

University of Mumbai



Tender Document

Supply of Computers, Peripherals & Equipments

No: Tender/ UCC/GEN/169/2013-2014, Date: 16th September, 2013

Part A - Terms and Conditions

Part B – Specifications

Price: Rs. 500/- (non refundable)

Important Dates:	
Period of Sale of Tender Document:	16 th September, 2013 to 10th October, 2013 during office hours 11.00 a.m. to 3.00 pm
Last Date of Receiving sealed Bids/Tenders:	10th October, 2013, during office hours 11.00 a.m. to 3.00 pm

Co-ordinator

University Computerization Center

University of Mumbai

Room No. 214 - 2nd Floor, IDOL Building, Dr. Shankar Dayal Sharma Bhavan, Vidyanagari, Mumbai –400098. Website: <http://www.mu.ac.in>

University of Mumbai



Tender Notice

Sealed tenders are invited from OEM's and their authorized dealers/distributors/suppliers for rate contract in two bid systems (Technical/Pre-qualification bid and Price bid by University Computerisation Centre, University of Mumbai for Supply of Computers, Peripherals and Equipments. Tender Document containing terms and conditions and technical specifications of the merchandise /equipments and Services are available with the Cash Unit of Dy. Registrar, Finance & Accounts, University of Mumbai, M.J Phule Bhavan, (Examination House) Vidyanagari, Santacruz (E), Mumbai 400 098, on all working days between 11.00 a.m. to 3.00 p.m. from 16th September, 2013 to 10th October, 2013 during office hours 11.00 a.m. to 3.00 pm by paying Rs.500/- (Rs. Five Hundred Only) in cash /Demand Draft from any scheduled bank/nationalized bank, drawn in favour of **“Finance and Accounts officer, University of Mumbai”**. Tender Document containing terms & conditions and Technical Specifications can be also downloaded from <http://www.mu.ac.in/tenders.html>. The tender bids duly complete in all respects, along with the necessary documents and EMD value of 5% of the cost of supply subject to maximum Rs.1 lakh should be submitted to University Computerization Center, University of Mumbai, Room No. 214 2nd Floor, IDOL Building, Dr. Shankar Dayal Sharma Bhavan, Vidyanagari, Mumbai –400098 **up to 10th October, 2013 at 3.00 p.m.**

The tender bids so received shall be opened on a schedule and venue to be arranged later in the presence of the representatives of the bidders. The names of shortlisted bidders shall be announced on the website after scrutinizing the Technical bids and evaluating their suitability to meet the University requirements. Right to reject any or all tenders without assigning any reason there for are reserved by the University of Mumbai.

Co-ordinator

University Computerization Center, **University of Mumbai**

Room No. 214 - 2nd Floor, IDOL Building, Dr. Shankar Dayal Sharma Bhavan, Vidyanagari, Mumbai –400098. Website: <http://www.mu.ac.in>

University of Mumbai



Part A – Terms and Conditions

1. Sealed tender are invited in two bid systems (Technical/Pre-qualification bid and Price bid) by University Computerisation Centre, University of Mumbai for Supply of Equipments needed by various Offices and Department on Rate Contract basis.
2. The rates are to be quoted in the Performa enclosed herewith both in words and figures. No figures or words should be overwritten. Overwritten figures or words should be scored out and re-written under full signature of the authorized signatory. Quotations that do not fulfill this condition will not be considered. Only typed bid will be considered and hand written quote will be considered as invalid bid.
3. The firm must enclose the copy of Registration and Income Tax. Service Tax Returns for the last three years. Details of ISO Certification (if any), company profile, Income Tax Clearance Certificate and list of valued customers, if any, should accompany along with the quotation. All the documents are to be attached with Technical/Pre-qualification Bid.
4. If the firm is authorized dealers/distributors of OEM's, proof of the same shall be attached.
5. The Tender shall remain valid for 120 days after the date of commercial bid opening. If any bidder withdraws his tender before the said period, University shall without prejudice to any other right or remedy, be at liberty to forfeit the Bid Security.
6. The tender must be submitted in a sealed cover. The sealed cover must be superscripted with "tender for " Supply of Computers, Peripherals and Equipments." due on October 10, 2013, addressed to the, Co-ordinator, University Computerization Center, University of Mumbai, in sealed envelopes so as to reach on or 10th October, 2013 at Time 3.00 P.M. No responsibility whatsoever will be accepted with regard to postal delays or for wrong delivery of quotation sent by Post. It can also be dropped in the tender box kept at the University for the purpose by the date stipulated above. Quotation received after due date will not be entertained. Technical/Pre-qualification Bid will be opened on 10th October, 2013 at Time 4.00 P.M. (Technical/ Prequalification bid only) by the constituted committee members in the presence of representatives of the firms who participated in the tender.
7. Tenders must be accompanied by a demand draft in the form of Earnest Money Deposit (EMD) in form of Bank Draft only drawn in favour of Finance & Accounts Officer, University of Mumbai. Tenders without EMD will be summarily rejected. No interest will be paid on Earnest Money Deposit. EMD of unsuccessful renderers will be returned in due course of time. If the quotation is accepted and firm fails to undertake the supply, they will forfeit the EMD. The amount of Earnest Money Deposit shall be 5% of the cost of supply subject to maximum Rs.1 lakh.

8. University of Mumbai reserves the right to order full or part thereof of or on rate contract basis for duration of one year or as finalized as per committee recommendation for those items included in the tender.

9. The quantity given in quotation is approximate which may increase or decrease for which no compensation will be paid.

10. **ESSENTIAL ELIGIBILITY CONDITIONS:**

Bidders are to provide information on Technical/Pre-qualification requirements in separate sealed envelope with title "Technical/Pre-qualification requirement". Price bid is to be enclosed separately with title "Price bid for Supply of Computers, Peripherals and Equipments". Tenders satisfying the following essential conditions will only be considered for further processing.

In absence of the proof of following supportive document the tender will not be considered, (which are mandatory requirements).

- a) The firm has to attach an undertaking that no Government/undertaking organizations have blacklisted the firm for any reason.
- b) The Vendor should preferably be a Company registered in India.
- c) The OEM firm must have preferably valid ISO certification. (Preference will be given to ISO for IT service support)
- d) Bidders should have successfully carried out minimum three such contracts during last five years. (Certificates of satisfactory service from above three organisations must be enclosed)
- e) The firm should have at least three years "experience in the field of supply and maintenance of such equipment and executed orders for similar value of supplies.
- f) Latest certificates of satisfactory service from the organizations where the vendors are supplying such equipments should be attached with tender. The tenderer should have full-fledged office and service centre at Mumbai.

11. BIDDING PROCEDURE

- a) Bids are invited in two bid system, (1) Technical/pre-qualification bid and (2) Price bid, which shall be sealed separately by mentioning Technical bid and Price bid on the top of envelop. Both of these two envelop will be then enclosed in a single sealed envelope.
- b) No Bids will be accepted after due date and time under any circumstances. This office will not be responsible for any postal/courier delay and also for reasons beyond the control of this office.
- c) Technical/Pre-qualification Bid must contain the EMD for specified amount, along with complete technical details as desired by this tender. First Technical Bids of all the tender will be opened on pre scheduled date, time & venue. Technical Bids without EMD will be summarily rejected.
- d) Price bid, of only successful Technical Bids, will be opened on pre scheduled date, time & venue.
- e) The bids must be accompanied by an Earnest Money Deposit and the amount of Security Deposit/Performance Guarantee shall be 5 % of the cost. In case of successful tenderer the amount of Earnest Money Deposit shall be converted in Security Deposit/Performance Guarantee. Security Deposit/Performance Guarantee shall be refunded after the warranty period is over. The Security Deposit/Performance Guarantee can be paid in the form of a Bank Guarantee from a scheduled bank. in a

form of Bankers cheque/ bank draft issued by any commercial bank in favour of Finance & Accounts Officer, University of Mumbai, payable at Mumbai.

- f) All bids must be dropped in the Tender Box kept at the University Computerisation, University of Mumbai Room No. 214 - 2nd Floor, IDOL Building, Dr. Shankar Dayal Sharma Bhavan, Vidyanagari, Mumbai –400098, as mentioned in the Tender form.

12. SUBMISSION OF BID:

- i. The first envelope shall be super scribed with the name of work and the words “Technical bid/Pre-qualification bid”. The first envelope shall be opened on the date of opening of tender. The bidder should specifically provide full technical details of service offered and also shall provide full details of deviation they intend to make from the technical specifications and contract terms detailed in the Bid. No price details shall be given in this envelope. Violation to this would result invalidation of tender. The Bid Security shall be enclosed with the envelope marked “Technical bid/Pre-qualification bid”.
- ii. The second envelope shall be super scribed with the name of work and the words “Price Bid (Commercial Bid)”. It shall contain full details of the price & commercial conditions. Any deviation from our standard conditions shall be specifically spelt out.
- iii. Any deviation of any sort e.g. Technical or Commercial terms and conditions shall be specifically indicated in the Technical Bid itself.
- iv. Silence or use of the word “Noted” against any of the Bid conditions shall mean bidder agrees to comply with that/those conditions of Bid.
- v. All offers shall be made available in hard copies as specified in the technical specifications and should be signed by the authorized signatory of the firm on all the pages of the hard copy.
- vi. All prices and other information in this regard having a bearing on the price shall be written both in figures and words in the prescribed offer form.
- vii. The bid should be submitted in the prescribed bid form of this document. All columns of the bid form should be filled. Any additional information should be enclosed separately and referred to in the relevant column of the bid form. All relevant product literature must be enclosed with the bid. No bid may be modified subsequent to its submission.
- viii. The University reserves the right to inspect any or all the works and satisfy itself about the quality and reliability of the service rendered before opening of the concerned vendor’s price bid.

13. OPENING OF BIDS:

- a. University of Mumbai will open the Technical bids at scheduled time, date and venue in the presence of the bidders representatives who chose to attend.
- b. The bidder’s representatives who will be present shall sign on the paper evidencing their attendance. In the event of the specific bid opening being declared a holiday for the purchaser, the bid shall be opened at the same time and location on the next working day.

- c. The bidders names, bid withdrawals, presence of bid security and such other details as the Purchaser at its discretion may consider appropriate will be announced at the bid opening.
- d. The firm who have submitted the bids and whose offers are found technically suitable shall be informed of the opening date of the second envelope i.e. "Price Bid (Commercial Bid)".

14. CLARIFICATIONS OF BIDS:

To assist the examination, evaluation and comparison of bids the University may constitute a Technical Evaluation Committee and may at its discretion, ask the bidder for clarification of its bid. The request for clarification and the response shall be in writing and no change in price or substance of the bid shall be sought, offered or permitted.

15. EVALUATIONS OF BIDS:

- i. The University will examine the bids to determine whether they are complete, required EMD has been furnished and all relevant documents have been properly signed. Evaluation of bids shall be done based on the information furnished by the bidder. The conformity of the bids to the technical specification and commercial terms and conditions shall be examined. Responsiveness of the bid shall be determined based on the technical and financial capability of the bidder to execute the contract.
- ii. The University may examine the bids to determine;
 - a. The correctness of the information furnished by the bidder in its bid. In case any information is found to be incorrect/false, the bid shall be considered as non-responsive.
 - b. The substantial responsiveness of each bid to the bidding: For purpose of this clause, a substantially responsive bid is one, which conforms to all technical specifications and terms and conditions of the bidding documents without material or commercial deviations. The Institute's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

16. UNIVERSITY RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS:

- a. University of Mumbai reserves the right to accept or reject any bids and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the University's action.
- b. The acceptance of tender will rest with the Co-ordinator, UCC, UNIVERSITY of MUMBAI who does not bind himself to accept the lowest bid and reserves himself the right to reject any or all the tenders received without the assignment of any reason. All the bids in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected.
- c. Canvassing in connection with tenders is illegal and strictly prohibited and the tenders submitted by the bidders, who resort to canvassing, will be rejected.

17. TERMINATION BY DEFAULT:

- a) University of Mumbai may, without prejudice to any other remedy for breach of contract, by written notice of default sent to vendor, terminate the Contract in whole or part:

- i. If the vender fails to provide supply, service/rectify the fault within the time period specified in the contract or any extension thereof granted by the University of Mumbai.
- ii. If the vender fails to perform any other obligation (s) under the Contract.
- b) In the event the University of Mumbai terminates the Contract in whole or in part, the University of Mumbai may procure, upon such terms and in such manner, as it deem appropriate, services similar to those undelivered for any excess costs for such similar services. However, the vender shall continue the performance of the Contract to the extent not terminated.

18. APPLICABLE LAW:

The contract shall be interpreted in accordance with the laws of the Union of India & will be under the jurisdiction of Court in Mumbai.

19. TAXES AND DUTIES:

Vendor shall be entirely responsible for all taxes, duties, license, fees etc. incurred until delivery of the contracted services to the Institute. No tax or duty will be payable by the University of Mumbai unless specified by the vender in the price bid.

CHECKLIST

Please verify the following before submission of the tender and submit the required documents in the sequence listed below, to avoid rejection or disqualification of your tender.

1. Tender should accompany with an EMD and the amount of Earnest Money Deposit shall be 5% of the cost of supply subject to maximum Rs. 1 lakh, by demand draft drawn on any nationalized bank in favour of **Finance & Accounts Officer, University of Mumbai**, payable at Mumbai in the form of Demand Draft valid for 3 months. The tenders without EMD will be rejected.
2. Following documents as indicated in the tender document printed on the tenderer's letterhead with dated signature and seal.
 - a) Tender form
 - b) Price Schedule
 - c) Supporting documents and Statement on Compliance with required specifications
 - d) Performance statement
 - e) Service support details, catalogs, manuscript etc. if any
 - f) Other formats, if any provided in the tender; and
 - g) Details of previous contracts, if any.

3. Certificates of registration for Service tax, VAT, Sales tax, Excise Duty and incorporation etc. issued by appropriate government for the required services with seal of the renderer.
4. Income tax clearance certificate issued by the concerned IT circle for the past three years with the seal of the renderer.
5. Certificates issued by employers where the similar services were rendered/being rendered with seal of the renderer.
6. The entire original tender document with seal and signature on each page.
7. Time and Date for receipt of Tender: up to 10th October, 2013, at Time 3.00 P.M.
10. Time and Date for opening of Tender: up to 10th October, 2013, at Time 4.00 P.M.
(Technical/Prequalification bid only)

Envelope No.1

Tender for Supply of Equipments at, University of Mumbai, Mumbai TECHNICAL/PRE QUALIFICATION BID. (Please provide the following details along with documentary proof of the supporting documents as asked in eligibility criteria, without which the tender will not be considered. In case sufficient space is not available, use separate sheets)

SCHEDULE:

Last Date of Receipt of Tender: October 10, 2013, 3.00 P.M.

Date & Time of Opening of Tender: 10th October, 2013, 4.00 P.M. (Technical/Prequalification bid only)

1. Company Name & Address :
2. Is the EMD 5% of the cost of supply is enclosed.
If yes give details. : Yes/No, D.D.No..... Dated.....
Rs.....
3. Company profile:
4. Service Tax Regn. No. :
5. Service Tax Paid in the year **2011-12: 2012-13:**
6. Income Tax PAN No. :
7. Total Income Tax paid in the year **2011-12 : 2012-13:**
8. Company Status (Prop./Pvt./Ltd.) :
9. Name of organizations and value of supply.
10. Compliance of essential eligibility conditions including Mandatory requirements and certificate in respect of Annual turnover in the year **2009-10, 2010-11, 2011-12,2012-13**
11. Registration details in State/Central Govt.:
Work executed with University of Mumbai, give details, if any:
12. List of clients along with their contact names, telephone numbers and address
(tender will not be considered without this information):
13. Are you authorized service provider of any reputed Company:

- (If yes, please give details and enclosed copy of authorization)
- 14 Address of Workshop
- 15 Facility available for sales after service
- i) Spares available
- ii) Test equipment
- iii) Test tools (Hardware/software)
- iv) any others.
- 16 Is your firm certified with ISO: Yes/No
(If yes, please enclose a copy of certification)
- 17 Have you attached the brief write up on approach and strategy: Yes/No
(If yes, please enclose a copy of write up)
- 18 Has the firm ever been black listed by any Government/undertaking organization:
Yes/No (If No, enclose the undertaking as asked in para-11)
- 19 Any other Information
Certified that the above information is correct and the firm is willing to accept all the terms and conditions of the tender document.

SINGNATURE

(with Name, address, Phone No. e-mail.ID and SEAL)

Envelope No.2 (Financial/Price Bid)

Financial Bid [To be kept in the second envelope]

Having examined the conditions of the tender and specifications, including all the annexure, the receipt of which is hereby duly acknowledged, we the undersigned, offer to provide supply of equipments in conformity with the said conditions of tender.

Note:

1. Tenderers are advised to read carefully the Terms and conditions of supply and “the Instructions to the Tenderers” before recording the rates in this schedule.
2. No. erasures or over waiting shall be allowed, unless they are authenticated under the full signature and the seal of the tenderer.
3. The rates shall be on CIF basis Mumbai for the delivery & installation at the respective departments, including working performance demonstration and user training, wherever required.

Part B – Specifications

1.Desktop Computer: 100 Units

Price per unit (Core i5 3rd Generation @ 3220) Rs. _____

(all inclusive)

Price per unit (Core i7 @ 3770 / 3330 – minimum 2nd Gen/ preferred 3rd Gen)

Rs. _____

(all inclusive)

CPU	Intel® Core™ i5-3470 Processor 3.2GHz, 6MB Cache, 4Cores, 4Thread or Core i5 3rd Generation @ 3220	Core i7 @ 3770 / 3330 – minimum 2nd Gen/ preferred 3 rd Gen
Main board	Q77 Express Chipset for 3rd generation Intel® Core™ vPro™ processor platform	Q77 Express Chipset for 3rd generation Intel® Core™ vPro™ processor platform
RAM	4 GB DDR3@ 1600MHz / 1333 MHz FSB	4 GB DDR3@ 1600MHz / 1333 MHz FSB
Storage/ Hard disk	500 GB SATA up to 3 GB/s Solid state drives preferred	500 GB SATA up to 3 GB/s Solid state drives preferred
Ethernet	10/ 100/ 1000 base T over cat5/ cat6	10/ 100/ 1000 base T over cat5/ cat6
Graphics	In built Intel HD graphics	Graphic dedicated 1 GB Radeon / Nvidia
Display	18.5 inch widescreen, antiglare aspect ration (16:9), Brightness: 250 nits	ICC 20” HD LED (full HD support)
Keyboard/ Mouse	Wired keyboard and optical (800 DPI) resolution	Wireless keyboard and optical (800 DPI) resolution
Audio	Onboard 5.1 channel	Onboard 5.1 channel
DVD drive	DVD writer +/- RW 24X	DVD writer +/- RW 24X
Optional	Extended warranty FOR 2 YEARS (to be if not included)	Extended warranty FOR 2 YEARS (to be if not included)
OS Compatibility	Without OS or DOS or Ubuntu and to be loaded with MS windows (Under Univ. Campus Agreement)	Without OS or DOS or Ubuntu and to be loaded with MS windows (Under Univ. Campus Agreement)

2.Desktop Computer Motherboard: 10 Units. Units

Price per unit (Core i5 3rd Generation @ 3220 with PS) Rs. _____

(all inclusive)

Price per unit (Core i7 @ 3770 / 3330 – minimum 2nd Gen/ preferred 3rd Gen with PS)

Rs. _____

(all inclusive)

AMD Processors FX 4100, 90XA-GD55

Rs. _____

(all inclusive)

Core i7 @ 3770 / 3330 – minimum 2nd Gen/ preferred 3 rd Gen / AMD Processors FX 4100
Q77 Express Chipset for 3rd generation Intel® Core™ vPro™ processor platform /90XA-GD55
4 GB DDR3@ 1600MHz / 1333 MHz FSB
1TR SATA up to 3 GB/sSolid state drives preferred
10/ 100/ 1000 base T over cat5/ cat6

3.42 U Server rack 2 Nos.

Rs. _____
(all inclusive)

4.Adjustable rack shelf 10 Nos.

Rs. _____
(all inclusive)

5.All- In- One Computer 100 Units

Price per unit (Core i5 3rd Generation @ 3240/3470Q) **Rs.** _____
(all inclusive)

Price per unit (Core i7 @ 3770– minimum 2nd Gen/ preferred 3rd Gen)
Rs. _____
(all inclusive)

CPU	Core i5 3rd Generation @ 3240/3470 Q	Core i7 @ 3770– minimum 2nd Gen/ preferred 3 rd Gen
Main board	OEM designed by the Manufacturer	OEM designed by the Manufacturer
RAM	4 GB DDR3@ 1600MHz / 1333 MHz FSB	4 GB DDR3@ 1600MHz / 1333 MHz FSB
Storage/ Hard disk	500 GB SATA up to 3 GB/s Solid state drives preferred	500 GB SATA up to 3 GB/s Solid state drives preferred
Ethernet	10/ 100	10/ 100/ 1000
Graphics	In built Intel HD graphics	Inbuilt HD graphic
Display	20” inch TFT LED widescreen, antiglare aspect ratio (16:9), Brightness: 250 nits without touch screen	ICC 20” HD LED TFT monitor (full HD support) touch screen support
Keyboard/ Mouse	Wireless optical	Wireless keyboard and optical
Audio	Onboard 5.1 channel	Onboard 5.1 channel
DVD drive	DVD writer +/- RW	DVD writer +/- RW
Optional	Extended warranty FOR 2 YEARS (to be included)	Extended warranty FOR 2 YEARS (to be included)
OS Compatibility	Without OS or DOS or Ubuntu and to be loaded with MS windows (Under Univ. Campus Agreement)	Without OS or DOS or Ubuntu and to be loaded with MS windows (Under Univ. Campus Agreement)

6.LAPTOP 50 Units

Price per unit (Intel Core i5-3317U 2nd Gen /3210M 3rd Gen. 13.3” with touch screen)

Rs. _____

(all inclusive)

Price per unit (Intel Core i5-3337M 2nd Gen /3230M 3rd Gen. 15.6” with LED screen)

Rs. _____

(all inclusive)

Price per unit (Intel Core i3-3217/3227-3rd gen CPU.14”/ 15.6” with LED Screen)

Rs. _____

(all inclusive)

Description	13.3” with touch screen	15.6” with LED screen	14”/ 15.6” with LED Screen
Processor	Intel Core i5-3317U 2 nd Gen /3210M 3 rd Gen	Intel Core i5-3337M 2 nd Gen /3230M 3 rd Gen	Intel Core i3-3217/3227-3 rd gen CPU
Color Kit	Any Dark color	Any Dark color	Dark Metallic colour
Memory	8 GB DDR3 @1600 MHz	4 GB DDR3 @1600 MHz	2 GB DDR#@ minimum1333MHz
HDD	500 GB SATA	500 GB SATA	500 GB SATA
SSD hard disk	Give details 256 GBSSD	Nil	Nil
Video card	Onboard Intel HD graphic / dedicated display graphic with 1 GB	Onboard Intel HD graphic / dedicated display graphic with 1 GB	Onboard Intel HD graphic
Web CAM	HD camera more than 2 Mega Pixel	HD camera more than 2 Mega Pixel	1.3 Mega Pixel Web Cam
O/S	DOS / ubuntu	DOS / ubuntu	DOS/ Ubuntu
Optical drive	Super multi DVD +/-RW	Super multi DVD +/-RW	Super multi DVD +/-RW
Screen Size	13.3” inch HD Touch Screen	15.6” inch HD Touch Screen	14” or 15.6 “ inch screen
Software	To be loaded with University Campus Agreement	To be loaded with University Campus Agreement	To be loaded with University Campus Agreement
Service/warranty	Extended warranty for 2 years to be mentioned separately (if not included)	Extended warranty for 2 years to be mentioned separately (if not included)	Extended warranty for 2 years to be mentioned separately (if not included)
Bluetooth/WIFI	BT-3.0 and 2x2 802.11 abg/n (up to 300Mbps), Wifi	BT-3.0 and 2x2 802.11 abg/n (up to 300Mbps), Wifi	BT-3.0 and 2x2 802.11 abg/n (up to 300Mbps), Wifi

7. MULTI FUNCTION PRINTER COLOR:**10 Units****Price per unit Rs. _____****(all inclusive)**

MFP	PRINTERS
Technology	Page wide Print Head Technology with pigmented inks, Color MFP
Print/Copy Speed	Black/ Color: Up to 70 ppm (draft, letter); Black/ Color (ISO, laser-comparable): Up to 42 ppm
ADF Scan Speed	ADF (300 dpi, black): Up to 20 ppm
Printer Resolution	Black (best): Up to 1200 x 1200 optimized dpi
Copier Resolution	600x600 dpi - both text and graphics
Scan Resolution	Optical: Up to 1200 dpi, Hardware: Up to 1200 x 1200 dpi;
Memory	768 MB
Processor	792 Mhz
First Page Out (Ready Mode)	Black/ color (from ready mode): As fast as 9.5 sec
Zooming	Reduce / Enlarge 25 to 400%
Paper Handling	A4 and smaller. Input: 500-sheet input tray, 50-sheet multi-purpose tray, Optional 500 sheet tray, Output: 300-sheet face-down output bin
ADF	Standard, 50 sheets
Print Media Size	Tray 1: 3 x 5 in to 8.5 x 14 in; Tray 2: 4.0 x 8.3 in to 8.5 x 11.7 in;
Print Media Type	Plain paper , photo , envelopes, labels, cards, glossy brochure, matte brochure, tri-fold brochure, Hagaki, greeting cards
Connectivity	High Speed USB 2.0, Ethernet 10/100 Base-TX network, RJ-11 modem port; 802.11 b/g/n Station; 802.11 b/g Access Point
Duplex Printing	Standard Automatic
Scan Mode	Front panel applications: Copy, Scan to E-mail, Scan to Network Folder, Scan to USB.
Scan Type	Flatbed, ADF
Scan Size	ADF, Flatbed: 216 x 356 mm
Fax Speed	Up to 33.6 kbps
Languages	PCL 5c, PCLXL (PCL 6), native PDF, Postscript Level 3 emulation
Operating System Support	Windows 8, Windows 7, Windows Vista, Windows XP (SP3, 32-bit), Mac OS X v10.6, Mac OS X Lion, Mac, OS X Mountain Lion, Linux
Necessary Drivers & cables	Should be provided by the vendor with the standard product
Mobile Printing Capability	Printng by email, Google Cloud Print, Wireless printing from mobile devices, Apple AirPrint™
Duty Cycle (Monthly)	Up to 75,000 pages
Control Panel	4.3 inches touch screen color display

8.DOT MATRIX PRINTER 136 COLUMN: 15 Units**Price per unit Rs. _____****(all inclusive)**

Item	Description
DOT MATRIX	136 COLUMN PRINTERS
SPEED	HIGH SPEED DRAFT (10cpi) 476 CPS / 550 CPS
PRINthead LIFE	400 MILLION STROKES
RIBBON LIFE	12 MILLION CHARACTERS
INTERFACE	PARALLEL / USB
TRACKTOR UNIT	PUSH OR PULL

9.DOT MATRIX PRINTER 80 COLUMN: 10 Units**Price per unit Rs. _____****(all inclusive)**

Item	Description
DOT MATRIX	80 COLUMN PRINTERS
SPEED	DRAFT (10cpi) 416 CPS
PRINthead LIFE	400 MILLION STROKES
RIBBON LIFE	2.5 MILLION CHARACTERS
INTERFACE	PARALLEL / USB
TRACKTOR UNIT	PUSH OR PULL

10.MULTI FUNCTION PRINTER MONO: 25 Units**Price per unit Rs. _____****(all inclusive)**

Item	Description
MFP	Print/Scan/Copy
Print method	On-demand ink jet
Print Speed	Approx. 34 PPM (Draft)
Scanning	Flatbed Colour Image Scanner
Resolution	1440 dpi x 720 dpi (with Variable-Sized Droplet Technology)
COPY	34 PPM Draft
Reduction / Enlargement	24 – 400%, Auto Fit Function
ADF	10 Sheets
INTERFACE	USB / Ethernet - 10/100MB Network / Mobile
PRINT OUPUT	Approx. 6000 Page Yield per Ink bottle

11.LASER PRINTER MONO: 50 Units**Price per unit Rs. _____****(all inclusive)**

Item	Description
Laser	Mono Black & White
Print Speed	Up to 33 PPM
FPO	7.5 sec.
Resolution	1200x1200
Processor(MHz)	800 MHz
Memory	256 MB
Noise	54/inaudible
Monthly Duty	50,000 pages/700-3000 pgs
Input Capacity	300 /800 Sheet
PRINT OUPUT	150 sheets
Duplex	Automatic
Weight	11 Kg

12.INFORMATION KIOSKS:**5 UNITS.****Price per unit Rs. _____ (all inclusive)**

Technical Specification for Information Kiosks:	Information Kiosks with support for LAN and wireless access mode. 19" TFT large-screen, handwriting input and interactive operation with high definition screen support for displaying. Vandalisation-proof ultrasonic touch screen, high sensitive for touching. User-friendly interface, support multi-languages and audio prompts. Self-diagnosis and repair, fault alarm and report.
Access Mode	LAN or wireless access
Computer	Intel Dual-core CPU 1.6GHz or higher, 4G RAM or higher, 320G hard Disk or higher, 2 RS-232, 6 USB, video Card, 2 ethernet interface, supporting TCP/IP protocol, sound Card, video card,etc.
Screen Touch Panel	19" LCD display, 32bits true color, resolution 1280*1024 High Lum, Lum \geq 300cd/m ² , 180°deflection angle, contrast 500:1 high transmittance, high resolution & durability. Dustproof, waterproof, explosion proof, accurate positioning, no drifted, Operation sensitivity \leq 80g, response speed \leq 10.4ms, resolution 4096*4096 Mohs' scale of hardness : level 7
Encryption Keypad	16 pieces of stainless steel keycaps, dustproof, waterproof, explosion proof, strip proof, revelation and monitor proof etc. DES and 3DES algorithm encryption Key management: store 16 arrays of 64bit key, can only written, Self-destruction for secret-key, program and sensitive information Support UnionPay, with PCI international certification
Power Supply	Specified power supply AC 110 ~ 240 V
UPS	AC220 \pm 10%, 60/50 Hz;500VA
Multimedia	Left and right two-way voice output, 3D surround effect
Structural	Vertical installation, elegant appearance, material with high quality steel ,strong and durable; surface with plastic powder spraying Modular design, to facilitate maintenance
Working Environment	Working Temp : 0 °C to + 55 °C ;Relative humidity (RH) : 10% to 95%

13.Server Specification: 4 Units.

Price per unit Rs. _____

(all inclusive)

CPU: 2 Nos.	2 Nos. of Intel Xeon E5 2660 V2 2.2 GHz 10 Cores/20 threads 25mb cache CPU
Main board	Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and E5-2600 v2 family Intel® C602 chipset; QPI up to 8.0GT/s Up to 1TB ECC DDR3, up to 1866MHz; 16x DIMM sockets, 2 PCI-E 3.0 x16, 3 PCI-E 3.0 x8, 1 UIO PCI-E 3.0 x8 (for SMC UIO HBA) or 1 PCI-E 2.0 x4 (in x8) Dual port 10GBase-T 8x SATA2 and 2x SATA3 ports 8x SAS2 ports from LSI 2208 Integrated , IPMI 2.0 and KVM with Dedicated LAN Dual port front and rear USB 3.0 Performance boost with Hyper-Speed
RAM	16 GB / 32 GB of 1866/1600 ECC DDR3 SD RAM with maximum 72 Bit, 240 Pin Gold Plated DIMMs, to support up to maximum 1 TB 16 X DIMM sockets
Storage:	2 nos of 600GB capacity with 8x 3.5" Hot-swap SAS / SATA Drive Bays Spinning at 15,000 RPM for mission-critical performance FCAL & SAS interfaces for reliable data throughput Advanced Power Management optimizes power consumption 64MB cache buffer – largest in the industry Self-encrypting models conform to TCG's Enterprise specification 5-year limited warranty Solid state SAS drive option with 12GB/S also should be quoted
Network	At least Dual port Giga lane 10G base T With option to install fiber optic HBA up to 2 port @: 8 Gbps (1600 MB/sec); 4 Gbps (800 MB/sec) per port or 4 port HBAs @: 4 Gbps (800 MB/sec); 2 Gbps (400 MB/sec); 1 Gbps (200 MB/sec) (per port)
Graphics	Compatible Onboard or Graphic accelerator card
Expansion	1x slim DVD WR with 7x full length Expansion slots
Keyboard/ Mouse	cord less wired or wireless
Audio	Onboard
Chassis	Compatible 2U rack mount 7x Full-height, Full-length Expansion Slots 100% Cooling Redundancy, Adjustable Air Shroud Dual Redundant 920W Redundant High-efficiency 80 PLUS minimum gold level (94%+) Power Supply
Optional	Compatible Solid state SAS hard drive option with 12GB/S Fiber optic HBAs up to 4 port 8 GB/s
OS Compatibility	Microsoft Windows Server, Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES), Oracle Solaris VMware, Citrix Xen Server (University Academic License, OEM software to be installed)

14.NAS STORAGE/BACKUP SERVER: 2Units

Price per unit Rs. _____ (all inclusive)

CPU:	2 Nos. of Intel Xeon E5 2620 V2 2.2 GHz 6 Cores/20 threads 25mb cache CPU
Main board	Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and E5-2600 v2 family Intel® C602 chipset; QPI up to 8.0GT/s Up to 1TB ECC DDR3, up to 1866MHz; 16x DIMM sockets, 2 PCI-E 3.0 x16, 3 PCI-E 3.0 x8, 1 UIO PCI-E 3.0 x8 (for SMC UIO HBA) or 1 PCI-E 2.0 x4 (in x8) Dual port 10GBase-T 8x SATA2 and 2x SATA3 ports 8x SAS2 ports from LSI 2208 Integrated , IPMI 2.0 and KVM with Dedicated LAN Dual port front and rear USB 3.0 Performance boost with Hyper-Speed
RAM	16 GB / 32 GB of 1866/1600 ECC DDR3 SD RAM with maximum 72 Bit, 240 Pin Gold Plated DIMMs, to support up to maximum 1 TB 16 X DIMM sockets
Storage	6 nos of 2TB ENTERPRISE SAS , capacity with MAXIMUM CAPACITY TO HOLD 8x 3.5" Hot-swap SAS / SATA Drive Bays Spinning at 7200 RPM for mission-critical performance FCAL & SAS interfaces for reliable data throughput Advanced Power Management optimizes power consumption 64MB cache buffer – largest in the industry Self-encrypting models conform to TCG's Enterprise specification 5-year limited warranty
Network	At least Dual port Giga lane 10G base T
Graphics	Compatible Onboard or Graphic accelerator card
Expansion	1x slim DVD W/R ROM with 7x full length Expansion slots
Keyboard/ Mouse	cord less or wireless
Audio	Onboard
Chassis	Compatible 2U rack mount 7x Full-height, Full-length Expansion Slots 100% Cooling Redundancy, Adjustable Air Shroud Dual Redundant 920W Redundant High-efficiency 80 PLUS minimum gold level (94%+) Power Supply
Optional	Compatible Solid state SAS hard drive option with 12GB/S
Key features	iSCSI Functionality -IP Address restrictions, CHAP, MPIO, iSCSI Failover, SCSI-3 persistent reservation, Session Management NAS Functionality -Windows Active Directory/Primary Domain Controller, NIS, Intern/external LDAP, ADS and NIS User/Group ID Synchronization, File System with Journaling, User and Group Quota, Antivirus Network Clients & Protocol -Supports Windows, Linux, Unix, Mac OS 8.0 - 10.5.8, X, SMB/CIFS, FTP, Secure FTP, HTTPS, Apple Talk, NFS v2, v3, iSCSI, Fibre Channel Backup -WORM, NDMP v3.0, Backup-Agents (Backup Exec®, Retrospect®, BrightStor®), Data (File) Replication, Volume Replication

15.CCTV SURVILANCE DEVICE 10 Units

Price 8 Channel unit Rs. _____ (all inclusive)

Price 16 Channel unit Rs. _____ (all inclusive)

Price 24 Channel unit Rs. _____ (all inclusive)

Price 32 Channel unit Rs. _____ (all inclusive)

Price 48 Channel unit Rs. _____ (all inclusive)

Feature	Specification for 8/16/24/32/48 channel Enterprise DVR
Processor	High performance Dual-core embedded microprocessor
Operating System	Embedded LINUX
System Resources	Pentaplex function: live, recording, playback, backup & remote access
User Interface	GUI
Control Devices	Front panel, USB mouse, IR remote control, Keyboard, Network
Video Input	16 channel /24 channel / 32 Channel/ 64 channel , BNC
Video Standard	NTSC(525Line, 60f/s), PAL(625Line, 50f/s)
Compression	H.264 / G.711
Video Resolution	1920×1080, 1280×1024, 1280×720, 1024×768
Audio Output	1 channel, BNC
Motion Detection	Zones: 396(22×18)
Hard Disk	2 SATA ports (2HDDs or 1HDDs+1CD/DVD-RW), up to 8TB
Smart Phone	iPhone, iPad, Android, Windows Phone
Trigger Events	Recording, PTZ, Tour, Alarm, Video Push, Email, FTP, Spot, Buzzer & Screen tips
Recording Mode	Manual, Schedule(Regular(Continuous), MD, Alarm), Stop
Search Mode	Time/Date, Alarm, MD & Exact search (accurate to second), Smart search
Playback	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Fullscreen, Repeat, Shuffle, Backup selection, Digital zoom
Backup Mode	USB Device / Network / Internal SATA burner
Interface Ports	2 USB Ports, 1 RJ45, 1 RS232, 1 eSATA & RS485 Port
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec
Max User Account	20 users
Ethernet	RJ-45 port (10/100M/1000M)
Protocols	HTTP, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, Alarm Server
Remote Operations	Monitor, PTZ control, Playback, System setting, File download, Log information
Power Supply	DC12V/ 3.3A
Power Consumption	25W(without HDD)
Working Temp	-10 ~+55°C / 10~90%RH / 86~106kpa

16.SURVILANCE DEVICE CAMERA 25 Units**Price Dome unit Rs.** _____ (all inclusive)**Price Bullet unit Rs.** _____ (all inclusive)**Price PTZ with optical/digital zoom unit Rs.** _____ (all inclusive)

Camera	Dome Bullet PTZ cameras with optical or digital zoom	
Image Sensor	1/3" Super HAD / CCD II or 1/3" EX view HAD CCD II	
Effective Pixels	976(H) x582(V), 570K pixels	976(H) x 494(V), 480K pixels
Horizontal Resolution	Color: 700TVL, B/W: 750TVL	
Electronic Shutter	1/50s~1/100,000s, 10s~1/100,000s@Slow shutter, 512x	1/60s~1/100,000, 8s~1/100,000s@Slow shutter, 512x
Synchronization	Internal / External	
Min. Illumination	0.8 LUX day and F2.0/0 LUX with IR ON	
Sync to noise Ratio	More than 50dB	
Video Output	1V p-p Composite Output (75Ω/BNC)	
Camera Features		
OnScreenDisplay	English	
Day/Night	Auto (ICR) / Color / B/W	
Backlight Compensation	BLC / HLC / WDR (75dB)	
White Balance	Auto Trace WB1 / Auto Trace WB2 / Manual / Auto	
Gain Control	Auto / Manual	
Gamma Correction	Up to 0.45	
Noise Reduction	2D / 3D	
Privacy Masking	Up to 4 areas	
Digital Zoom	Magnitude / Horizontal / Vertical	
Picture Adjustment	Mirror / Contrast / Sharpness / Hue / Gain/ Slow Shutter	
Lens		
Focal Length	2.7~9mm or 6 ~ 8 mm fixed	
Focus Control	Manual	
Lens Type	Manual / Auto iris	
Mount Type	C / CS	
Auxiliary Interface		
RS485	1 Port	
General		
Power Supply	AC24V±10% or DC12V±10%	
Power Consumption	< 7 watt	
Working Environment	-30°C~+60°C / 20%~80% RH	
Certification	CE , FCC certified	
IP rating	66	

17. Cable with 18/2 power Cable White Jacket, 500/1000 feet in Box

Price per 500 meter box Rs. _____ (all inclusive)

Price per 1000 meter box Rs. _____ (all inclusive)

18.CAT6/RJ45 Network 4-pair UTPCable;

Price per box Rs. _____ (all inclusive)

19.Power supply for Camera

Price per Unit Rs. _____ (all inclusive)

Power supply Unit	specification
For 16 camera to be connected Over multi core cable	Switch mode power supply with output of 12V DC/ 16 A to 20 A power supply Wall mountable fused for each camera for continues protection from Short circuit in cabling and or lightening With cooling DC Fan for 24x7 operation

20.Cabling, Casing,Caping with complete Installation (Rates Per Meter)

Price per meter Rs. _____ (all inclusive)

Multi-core full copper solderable cable	3+1 core or 4+1 core shielded cable No. of strands / SWG : 7/36 Conductor Size in mm : 0.193 Overall diameter in mm : 6 for 3+1 core and 6.2 for 4+1 core Crosssectional area in mm²: 0.2048 Max. conductor resistance (Ohm / kilometer) : 127 ohm 75 Ohms Coaxial for Video signal (crystal clear picture quality) flexible wire cores for audio signal & 12 V power supply used for CCTV & surveillance systems.
CAT6 cable for CCTV surv. Over Ethernet cable	With FCC /IE specification full copper branded such as AVAYA/ DLINK /DAX cables Rate to be quoted per meter
Cable laying charges per meter in length	Including PVC plastic white rectangular stripping along with soldering and proper thermal insulation including BNC and other connectors such as Video BALUN Active or passive as per requirement and other wages if any.

21.Hard disk for used in DVR for backup: 10 Units

Price per 2 TB Unit Rs. _____ (all inclusive)

Price per 1 TB Unit Rs. _____ (all inclusive)

Specifications	2 TB	1 TB
Formatted capacity ¹	2,000,398 MB	1,000,204 MB
User sectors per drive	3,907,029,168	1,953,525,168
Form factor	3.5-inch	3.5-inch
RoHS compliant ²	Yes	Yes
Data transfer rate (max)Buffer to hostHost to/from drive (sustained)	6 Gb/s (EURX) 3 Gb/s (EURS)130 MB/s	6 Gb/s110 MB/s
Cache (MB)	64	64
Rotational speed (RPM)	IntelliPower	IntelliPower
Reliability/Data Integrity		
Load/unload cycles ³	300,000	300,000
Non-recoverable read errors per bits read	<10 in 10 ¹⁴	<10 in 10 ¹⁴
Temperature (°C, on the base casting)OperatingNon-operating	0 to 70-40 to 70	0 to 70-40 to 70
Shock (Gs)Operating (2 ms, read/write) Operating (2 ms, read)Non-operating (2 ms)	3065250	3065300
Acoustics (dBA) IdleSeek (average)	2324	2324

22. Monitor for display of DVR play: T.V. Display system with sound including wall mounting kit 10Units.

Price per 32" TV Unit Rs. _____ (all inclusive)

Price per 42" TV Unit Rs. _____ (all inclusive)

Panel Specification	
Viewing Angle H/V (Typical)	178°/ 178°
Aspect Ratio 16:9	16:09
Resolution	1920 x 1080 (42") / 1366x768 (32")
Backlight Type	E-LED
Viewable Screen Size	32"/42" (106.7 cm) , 31.5" (80 cm)
Picture Features	
Picture Format	16:9, Zoom1, Zoom2, 4:3
Dynamic Contrast Ratio	Yes
Color Temperature	Normal, Warm, Cool
Picture Mode	Vivid, Standard, Movie, Mild, Sport, Game, Eco, Personal.
Backlight Control	Yes
3D Comb Filter	Yes
Sound Features	
Speaker Power Output	10W x 2
Auto Volume Level	Yes
Dream Surround Sound	Yes
Sound Mode	Standard, Music, Speech, Personal.
Other Features	
Wall Mount	VESA 400 × 400 mm
Auto Blue Back	Yes
Favorite Channel	-
Channel Skip	Yes
Manual Channel Search	Yes
Auto Channel Search	Yes
Child Lock	Yes
Sleep Timer	Off, 10 ~ 120 Minute
TV Tuner System	PAL BG / DK / I, NTSC, MSECAM

23.Display Monitor System: 10 Units

Price per 23.6” Display Unit Rs. _____ (all inclusive)

Price per 20” Display Unit Rs. _____ (all inclusive)

Display Size	23.6 Wide (598 mm diagonal)	20 Wide (508.05 mm diagonal)
Native Resolution	1920 x 1080	1600 x 900
Response Time	2 ms (GTG)	5 ms
Interfaces	Analog (D-sub) , HDMI	Analog(D-sub) , DVI-D
Viewing Angle (horizontal)	170° (H)	170° (H)
Viewing Angle (vertical)	160° (V)	160° (V)
Speaker	N/A	N/A
Luminance	250 Cd/m ²	250 Cd/m ²
Contrast Ratio	1000:01:00	1000:01:00
Dynamic Contrast Ratio	20,000,000:1	: 20,000,000:1
Pixel Pitch	0.248 mm	0.2768 mm
Colors Supported	16.7 Million	16.7 Million
Frequency Range (Horizontal)	30-83 KHz (H)	30-83 KHz (H)
Frequency Range (Vertical)	50-76 Hz (V)	50-76Hz (V)
On Screen Controls	Luminance, Image Setup, Color Temperature, Color Boost, Picture Boost, OSD Setup, Extra, Reset, Exit.	Luminance, Image Setup, Color Temperature, Color Boost, Picture Boost, OSD Setup, Extra, Reset, Exit.
Power	24 W (Typical)	20W (Typical)
Power Supply	100-240 VAC; 50/60 Hz	100-240 VAC; 50/60 Hz

24. BIOMETRIC DEVICE:**5 Units****Face Based Attendance system****Price per unit Rs. _____ (all inclusive)****Finger Based Attendance system****Price per unit Rs. _____ (all inclusive)**

Item	Description
Biometric	Face / Finger Based Attendance system
CPU	TI DM 600 MHz / 667MHz RISC, 533MHz DSP
User Capacity	500 / 1400 or / 400,000 templates (1:1), 20,000 templates (1:N) / 200,000 User Capacity
Record Capacity	150,000 / 1,000,000 events / Fingerprint: 1,000,000 / Image: 5,000
Recognition	Dual Sensor V 3.0
Sensor	Specialized double sensor
Verification Method	Card + Face / Face only / Finger / Optical - Face detection & videophone
Verification Speed	Less than 1 sec. 500 User / 1 to 3,000 identification in 1 sec
Keyboard	4*4 Touch Keypad
LCD	3.5 inch TFT Color / 5.0 inch WVGA touchscreen
Communication	TCP/IP / Wireless LAN (optional), TCP/IP, RS485 / PoE
Data Transfer	USB Host / RS 232
Memory	1GB SD card – 70,000 Images / 1GB Flash + 256 MB RAM / SD card slot
Access control	Standard Wiegand 26/34 bit output / Deadbolt, EM lock, door strike, automatic door
Card Recognition	EM RF ID (125 KHz) of Mi FARE Card / 125KHz EM, 13.56MHz Mifare/DesFire
Certification	CE FCC Class A, ROHS, ISO 9001
Sound	16 bit Hi-Fi voice & sound indication

25. Thin Client System 50 Units**Price per unit Rs. _____ (all inclusive)**

Thin PC	Thin client / zero client PC
Processor	Intel Atom 1.8 GHz or Equalant
RAM	2 GB
Video Graphics	Integrated
Hard Disk	2/4 GB Sata Flash
Interface	10/100/1000 Giga Port
I/O	Keyboard / Mouse / VGA / USB (wireless)
Monitor	18.5" LCD /LED
Optional	WLAN / Terminal Emulation / Embedded Antivirus
Browser Support	Internet Explorer / Mozilla Firefox
OS	Windows Embedded / Linux (University Campus License)

26.Smart-UPS On-Line 5KVA/230V 2 Nos.

Price per 5 KVA unit Rs. _____ (all inclusive)

27.Smart-UPS DP 8KVA /230 V 2 Nos.

Price per 8KVA unit Rs. _____ (all inclusive)

Output Power Capacity	8000 Watts / 8000 VA Max Configurable Power 8000 Watts / 8000 VA 5000 Watts/5000VA Max Configurable Power 5000 Watts / 5000 VA
Nominal Output Voltage	230V Output Voltage Note Configurable for 220 : 230 or 240 nominal output voltage
Efficiency at Full Load	95.0% Output Voltage Distortion Less than 5% at full load
Output Frequency (sync to mains)	47 - 53 Hz for 50 Hz nominal Crest Factor up to 5 : 1
Waveform Type	Sine wave
Bypass Internal Bypass (Automatic and Manual), Optional External Bypass Input Nominal Input Voltage 230V, Includes: CD with software, Smart UPS signaling RS-232 cable, User Manual	

28.Multimedia Projector: 0.59 “DLP/ LCD & LED –Laser Hybrid 5 Nos.

Price per 2500 Ansi Lumens unit Rs. _____ (all inclusive)

Price per 3000Ansi Lumens unit Rs. _____ (all inclusive)

Lumens	2000 Ansi/ 2500 Ansi / 3000 Ansi
LCD Size	0.59” with MLA (D8)
Native Resolution	WXGA
Brightness (White and Colour)	2,500lm / 2,000lm
Contrast Ratio	3000:1
Lamp Life	5,000 hours (Normal)/ 6,000 hours (Eco)
Keystone Correction	Vertical: ±15° Horizontal: ±15°
Sound Output	16W Monaural
Fan Noise	35dB / 28dB
PORT	HDMI/ S video Computer 2/ RS 232C Monitor Out Audio Out,LAN Port & USB Port
Interactive; Basic Specification	Technology Infrared
Input Devices	Digital Pen (Easy Interactive Pen 1 and 2)
Connection to PC	USB, Network
Calibration	Auto / Manual (25points)
Functions	Hover, Right click, Auto Adjust Pen Area
Computer Interactive	Driver Installation Windows, Linux
Multi-Pen Support	Required, 2 types of pens (Easy Interactive Pen 1 and 2) Instant Annotation (PC-Less) with Whiteboard Function Yes

29.7"/10" TFT CAPACITIVE TOUCH SCREEN TAB**5 Units.****Price per 7" unit Rs. _____ (all inclusive)****Price per 10" unit Rs. _____ (all inclusive)**

Processor	1.2 GHz Dual Core
Voice Call	Yes
Supported Networks	2G: GSM 900, 1800; 3G: UMTS 2100
In The Box	Tablet, Data Cable, Travel Adapter
Operating System	Android 4.1 (Jelly Bean)
Sensors	Geo-magnetic Sensor, Light Sensor, Accelerometer, Proximity Sensor
Memory RAM	1 GB
Storage Internal Storage	8 GB
Expandable Storage Capacity	32 GB
Memory Card Slot type	microSD
Display Type	7 inch TFT Capacitive Touchscreen with 1024 x 600 pixels ,16 M Colors
Other Display Features	Multi-touch
Primary Camera	3 megapixels
Secondary Camera	1.3 megapixels
Video Recording	Yes
Other Camera Features	Shot Mode, Framed Photos
Mail Features	Email
Battery Type	4000 mAh Lithium - Ion
Talk Time	20 hrs (3G)
Wi-Fi	Yes, 802.11 a/b/g/n
3G	Yes
Pre-Installed Browser	Android
Video Playback	Yes , Full HD Playback
Video Formats Supported	H.263, H.264, DivX, WMV, MPEG4
Audio Formats Supported	MP3, WMA, AAC, OGG, eAAC+, AC-3, WAV, apt-X, AAC+, AMR-NB, AMR-WB, FLAC
GPS	Yes, A-GPS, GLONASS
Map Support	Google Maps
Other Connectivity Features	Wi-Fi Hotspot, Wi-Fi Direct, DLNA Support
USB	Yes, USB 2.0
Audio Jack	3.5 mm Headphone Jack
Bluetooth	v3, Supported Profiles(A2DP, AVRCP, OPP, PAN, HSP, SPP, HID)
Dimensions	188 x 111.1 x 9.9 mm
Weight	~300 g

30.dnp Supernova ONE 84"/16:10 Screen with black frame 2 Nos.**Price per unit Rs. _____ (all inclusive)**