x PTZ Camera	1 no				
15	33450-B13-NVR-015	Network Video Recorder 8 Channels 1 HDD	1 no				
16	33450-B13-NVR-016	Network Video Recorder 16 Channels 2 HDD	1 no				
17	33450-B13-NVR-017	Network Video Recorder 32 Channels 4 HDD	1 no				
18	33450-B13-NVR-018	Network Video Recorder 64 Channels 8 HDD	1 no				
19	33450-B13-NVR-019	Network Video Recorder 128 Channels 16 HDD	1 no				
20	33450-B13-NVR-020	Network Attached Storage 4 Bays - Tower Type	1 no				
21	33450-B13-NVR-021	Network Attached Storage Bays-16 with dual controller	1 no				
22	33450-B13-IP-022	Video Management Software	1 no				

23	33450-B13-IP-023	Video Analytics Software with ANPR features	1 no				
24	33450-B13-IP-024	Video Analytics Software with Face Recognition features	1 no				
25	33450-B13-IP-025	8 Port Switch 10/100/1000 MbpsSemi Managed Switch with 2 SFP Ports	1 no				
26	33450-B13-IP-026	24 Port Switch 10/100/1000 MbpsSemi Managed Switch with 4 SFP Ports	1 no				
27	33450-B13-IP-027	6U Rack	1 no				
28	33450-B13-IP-028	9U Rack	1 no				
29	33450-B13-IP-029	24U Rack	1 no				
30	33450-B13-IP-030	32" LED Display	1 no				
31	33450-B13-IP-031	43" LED Display	1 no				
32	33450-B13-IP-032	55" LED Display	1 no				
33	33450-B13-IP-033	Cat 6 Cable 23AWG	1 no				
34	33450-B13-IP-034	Cat 6 Cable Armored Cable	1 no				
35	33450-B13-IP-035	OFC 6 Core Single Mode Fibre Cable	1 no				
36	33450-B13-IP-036	OFC 12 Core Single Mode Fibre Cable	1 no				

37	33450-B13-IP-037	1" / 2" PVC Conduit with laying Charges	1 no				
38	33450-B13-IP-038	2" HDPE Conduit with Laying Charges	1 no				
39	33450-B13-IP-039	13 Feet GI Pole	1 no				
40	33450-B13-IP-040	15 Feet GI Pole	1 no				
41	33450-B13-IP-041	Outdoor weather proof Junction Box	1 no				
42	33450-B13-IP-042	4 TB AV Hard Disk	1 no				
43	33450-B13-IP-043	6TB AV Hard Disk	1 no				
44	33450-B13-IP-044	8 TB AV Hard Disk	1 no				
45	33450-B13-IP-045	10 TB AV Hard Disk	1 no				
46	33450-B13-IP-046	12 TB AV Hard Disk	1 no				
47	33450-B13-IP-047	6 Port LIU Loaded with adapter & SC PigTail	1 no				
48	33450-B13-IP-048	12 Port LIU Loaded with adapter & SC PigTail	1 no				
49	33450-B13-IP-049	Patch Cord SC-LC	1 no				
50	33450-B13-IP-050	10GBPS Module	1 no				
51	33450-B13-IP-051	Digging and Refilling of Soil/Tar/ Concrete road with 3FT Depth Per Meter	1 no				
52	33450-B13-IP-052	Fibre Splicing	1 no				

53	33450-B13-IP-053	Indoor Microphone	1 no				
54	33450-B13-IP-054	Outdoor Microphone	1 no				
55	33450-B13-IP-055	HDMI Splitter 1 in and 2 Out	1 no				
56	33450-B13-IP-056	64GB SD card class 10	1 no				
57	33450-B13-IP-057	128GB SD card class 10	1 no				
58	33450-B13-IP-058	HDMI Cable per Meter	1 no				
59	33450-B13-IP-059	VGA Cable Per Meter	1 no				
60	33450-B13-IP-060	Site Survey per site	1 no				
		Total					

Note:

1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**

2) **Warranty: One year minimum warranty or Product Standard warranty whichever is higher**

3) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.14   Price Bid – Category B14- Firewall

S.N	Product Code	Description	Quantity/Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B14-001	Next Generation Firewall cum SDWAN Router - Category -1 (Suitable for upto 300 Users)	1 no				
2	33450-B14-002	Next Generation Firewall cum SDWAN Router - Category -2 (Suitable for upto 100 Users)	1 no				
3	33450-B14-003	Next Generation Firewall cum SDWAN Router - Category -3 (Suitable for upto 50 Users)	1 no				
4	33450-B14-004	Next Generation Firewall cum SDWAN Router - Category -4 (Suitable for upto 25 Users)	1 no				
5	33450-B14-005	Data Center Firewall cum SDWAN Core Router - Category -1 (Suitable for upto 5000 Users)	1 no				

6	33450-B14-006	Data Center Firewall cum SDWAN Core Router - Category -2 (Suitable for upto 2500 Users)	1 no					
7	33450-B14-007	SD-WAN Manager for Central Management and Monitoring	1 no					
8	33450-B14-008	Web Application Firewall (Category-1)	1 no					
9	33450-B14-009	Web Application Firewall (Category-2)	1 no					
		Total						

Note:

1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**

2) **Warranty: One year minimum warranty or Product Standard warranty whichever is higher**

3) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

A2.15   Price Bid – Category B15- Laptop

S.N	Product Code	Description	Quantity/ Unit	Basic Unit Price In Rs.	GST in % for Col no.5	GST Value in Rs. For Col No.5	Total Unit Price with GST (Rs.) (5)+(7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	33450-B15-001	Laptop Intel Pentium / AMD	1 no				
2	33450-B15-002	13.3" Laptop with i5 G series Processor, SSD	1 no				
3	33450-B15-003	13.3" Laptop with i7 G series Processor, SSD	1 no				
4	33450-B15-004	14" Laptop with i3 G series Processor	1 no				
5	33450-B15-005	14" Laptop with i5 G series Processor, SSD	1 no				
6	33450-B15-006	14" Laptop with i5 G series Processor, FHD, SSD	1 no				
7	33450-B15-007	14" Laptop with i5 G series Processor, 1 TB SATA HDD with 8 GB	1 no				
8	33450-B15-008	14" Laptop with i7 G series Processor , 1 TB SATA HDD with 16GB	1 no				
9	33450-B15-009	14" Laptop with i7 G series Processor SSD	1 no				

		with 16GB					
10	33450-B15-010	14" Laptop with i7 G series Processor, FHD, m2 SSD with 16GB	1 no				
11	33450-B15-011	14" Laptop with AMD Ryzen 3 Processor	1 no				
12	33450-B15-012	14" Laptop with AMD Ryzen 5 Processor	1 no				
13	33450-B15-013	14" Laptop with AMD Ryzen 7 Processor	1 no				
14	33450-B15-014	15.6" Laptop with i3 G series Processor, SSD with 8 GB	1 no				
15	33450-B15-015	15.6" Laptop with i5 G series Processor, SSDwith 8 GB	1 no				
16	33450-B15-016	15.6" Laptop with i7 G series Processor, FHD, SSDwith 16GB	1 no				
17	33450-B15-017	Convertible 360 Degree Laptop - i5 G series Processor, SSD	1 no				
18	33450-B15-018	2 in 1 Laptop - i5 G series Processor, SSD	1 no				
19	33450-B15-019	Light weight Laptop with i5 G series Processor	1 no				
20	33450-B15-020	Surface Laptop with 256 GB SSD	1 no				
21	33450-B15-021	Surface Laptop with 512 GB SSD	1 no				
		Add on Items					

22	33450-B15-022	4 GB DDR4 RAM	1 no				
23	33450-B15-023	8 GB DDR4 RAM	1 no				
24	33450-B15-024	16 GB DDR4 RAM	1 no				
25	33450-B15-025	500 GB HDD SATA 5400 RPM	1 no				
26	33450-B15-026	1TB HDD SATA 5400 RPM	1 no				
27	33450-B15-027	2TB HDD SATA 5400 RPM	1 no				
28	33450-B15-028	500GB HDD SATA 7200 RPM	1 no				
29	33450-B15-029	1 TB HDD SATA 7200 RPM	1 no				
30	33450-B15-030	2 TB HDD SATA 7200 RPM	1 no				
31	33450-B15-031	256 GB SSD	1 no				
32	33450-B15-032	512 GB SSD	1 no				
33	33450-B15-033	1 TB SSD	1 no				
34	33450-B15-034	256 GB M.2 SSD	1 no				
35	33450-B15-035	512 GB M.2 SSD	1 no				
36	33450-B15-036	1 TB M.2 SSD	1 no				
37	33450-B15-037	2 GB Graphics Card	1 no				

38	33450-B15-038	4 GB Graphics Card	1 no				
39	33450-B15-039	Li-On Battery (35 WHr) with minimum 5 hours backup	1 no				
40	33450-B15-040	Li-On Battery (40 WHr) with minimum 5 hours backup	1 no				
41	33450-B15-041	Li-On Battery (45 WHr) with minimum 7 hours backup	1 no				
42	33450-B15-042	DVD RW (External Drive)	1 no				
43	33450-B15-043	Wireless Keyboard(OEM)	1 no				
44	33450-B15-044	Wireless Mouse(OEM)	1 no				
45	33450-B15-045	Wireless keyboard & Mouse (Combo)(OEM)	1 no				
46	33450-B15-046	Pre-Loaded Windows 10 Pro, 64bit with 1 year antivirus software	1 no				
47	33450-B15-047	Pre-Loaded Windows 10 Home, 64bit with 1 year antivirus software	1 no				
48	33450-B15-048	Pre-Loaded Windows 10 Pro National Academic Edition	1 no				
49	33450-B15-049	Active pen (OEM Make) for Convertible 360 Degree Laptop	1 no				
50	33450-B15-050	Active pen (OEM Make) for 2 in 1 Laptop	1 no				
		In lieu items					

51	33450-B15-051	16 GB DDR4 RAM in lieu of 8 GB RAM	1 no				
52	33450-B15-052	1 TB HDD in lieu of 500GB SATA HDD	1 no				
53	33450-B15-053	2 TB HDD in lieu of 1TB SATA HDD	1 no				
54	33450-B15-054	512 GB SSD in lieu of 256 GB SSD	1 no				
55	33450-B15-055	1 TB SSD in lieu of 256 GB SSD	1 no				
56	33450-B15-056	1 TB SSD in lieu of 512 GB SSD					
57	33450-B15-057	512 GB M.2 SSD in lieu of 256 GB M.2 SSD	1 no				
58	33450-B15-058	1 TB M.2 SSD in lieu of 256 GB M.2 SSD	1 no				
59	33450-B15-059	256 GB M.2 SSD in lieu of 256 GB SSD	1 no				
60	33450-B15-060	512 GB M.2 SSD in lieu of 256 GB SSD	1 no				
61	33450-B15-061	1 TB M.2 SSD in lieu of 256 GB SSD	1 no				
62	33450-B15-062	Pre-Loaded Windows 10 Pro, 64bit with 1 year antivirus software in lieu of Linux OS	1 no				
63	33450-B15-063	Pre-Loaded Windows 10 Home, 64bit with 1 year antivirus software in lieu of Linux OS	1 no				
64	33450-B15-064	Pre-Loaded Linux OS in lieu of Windows OS	1 no				
		Total					

Note:

1) **The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all items listed above. Partial quote is not allowed for this Category. However, the bidder should ensure that the prices are quoted for the corresponding accessories relevant to the items quoted**
2) **Warranty: One year minimum warranty or Product Standard warranty whichever is higher**
3) **The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement / date of release of the Purchase order, whichever is later.**

	Annexure-2.16 CAMC for Group B						
S.No	**Category**	**Standard Product Warranty (in yrs) 'n'**	**CAMC in % for 'n'+ 1 year**	**CAMC in % for 'n'+ 2year**	**CAMC in % for 'n'+ 3 year**	**CAMC in % 'n'+ 4 year**	**GST in % for Col (4), (5) ,(6) & (7)**
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**
1.	Category B5						
2.	Category B6						
3.	Category B7						
4.	Category B8						
5.	Category B9						
6.	Category B10						
7.	Category B11						
8.	Category B12						
9.	Category B13						
10.	Category B14						
11.	Category B15						

Note:
  a) **The Bidders should specify the Standard Product Warranty period in Years under Column (3) for each Bidding category.**
  b) **CAMC should be quoted without fail. CAMC cost means cost toward all the spares, service charge and all taxes.**
  c) **CAMC percentage quoted should be less than 10%.**
  d) **If the bidder quotes 0% or leaves the column unfilled or empty, it will be treated as the bidder would render CAMC at free of cost.**