

Punjabi University, Patiala
(Established under Punjab Act # 35 of 1961)
University Computer Centre

SHORT TERM E-TENDER NOTICE

REVISED ON 15.01.2019

E-Tenders for items(per item rate basis) and networking projects (rate per project basis)are invited by Punjabi University, Patiala to make purchase of Flatbed Scanners, High Speed Scanner, i3 Desktops, Dual Core Desktops, i5 AiOs, i5 Laptops, i7 AiOs, i7 Laptops, Printers: Inkjet, LaserJet, LaserJet dw, LaserJet nw, MFP, Printronix, Photocopier, Server, UPS Offline/ Online, for its different departments and branches, switches, networking equipment, Wi-Fi LAN equipment and its setup (Project Based), Networking of Computer Labs (Project Based) in different departments/ branches, Smart Class Room solution, Projectors, Stands and Screens. To quote for it please refer to the website www.tenderwizard.com/PUNJAB. All interested Manufacturers/ Suppliers/ Dealers/ OEMs/ System Integrators etc., fulfilling the eligibility criteria mentioned herein can quote for.

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| 1. Last date and Time for receipt of Tender online | : | Date 21-01-2019 (till 05:00 PM) |
| 2. Last date to Physically submit Folder A and Folder C in the office of Director, University Computer Centre | : | Date 22-01-2019 (till 01:00 PM) |
| 3. Time and date of opening Technical bid in the Computer Lab of University Computer Centre | : | Date 22-01-2019 (03:00 PM) |
| 4. Time and date of opening Financial bid in the Computer Lab of University Computer Centre | : | Date 23-01-2019 (03:00 PM) |

<i>Sr.No</i>	<i>Name of Supply</i>	<i>Earnest Money (Refundable)</i>	<i>Tender Fees (Non Refundable)</i>	<i>Bid processing fee.</i>
1.	Purchase of Flatbed Scanner, High Speed Scanner, i3 Desktop, Dual Core Desktop, i5 AiO, i5 Laptop, i7 AiO, i7 Laptop, Printers: Inkjet, LaserJet, LaserJet dw/ nw, MFP, Printronix, Photocopier, Server, UPS Offline/ Online, for its different departments and branches, switches, networking equipment, Wi-Fi LAN equipment and its setup(On Each Project Basis Separately), Networking of Computer Labs in different departments/ branches (On Each Project Basis Separately), Smart Class Room solution, Projectors, Stands and Screens.	<i>To be calculated on per item and on project basis as explained in the procedure given below to calculate it</i>	Rs. 2000/-	Rs. 2360/-

Procedure to calculate the earnest money:

Each and every item has been specified with the quantity required, specifications, and list of departments who have demanded the items, estimated gross cost of that item and the earnest money @2% (approximately).

TOTAL EARNEST MONEY SHALL BE CALCULATED AS THE SUM TOTAL OF ALL THE ITEMS BEING QUOTED BY THE RESPECTIVE VENDOR. ONLY ONE DEMAND DRAFT SHALL BE DEPOSITED ACCORDINGLY. ATTACH ITEM WISE DETAIL OF THE EARNEST MONEY CALCULATED ALONG WITH THE DRAFT.

Aspiring Tenderer who has not obtained the User ID and password for participating in e- tendering may obtain the same by registering in the e- procurement portal www.tenderwizard.com/PUNJAB. The Tenderers once registered can participate in any of the department tenders. For any clarification contact 9257209340, 0172-5035985, 8146699866 or E-mail : etenderhelpdeskpb@gmail.com, pavitar.s@tenderwizard.com

All other details can be seen in the bidding document.

Terms and conditions:-

1. **Earnest Money and Tender Fees** shall be submitted in shape of DD (separately) of any Nationalised Bank payable at par in favour of The **Registrar, Punjabi University Patiala** in the Office of the Director, University Computer Centre by 22-01-2019 till 01:00 PM.
2. The last date for payment of bid processing fees (through e- payment in the form of Direct Debit or Internet Banking) and submission of e-tender is 21-01-2019 (till 05:00 PM)
3. The Tender documents shall be submitted in three folders.
 - (i) **Folder-A:** Shall contain pre-qualification documents such as Registration, PAN No., GST, Income Tax Return (last 2 years) and Non Black List Self certificate, technical sheet and supporting documents etc. to be submitted along with the drafts in the Office of Director University Computer Centre, Punjabi University Patiala. (Offline/Physically). The sealed envelope must bear the title “ Folder A: Technical sheets and other supporting documents”. **Make sure that Technical Compliance Sheet shall be duly filled and signed by the authorised signatory.** It must reach the Office of the Director University Computer Centre by 22-01-2019 till 01:00 PM.
 - (ii) **Folder-B:** shall contain financial bid on the prescribed format. (Online)
 - (iii) **Folder-C:** Demand Drafts of Tender Fees and Earnest money. It must reach the Office of the Director, University Computer Centre by 22-01-2019 till 01:00 PM.
4. In case Earnest Money, Tender Processing Fees and Bid Processing Fees are not deposited, the bids will not be considered and rejected straightaway.
5. The folder-B: shall be opened only of those contractors who will be found technically qualified for the supply.
6. ***In case vendor wants to give some clarification/remarks, the same shall be submitted on the official letter pad of the company in the physical form.*** It must reach the Office of the Director, University Computer Centre by 22-01-2019 till 01:00 PM.
7. Corrigendum/Addendum/Corrections, if any, will be published in the University Website only. The Firm may continue to check the University website www.punjabiversity.ac.in.

PRE-QUALIFICATION REQUIREMENTS: -

1. Manufacturers/Suppliers/ Authorized Dealers/ System Integrators/ OEMs etc. for Supply of Equipment and setting up of LANs etc. can participate in this Project.
2. The Supplier/Firm shall submit a copy of PAN No., GST No. etc.

3. The Supplier/firms shall submit copies of income tax return for the last 2 years.
4. The Supplier/firms shall also submit Self certification that they have not been debarred/blacklisted by any Govt./ Semi Govt. Organization or any Corporation at any stage.

Please note that Quantity mentioned below is indicative in nature. It is subject to change as per the actual requirements. It may increase/ decrease or may not be purchased at all.

Part I: Section A

#	Qty	Specifications	Department	Earnest Money
1.	2	Desktop (LENOVO/ HP/ DELL) Commercial segment 8th Gen. Dual Core Processor, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement, 4 GB RAM DDR4, 1TB HDD, DVD RW, 21" Coloured Monitor, USB Mouse & Keyboard, 3 years warranty onsite	Regional Centre, Bathinda	Rs. 1,200/-
2.	3	Flatbed Scanner (HP/Canon) with Optical Resolution 2400 dpi x 4800 dpi, Input type Colour, Document Size Class A4/Letter, One-year warranty from OEM.	Distance Education, Office of Dean Academics Affairs, Regional Centre Bathinda	Rs. 1,780/-
3.	1	(HP/ Canon/ Epson) Scanner Sheet feed/ADF/ Flatbed scanner- Scanning Resolution up to 600x600dpi, scanning speed-30ppm, ADF capacity-50 sheets.	Department of University Computer Centre	Rs. 420/-
4.	199	Option-I: Desktop (LENOVO/ HP/ DELL) commercial segment 7th Gen., i3 Processor, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement, 4 GB RAM DDR4, 1TB HDD, DVD RW, 2GB Graphics Card , 21" Coloured Monitor, USB Mouse & Keyboard, 3 years warranty	Accounts Branch Bhai Ghaniya Health Centre Patiala Department of Biotechnology Department of Botany Department of Civil Engineering	1,67,000/-
5.		Option-II: Desktop (LENOVO/ HP/ DELL) Commercial segment 8th Gen., i3 Processor, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement, 4 GB RAM DDR4, 1TB HDD, DVD RW, 2GB Graphics Card , 21" Coloured Monitor, USB Mouse & Keyboard, 3 years warranty onsite	Department of Commerce Department of Computer Science Department of ECE Department of Fine Art Department of History Department of Mechanical Engg Department of Philosophy	

			Department of Punjabi Department of Sports Science Department of University Computer Centre Department of University School of Applied Management Registration Branch Office of Dean Academic Affairs Administrative Blocks	
6.	59	Option-I: (LENOVO/ HP/ DELL) AIO Commercial Segment intel 7th Gen. Full Powered processor i5 64 bit base 21" Coloured Display, 8GB DDR4 RAM, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement USB 3.0, HDD 1TB, DVDRW, USB Keyboard and Mouse, 3 years onsite warranty.	Department of Civil Engineering Department of Defence Studies Department of Education and Community Service Department of English Department of University Computer Centre	59,000/-
7.		Option-II:(LENOVO/ HP/ DELL) AIO Commercial Desktop intel 8th Gen. Full Powered processor i5 64 bit base 21" Coloured Monitor, 8GB DDR4 RAM, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement USB 3.0, USB 2.0, HDD 1TB, DVDRW, USB, keyboard and mouse, 3 years onsite warranty.	Gurmat Sangeet Mathematics Office of Dean Academics Affairs Registration Branch Right to Information Cell	
8.	10	(Hp/ Lenovo/ DELL) Laptops Intel Core i5 8th Gen., 8 GB DDR4 RAM, 2TB HDD, 15.6" Display, 2GB Graphic Card, Windows 10 single language (English) 64 Bit upgradable through Campus Licence Agreement, with Genuine laptop Bag., Three years onsite warranty.	Department of Botany Department of Distance Education Department of Sociology & Social Anthropology Department of University Computer Centre Department of Philosophy	12,000/-
9.	1	Desktop Intel i7 8 th Gen., 8GB Ram, Graphics card, Monitor 27", 2 TB HDD, Keyboard, mouse and 1 KVA Offline UPS with 15-30 min backup (with original windows), 2 years warranty.	Department of Journalism and Mass Communication	1,800/-
10.	1	(HP/ Lenovo/ DELL) Laptop Intel Core i7 8th Gen., 8 GB RAM, 1 TB HDD, 15.4" Display, Window 10, Laptop Bag. Three years onsite warranty.	Department of Education and Community Service	1,200/-
11.	1	(HP/ Lenovo/ DELL) Laptop Intel Core i7 8th Gen., 12 GB DDR4-2400 SDRAM, 512GB SSD, 14" Display, 4GB Graphics Card, 2 USB 3.0, 1 USB 2.0, 1 HDMI, Window 10, Laptop Bag. Three years onsite warranty.	Department of University Computer Centre	2,500/-

12.	1	(Epson/HP/Cannon/Ricoh) Inkjet Printer Scanner Copier, with Wi-Fi direct, up to 33 ppm Black and 15 ppm Colour, Copy Size: A4, Letter with Copy resolution of 600 x 600 dpi; Scan resolution 1200 x 2400 dpi, Printing capacity with 4500 pages black and 7500 pages coloured. With 1 year warranty.	Department of ECE	280/-
13.	1	Inkjet Printer with Ink Tanks; Printer, Output - Colour, Pages per minute - 27 pages (Black & White), 15 pages (Colour) ; Paper size- A4/Legal , Warranty - 1 year onsite	Department of University Computer Centre	160/-
14.	52	Option 1: LaserJet Printer (HP/ Ricoh/ Canon/ Epson) Print speed 15ppm, Paper size- A4/Legal, with one year onsite warranty.	Accounts Branch Department of Defence Studies Department of Distance Education Department of statistics Department of University Computer Centre Office of Dean Academics Affairs Regional Centre Bathinda Right to Information Cell Department of Sports Science	13,000/-
15.		Option 2: LaserJet Duplex Printer (HP/ Ricoh/ Canon/ Epson) Print speed 15ppm, Paper size- A4/Legal, with one year onsite warranty.		
16.		Option 3: LaserJet Duplex and N/W Printer (HP/ Ricoh/ Canon/ Epson) Print speed 15ppm, Paper size- A4/Legal, with one year onsite warranty.		
17.		Option 4: LaserJet Duplex Printer and N/W with Wi-Fi (HP/ Ricoh/ Canon/ Epson) Print speed 15ppm, Paper size- A4/Legal, with one year onsite warranty.		
18.	2	LaserJet Printer, Speed 30ppm A4, 15ppm A3, Duplex printing, USB, Ethernet, Memory 128 MB or above (HP/ Ricoh/ Canon/ Epson)	Accounts Branch	2,400/-
19.	35	Option 1: LaserJet MFP (HP/ Ricoh/ Canon/ Epson): MONO Laser Jet Printer with Print, Copy and Scan Functions. Duplex, Network ready, 18 PPM (Printer Speed Black), with ADF, Scan Resolution upto 600 dpi coloured and 1200 dpi mono on flat with one year onsite warranty	Bhai Ghaniya Health Centre Patiala CAMS Department of Commerce Department of Defence Studies	14,700/-

20.		Option 2: MFP (HP/ Ricoh/ Canon/ Epson): MONO Laser Jet Printer with Print, Copy and Scan Functions. Duplex, Wi-Fi ready, 18 PPM (Printer Speed Black), with ADF, Scan Resolution upto 600 dpi coloured and 1200 dpi mono on flat with one year onsite warranty	Department of Education and Community Service Department of History Department of Philosophy Department of Political Science Department of Psychology Department of Sanskrit &Pali Department of Sports Science Department of statistics Department of University Computer Centre Department of University School of Applied Management Mathematics Punjab School of Law Fine Arts Department of Distance Education	
21.	1	(Ricoh/Canon/Sharp/HP/KonicaMinolta/Toshiba) Photocopier Machine, Continuous 20 ppm, minimum memory 256 MB, Network Ready, paper size Standard paper tray(s): A3, A4, A5, By-pass Tray A3, A4, A5, A6, Paper Input Capacity Standard: 350 sheets, Paper Weight Standard paper tray(s):52 - 105 g/m ² , Bypass tray: 52 - 216 g/m ² , Duplex: 64 - 105 g/m ² , Multiple Copying Up to 99 copies, Resolution Up to 600 dpi , Zoom From 50% to 200%, Scan Speed Colour: Maximum 6 originals per minute, B/W Maximum 15 originals per minute, ResolutionMaximum 600 dpi.	Department of Psychology	900/-
22.	3	Printronix HD Matrix P8003H Open Print HD Printer 36 IPM	Examination Branch	14,500/-
23.	1	Servers: Xeon gold 6136, RAM128 GB DDR4, Storage single rack 6 to8 TB, Raid 1 and 3, RAM slots 24, 4 TB Firecuda SATA HDD, Redundant power supply , 21.5'' LED, keyboard, mouse, Server Rack 6 U, 24x7 after sales support. Make : HP/DELL/LENOVO	Registration Branch	5,500/-

24.	175	UPS (Intex/APC/ Numeric/ Luminous/): 600 VA OR Above	Accounts Branch Bhai Ghaniya Health Centre Patiala Biotechnology Department of Biotechnology Department of Civil Engineering Department of English Department of Sports Science Department of University Computer Centre Office, Dean Academics Regional Centre Bathinda Registration Branch Office of Dean Academic Affairs Punjabi Applied Management Computer Science Commerce	8,750/-
25.	1	UPS 2KVA online with 8 42AH Batteries	Registration Branch	1,100/-
26.	1	UPS 3KVA online with 6 batteries of 26AH	Pharmaceutical Sciences and Drug Research	900/-
27.	2	UPS 3KVA online UPS with 8 batteries of 100AH	Accounts Branch	4,000/-

Part I: Section B

#	Qty	Specifications	Department	Estimated Cost	Earnest Money
28.	1	ESRI India GIS Academy Program (EIGAP), ESRI ArcGIS Advance with desktop extensions: Network Analyst Extension (Qty-05), Spatial Analyst Extension, Geo-Statistical Analyst Extension, 3D Analyst Extension, Data Interoperability, Maplex, Arc Scan, Data Reviewer, Arc Schematics Extension, Arc Publisher Extension, Complementary Esri India User Conference Registration, ESRI Arc GIS Server Advance Enterprise (Qty-1), Subscription Terms: 3 Years, 3 days Training (Maximum for 5 faculty Members), Inclusive of all taxes, Installation in the Department.	Department of Geography	4,90,000/-	9,800/-

Part I: Section C**SMART CLASSROOM Solutions**

Sr.	Qty.	Specifications	Department	Estimated Cost	Earnest Money
29.	27	<ul style="list-style-type: none"> • Smart Class Room Solution with i5 7th generation processor, 4GB DDR4 RAM, 1TB hard disk, Built in speakers with amplifier, wireless keyboard and mouse, Central controller for system on-off, PC on-off, Projector on-off volume control keys, External PC Input VGA input external ports, USB Ports, HDMI-VGA ports, External mic port, RJ-45 port, RH-232 port, Audio port, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement • Ceramic Interactive Board and Short Throw Projector • Cordless Mic. & Collar Mic. • Imported Wall Mount Projector Kit for Short Throw Projector, wall hanging All-in-one PC-DTD machine with cabinet, frame and control panel one switch on-off controller. • One KVA UPS with case with wall mounting aluminium frame • Visualizer • OS supports : Windows and Linux • Screen Recording, Play Videos On-board, Auto Calibration, Auto Save Everything, PDF Ready • one year onsite warranty 	Department of Biotechnology Department of Political Science Department of Chemistry Department of Social Work Regional Centre, Mohali Department of Geography Department of Sanskrit & Pali USB, Talwandi Sabo Department of Physiotherapy Department of Sports Science Department of Dance Yadavindra College of Engineering Department of Basic & Applied Sciences Department of Public Administration Department of Hindi Department of Human Genetics Department of Defence Studies Mathematics Department of Psychology GurmatSangeet Department of Economics Tourism, Hospitality and Hotel Management Department of English Department of Punjabi	33,75,000/-	97,200/-

30.

- Smart Class Room Solution with i5 7th generation processor, 4GB DDR4 RAM, 1TB hard disk, Built in speakers with amplifier, wireless keyboard and mouse, Central controller for system on-off, PC on-off, Projector on-off volume control keys, External PC Input VGA input external ports, USB Ports, HDMI-VGA ports, External mic port, RJ-45 port, RH-232 port, Audio port, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement
 - Ceramic Interactive Board and Short Throw Projector
 - Cordless Mic. & Collar Mic.
 - Imported Wall Mount Projector Kit for Short Throw Projector, wall hanging All-in-one PC-DTD machine with cabinet, frame and control panel one switch on-off controller.
 - One KVA UPS with case with wall mounting aluminium frame
 - Visualizer
 - OS supports : Windows and Linux
 - Screen Recording, Play Videos On-board, Auto Calibration, Auto Save Everything, PDF Ready
 - one year onsite warranty
- With following addition features:
- Rich multimedia content-enabled education system
 - Wide combination of Multimedia elements such as 3d, 2d, Video, Animations, Rich Graphics and real time images and text etc.

45,90,000/-

31.

- Smart Class Room Solution with i5 8th generation processor, 4GB DDR4 RAM, 1TB hard disk, Built in speakers with amplifier, wireless keyboard and mouse, Central controller for system on-off, PC on-off, Projector on-off volume control keys, External PC Input VGA input external ports, USB Ports, HDMI-VGA ports, External mic port, RJ-45 port, RH-232 port, Audio port, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement
- Ceramic Interactive Board and Short Throw Projector
- Cordless Mic. & Collar Mic.
- Imported Wall Mount Projector Kit for Short Throw Projector, wall hanging All-in-one PC-DTD machine with cabinet, frame and control panel one switch on-off controller.
- One KVA UPS with case with wall mounting aluminium frame
- Visualizer
- OS supports : Windows and Linux
- Screen Recording, Play Videos On-board, Auto Calibration, Auto Save Everything, PDF Ready
- one year onsite warranty

36,45,000/-

32.		<ul style="list-style-type: none"> • Smart Class Room Solution with i5 8th generation processor, 4GB DDR4 RAM, 1TB hard disk, Built in speakers with amplifier, wireless keyboard and mouse, Central controller for system on-off, PC on-off, Projector on-off volume control keys, External PC Input VGA input external ports, USB Ports, HDMI-VGA ports, External mic port, RJ-45 port, RH-232 port, Audio port, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement • Ceramic Interactive Board and Short Throw Projector • Cordless Mic. & Collar Mic. • Imported Wall Mount Projector Kit for Short Throw Projector, wall hanging All-in-one PC-DTD machine with cabinet, frame and control panel one switch on-off controller. • One KVA UPS with case with wall mounting aluminium frame • Visualizer • OS supports : Windows and Linux • Screen Recording, Play Videos On-board, Auto Calibration, Auto Save Everything, PDF Ready • one year onsite warranty <p>With following addition features:</p> <ul style="list-style-type: none"> • Rich multimedia content-enabled education system • Wide combination of Multimedia elements such as 3d, 2d, Video, Animations, Rich Graphics and real time images and text etc. 		48,60,000/-	
33.	9	LED Projector, XGA, 2700 Lumens, Normal Throw, HDMI port, Direct Power On/ Off, 5 yrs. Warranty on Lamp, 3 yrs. warranty on whole projector,	Department of Computer Science Mathematics	4,95,000/-	10,800/-
34.		LED Projector, XGA, 3000 Lumens, Normal Throw, HDMI port, Direct Power On/ Off, 5 yrs. Warranty on Lamp, 3 yrs. warranty on whole projector,	Department of Psychology Physics	5,40,000/-	
35.		LCD Projector, 3000 Lumens, Normal Throw, HDMI port, Direct Power On/ Off, 2 yrs. Warranty	Department of Philosophy Regional Centre, Bathinda	3,24,000/-	
36.		DLP Projector, 2700 Lumens, Normal Throw, HDMI port, Direct Power On/ Off, 2 yrs. Warranty	Department of Law (2nd Shift)	2,88,000/-	

37.	9	Celling mount kit, 20 m HDMI Cable, Iron Cage, Ceiling Mount Kit & Installation	Department of Computer Science Mathematics Department of Psychology Physics Department of Philosophy Regional Centre, Bathinda Department of Law (2nd Shift)	90,000/-	1,800/-
38.	4	Wall mount Projector Screen 6 Ft. x 4 Ft.	Department of Fine Art Department of Psychology	20,000/-	480/-
39.		Wall mount Projector Screen 5 Ft. x 7 Ft.		24,000/-	
40.	2	Native Resolution-WXGA (1280x800) HD720P Brightness=800 ANSI Lumens, Contract Ration=30,000:1 Max. Resolution=UXGA (1600x1200) @ 60Hz, Native Aspect Ratio=16:10, Lamp Life and Type=30,000 Hours LED, Display Type=Single Chip DLP, Chip Size=0.45' DMD Throw Ration=1.55:1, Image size 30"~90" Project Distance 1-3m Project Distance, Project lens F/1.9, f=15.3, Zoom Ratio 1x, offset (Based on Full Image Height) 105% keystone correction=Vertical + 33/ -45, Speakers=2W x 1 , i/o connection Ports = HDMI, Audio-Out, USB Type A for Display and Jpg Reader, portable not more than 500 gms, Noise level 34db/ 30 db, Power Supply AC 100-240V, 50/60Hz Consumption 66W/52W, <0.5 w, Wifi USB Dongle USB type A Built in, Standard Accessories = HDMI-MHL cable, user manual, carrying case, quick start guide warranty card, remote controller, wifiusb dongle usb type a, AC power cord, optional accessories = remote control	Department of University School of Applied Management	1,30,000/-	2,600/-

1. Item number 4 and 5 are two different options for the i3 desktops. The quantity mentioned is the gross requirement for both the options collectively.
2. Item number 14, 15, 16 and 17 are four different options for LaserJet printer. The quantity mentioned is the gross requirement for all the options collectively.
3. Item number 19 and 20 are two different options for the Multi-Functional Printers. The quantity mentioned is the gross requirement for both the options collectively.

4. Item number 29, 30, 31 and 32 are four different options for smart classroom solutions. The quantity mentioned is the gross requirement for both the options collectively.
5. Item number 33, 34, 35 and 36 are four different options for Projectors. The quantity mentioned is the gross requirement for both the options collectively.
6. Item number 38 and 39 are two different options for the screens. The quantity mentioned is the gross requirement for both the options collectively.
7. In case of proprietary items, OEM or authorized dealers can be given preference.
8. **EACH INDIVIDUAL DEPARTMENT WILL RAISE THE PURCHASE ORDER ON THE BASIS OF FUNDS ALLOCATED TO THEM. THE DELIVERY IS TO BE MADE TO EACH DEPARTMENT INDIVIDUALLY BY THE RESPECTIVE VENDORS. THE PAYMENT WILL BE MADE BY THE INDIVIDUAL DEPARTMENT ON THE BILL PAYMENT BASIS ON SUCCESSFUL DELIVERY AND INSTALLATION OF THE EQUIPMENT IN THE RESPECTIVE DEPARTMENT.**
9. **PLEASE NOTE THAT THERE ARE CERTAIN ITEMS THAT ARE TO BE SUPPLIED TO THE DIFFERENT CAMPUSES OF THE UNIVERSITY. ALL SUCH ITEMS ARE TO BE QUOTED IN INDIAN RS. ALL INCLUSIVE FOR RESPECTIVE CAMPJSES.**
10. **TOTAL EARNEST MONEY SHALL BE CALCULATED AS THE SUM TOTAL OF ALL THE ITEMS BEING QUOTED BY THE RESPECTIVE VENDOR.**

Sr No.	Qty	Project based Specifications	Annexure	Department	Estimated Cost	Earnest Money
1	1	Networking Lab (319) and Installation: (D-Link/HP/Cisco) 02 Nos. Switch (unmanaged) 24 Ports portable, (D-Link, Actassi, Molex) 02 Nos Jack Panel Fully loaded 24 port, (DigitecGaden, Comrack) 01 Nos 12 U Rack, (D-link, Actassi, Molex) 42 Nos I/o Point, (D-Link, Schneider, Molex) 42 Nos Patch cords (2m Length), (D-Link Schneider, Molex) 41 Nos Patch Cords (1 m Length), 03 Nos Cable Roll (305 mtr. Length) CAT 6, 90 mtr Conduit Pipe (1inch) ISI, 90 mtr Conduit Pipe (1.5inch) ISI with one year support.	Annexure 'A'	Department of ECE	53,976/-	1,080/-
2	1	Networking of Research Scholar Flats, cable laying(Admin. Block-1), Wi-Fi Setup and inventory etc. and Installation: Annexure -B	Annexure 'B'	Department of University Computer Centre	10,00,000/-	20,000/-

3	1+3+1	01 Nos Layer 3 Switch, 03 NosPoE Layer 2 Switch, 01 Nos Layer 2 Switch: Layer 3 HP Brand, with minimum 16 SFP ports, 4 SFP+ and 8 combo ports, including essential fitments like power supply etc. Lifetime warranty (minimum 5 year). Must be fully compatible with HP iMC Network Management software for full alerts and backups etc., Layer 2 HP Brand, 370 W PoE, 24 gigabit ethernet ports, 2/4 SFP ports, Lifetime warranty (minimum 5 year). Must be fully compatible with HP iMC Network Management software for full alerts and backups etc. , Layer 2 HP Brand, 24 gigabit Ethernet ports, 2/4 SFP ports, Lifetime warranty (minimum 5 year). Must be fully compatible with HP iMC Network Management software for full alerts and backups etc.	Annexure 'C'	Department of University Computer Centre	3,99,000/-	8,000/-
4	7+1	Wi-fi-Access Points with Installation: Indoor Wireless access point 802.11bgn/ac POE port, Minimum 50metres range, Minimum 300MB data transfer, support Minimum 20 concurrent connections. Additional: 100 meter CAT6 UTP, 90 Meter Conduit (ISI mark), 2 I/O for Dept. of Biotechnology.	Annexure 'D'	(i) Department of Distance Education (ii)Department of Biotechnology	(i)70,000/- (ii)16,000/-	1,700/-
5	1	Wi-fi Setup &Installation: One indoor Wireless access pointwithsame specifications as per sr. No.2, 80m CAT6 UTP, 80m PVC Conduit (ISI), 2 nos. CAT 6 I/O, 2 nos. CAT 6 Patchcord 1 meter, 1 nos. POE kit compatible to access point.	Annexure 'E'	CAMS	35,000/-	700/-

6	10+1	Outdoor Wireless Access Point minimum 1.3 GBPS or Above: Concurrent dual-radio dual-band 802.11a/b/g/n/ac, WAVE 2 802.11b/g/n: 2.4GHz to 2.483GHz Built-in Omni-directional Smart Antenna, 4dBi Antenna gain, Throughput Minimum 1.3Gbps or above (per AP), 3 Spatial Streams <i>(see Annexure 'F' for detailed specifications)</i>	Annexure 'F'	Baba Banda Singh Bahadur Hostel (Boys)	13,43,680/-	27,000/-
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Annexure-A

PUNJABI UNIVERSITY, PATIALA.

Networking Equipment with Installation for Department of Electronics & Communication Engineering

S No.	Item	Quantity	Make/ Model No.	Unit Price
1	Switch (Unmanaged) 24 Ports portable	2	D-Link/HP/Cisco	
2	12 U Rack fully loaded	1	Digitec, Gaden, Comrack	
3	Jack Panel Fully loaded 24 port	2	D-Link, Actassi, Molex	
4	I/o CAT 6	40	D-Link, Actassi, Molex	
5	Patch Cords (2m Length)	40	D-Link, Schneider, Molex	
6	Patch Cords (1m Length)	41	D-Link, Schneider, Molex	
7	Cable Roll (305 mtr. Length) Cat-6	450m	D- Link	
8	Conduit Pipe (1 inch) ISI	90 mtr	ISI	
9	Conduit Pipe (1.5 inch) ISI	90 mtr	ISI	

PUNJABI UNIVERSITY, PATIALA.

Networking of Research Scholar Flats, Cable laying (Admin. Block-1), Wi-Fi Setup, Inventory and Installation

S.No	Item	Qty	Make/ Model No.	Unit Price
1	Indoor Wireless Access Points AC Series, 4x4:4 Wave 2, min 2.5 Gbps or higher(including the cost of Lifetime Licenses; if required) with Hardware Controller; Minimum 5 Years Warranty Note: No Licenses required if compatible with Wireless Controller Ruijie WS 6008; available with the University Computer Centre	21	Ruijie/HP/Ruckus/Cisco	
2	24 Port POE Switch with SFP (Gigabit Managed Switches) Min. 370W	6	HP/Cisco/D-Link	
3	8 Port POE Switch with SFP (Gigabit Managed Switches) Min. 130W	7	HP/Cisco /D-Link	
4	OFC SM Six core OS2 standard in meters	200	D- Link	
5	LIU 6 Port unloaded	4	D- Link	
6	SC Adaptors SM	24	D- Link	
7	Pigtails SM	54	D- Link	
8	SC Adaptors Plates	4	D- Link	
9	SC-LC Patch Cord SM	44	D- Link	
10	6 U Rack with accessories	1	D- Link	
11	12 U Rack with Accessories	1	D- Link	
12	CAT 6 Cable roll 305 meter	7	D- Link	
13	CAT 6 jack Panel	1	D- Link	
14	CAT 6 Patch Cord1 Meter	30	D- Link	
15	Cat 6 I/O	20	D- Link	

16	SFP Module SM	4	SYROTECH/ D-Link/HP/Cisco	
17	Conduit Pipe 1" (ISI) with Clips & Accessories in meters	900	ISI	
18	Splicing	24	Service	
19	Iron Cages for AP	20	Custom	
20	Manual Digging in meters (including laying charges)	150	Service	
21	Fibre Patch Cords LC-SC (Multi Mode)	30	D- Link	
22	Fibre Pig Tales LC (Multi Mode)	30	D- Link	

Annexure-C

PUNJABI UNIVERSITY, PATIALA.
Networking Equipment for University Computer Centre

S No.	Item	Quantity	Make/ Model No.	Unit Price
1	Layer 3 Switch with minimum 16 SFP ports, 4 SFP+ and 8 combo ports, including essential fitments like power supply etc. Lifetime warranty (minimum 5 year). Must be fully compatible with HP iMC Network Management software for full alerts and backups etc.,	1	HP	
2	PoE Layer 2 Switch, 370 W PoE, 24 gigabit ethernet ports, 2/4 SFP ports, Lifetime warranty (minimum 5 year). Must be fully compatible with HP iMC Network Management software for full alerts and backups etc.	3	HP	
3	Layer 2, Non PoE, 24 gigabit Ethernet ports, 2/4 SFP ports, Lifetime warranty (minimum 5 year). Must be fully compatible with HP iMC Network Management software for full alerts and backups etc.	1	HP	

Annexure-D

PUNJABI UNIVERSITY, PATIALA.

Wi-fi-Access Points, Networking with Installation for Department of Distance Education and Department of Biotechnology

S No.	Item	Quantity	Make/ Model No.	Unit Price
1	Indoor access point 802.11b/g/n/ac POE port, Minimum 50metres range, Minimum 300MB data transfer, support Minimum 20 concurrent connections.	1	HP/D-Link/Cisco	
2	Cat-6 UTP	100 mtr	D- Link	
3	Conduit Pipe (1 inch) ISI	90 mtr	ISI	
4	I/O CAT 6	2	D- Link	

Annexure-E

PUNJABI UNIVERSITY, PATIALA.

Wi-fi-Access Point, Networking with Installation for CAMS Department

S No.	Item	Quantity	Make/ Model No.	Unit Price
1	Indoor Wireless access point with same specifications as per Annexure 'B'	1	HP/D-Link/Cisco/Ruijie	
2	Cat-6 UTP	80 mtr	D- Link	
3	Conduit Pipe (1 inch) ISI	80 mtr	ISI	
4	POE kit compatible to access point	1	Compatible to access point	
5	I/O CAT 6	2	D- Link	
6	Cat 6 Patchcord 1 mtr	2	D- Link	

PUNJABI UNIVERSITY, PATIALA.

Wi-Fi setup, Networking and Installation at Baba Banda Singh Bahadur Engineering Hostel

S.No	Item	Quantity	Make/ Model No.	Unit Price
1	Outdoor Wireless Access Point minimum 1.3 GBPS or Above per AP Concurrent dual-radio dual-band,802.11a/b/g/n/ac, ,WAVE 2802.11b/g/n: 2.4GHz to 2.483GHz,Built-in Omni-directional Smart Antenna (4dBi),Spatial Streams 3,IP Rating IP67,Service Port 10/100/1000Mbps ETH1/PoE IN port (RJ-45 connector) OR Small Form-Factor Pluggable (SFP) port, 1 Console Port(RJ45)as Management Port ,Power Supply of PoE+ (802.3at) or DC Power Input, Minimum 100 clients per AP, Should Support Configuring the authentication mode. Encryption mechanism and VLAN attributes for each SSID, Static IP address or DHCP reservation, Should support IPv6 CAPWAP tunnel,ICMPv6,Manual or automatic configuration of IPv6 address, SNMP v1/v2C/v3, Telnet, SSH, TFTP, and FTP and web management, Operating Temperature: -40°C to 70°C,Wall/pole-mount installation.	10	Ruijie/Hp/Ruckus/Cisco	
2	Wifi Controller Hardware Based, Centralized Management of at least 100 APs with Single appliances (At least 30 APs licenses enabled on day one) ,Controller should support distributed traffic forwarding allowing traffic to flow directly from source to destination, eliminating needless traffic to pass through the controller, delivering better performance and faster more-responsive applications., User isolation based on AC, AP and WLAN ,Wireless QoS: AP-based bandwidth limiting, WLAN-based bandwidth limiting, Static speed limiting and smart speed limiting based on user, At least 6000 wireless clients with MAC Authentication, AP-based load balancing; AP traffic-based load balancing;5G priority access; RSSI threshold, Roaming across Subnets and VLANs, Multi-Controller Redundancy, clustering, Management of both Indoor and Outdoor AP's (802.11 a/b/g/n/ac),CAPWAP or equivalent encrypted communications between AP and Controller, Dynamic RF channel and power management, Integrated captive portal,802.11 security and encryption,IPv6 management and Static & Dynamic routing, Console and Web management	1	Compatible with Wifi Access Points (as per Sr no. 1)	

3	24-Port 10/100/1000 Mbps + 2-Port SFP 1000 Mbps PoE switch, POE 10BASE-T/100BASE-TX/1000BASE-T: 24,1000BASE-X SFP Ports: 2, Gigabit Managed Switches, Min. 370 watts, Internal/external surge protection on all Ethernet ports. Lifetime Warranty	1	HP/Cisco/D-Link	
4	8-Port 10/100/1000 Mbps + 2-Port SFP 1000 Mbps PoE switch, POE 10BASE-T/100BASE-TX/1000BASE-T: 8,1000BASE-X SFP Ports: 2, Gigabit Managed Switches, Switching Capacity: 20 Gbps, Internal/external surge protection on all Ethernet ports, Lifetime Warranty (Min. 5 Years).	1	HP/Cisco /D-Link	
5	CAT 6 UTP cable (in meters)	915	D- Link	
6	Patch Panel UTP Keystone- 24 Port- loaded (Cat 6)	2	D- Link	
7	CAT 6 I/O	10	D- Link	
8	Patch Cord (1 Meter CAT 6)	12	D- Link	
9	Patch Cord (2 Meter CAT 6)	10	D- Link	
10	Rack 9 U with accessories	2	D- Link	
11	Pole for Camera (Iron cast 5 meter for AP along with AP mounting kits & installation)	1	Customised	
12	Iron angle arms with AP mounting kit & installation	8	Customised	
13	PVC Junction box with pre Moulded cable entry IP 66-67 with RAL7035	10	Customised	
14	Industrial grade flexible LAP Make conduit pipe Roll	1	Customised	
15	PVC Conduit pipe 1" ISI with clips & bends (in meters)	700	ISI Marked	
16	Cable Laying (in meters)	915	Customised	

17	Conduit laying (in meters)	700	Customised	
18	Digging Manual at 3ft depth (in meters)	30	Customised	

Note:

- 1) Outdoor Access Point and Switches shall have life time warranty.
- 2) Wireless Controller (Hardware based) shall support 100 APs with Single appliances at least 30 AP's license enabled on day one with lifetime warranty on product & license.

Terms and Conditions:-

1. Prices should be inclusive of all taxes and levies in INR, FOR Punjabi University Patiala.
2. Payment will be released on successful installation and commissioning.
3. Order can be placed to different vendors for different Projects. Only one vendor will execute a single project to its entire completion.
4. All items to be supplied must be branded and shall be amply supported onsite directly by OEM. All RMA, shall be in name of Punjabi University, Patiala.
5. Vendor/ System Integrator shall be responsible for onsite deployment / configuration etc.
6. All costs related to the installation of the equipment (including all necessary materials, labour, etc.) will be the responsibility of the vendor.
7. If there is holiday on the receipt/ opening day of the tender, the tender may be received/ opened on the next working day at the same time and at the same place.
8. The Purchase Committee reserves the right to reject the tender without assigning any reason before/ after opening of the tenders and the tenderers shall have no right or any claim what so ever for the same on this account.
9. University reserves the right to increase/ decrease the quantity of items. The order for quantity of different items can be increased or decreased. The Suppliers/ Tenderers shall have no right or any claim what so ever for the same on this account. The payment for passive components will be made on the basis of actual consumption.
10. The rate quoted by the Supplier/ Tenderer shall be inclusive of all the taxes i.e. GST or any other taxes levied by Central Govt. or State Government Authority or Local Bodies including their variations as notified by the Concerned Authority from time to time and of all the new taxes and levies that may be imposed. Firm will supply the material on quoted Rates which include F.O.R., Loading, Unloading, stacking and inclusive of all taxes. Nothing Extra shall be paid.
11. The Supplier/ Tenderer shall comply with the proper by- Laws and legal order of the local body or authority under the jurisdiction of which the supply is executed and pay all fees and charges for which he may be liable. Nothing extra shall be payable by the University on this account.
12. In case of failure of supply of material as per ordered specifications, the University reserve the right to reject the supply order and can forfeit the earnest money deposited by the firm.
13. In case of any dispute, the decision of the Vice-chancellor, Punjabi University, Patiala shall be final and binding on both the parties. Dispute leading to litigation the jurisdiction will be Patiala (Punjab) only.
14. In case of any clarification regarding tender contact Phone No. **0175-3046314-15, 0175-2286570**
15. ANY CORRIGENDUM RELATED TO THE ABOVE SAID PURCHASES WILL BE NOTIFIED ON THE UNIVERSITY WEBSITE ONLY. Please keep on referring to the website regularly for latest notifications. <http://tenders.punjabiversity.ac.in>
16. **Project related specific conditions have been mentioned in the technical specifications also.**

Director
University Computer Centre
Punjabi University,Patiala.
01753046314-15, 2286570

Technical Compliance Sheet

TOTAL EARNEST MONEY SHALL BE CALCULATED AS THE SUM TOTAL OF ALL THE ITEMS BEING QUOTED BY THE RESPECTIVE VENDOR.

Delivery Time: 30 Day (Maximum)

Part 1:

Sr	Specifications	Interested in supplying the item? (Yes/ No)	Make	Do you meet the specifications? (Yes/No)
1.	Desktop (LENOVO/ HP/ DELL) Commercial segment 8th Gen. Dual Core Processor, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement, 4 GB RAM DDR4, 1TB HDD, DVD RW, 21" Coloured Monitor, USB Mouse & Keyboard, 3years warranty onsite			
2.	Flatbed Scanner (HP/Canon) with Optical Resolution 2400 dpi x 4800 dpi, Input type Colour, Document Size Class A4/Letter, One-year warranty from OEM.			
3.	(HP/ Canon/ Epson) Scanner Sheet feed/ADF/ Flatbed scanner- Scanning Resolution up to 600x600dpi, scanning speed-30ppm, ADF capacity-50 sheets.			
4.	Option-I: Desktop (LENOVO/ HP/ DELL) commercial segment 7th Gen., i3 Processor, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement, 4 GB RAM DDR4, 1TB HDD, DVD RW, 2GB Graphics Card , 21" Coloured Monitor, USB Mouse & Keyboard, 3 years warranty			

5.	Option-II: Desktop (LENOVO/ HP/ DELL) Commercial segment 8th Gen., i3 Processor, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement, 4 GB RAM DDR4, 1TB HDD, DVD RW, 2GB Graphics Card , 21" Coloured Monitor, USB Mouse & Keyboard, 3 years warranty onsite		
6.	Option-I: (LENOVO/ HP/ DELL) AIO Commercial Segment intel 7th Gen. Full Powered processor i5 64 bit base 21" Coloured Display, 8GB DDR4 RAM, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement USB 3.0, HDD 1TB, DVDRW, USB Keyboard and Mouse, 3 years onsite warranty.		
7.	Option-II:(LENOVO/ HP/ DELL) AIO Commercial Desktop intel 8th Gen. Full Powered processor i5 64 bit base 21" Coloured Monitor, 8GB DDR4 RAM, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement USB 3.0, USB 2.0, HDD 1TB, DVDRW, USB, keyboard and mouse, 3 years onsite warranty.		
8.	(Hp/ Lenovo/ DELL) Laptops Intel Core i5 8th Gen., 8 GB DDR4 RAM, 2TB HDD, 15.6" Display, 2GB Graphic Card, Windows 10 single language (English) 64 Bit upgradable through Campus Licence Agreement, with Genuine laptop Bag., Three years onsite warranty.		
9.	Desktop Intel i7 8 th Gen., 8GB Ram, Graphics card, Monitor 27", 2 TB HDD, Keyboard, mouse and 1 KVA Offline UPS with 15-30 min backup (with original windows), 2 years warranty.		
10.	(HP/ Lenovo/ DELL) Laptop Intel Core i7 8th Gen., 8 GB RAM, 1 TB HDD, 15.4" Display, Window 10, Laptop Bag. Three years onsite warranty.		
11.	(HP/ Lenovo/ DELL) Laptop Intel Core i7 8th Gen., 12 GB DDR4-2400 SDRAM, 512GB SSD, 14" Display, 4GB Graphics Card, 2 USB 3.0, 1 USB 2.0, 1 HDMI, Window 10, Laptop Bag. Three years onsite warranty.		
12.	(Epson/HP/Cannon/Ricoh) Inkjet Printer Scanner Copier, with Wi-Fi direct, up to 33 ppm Black and 15 ppm Colour, Copy Size: A4, Letter with Copy resolution of 600 x 600 dpi; Scan resolution 1200 x 2400 dpi, Printing capacity with 4500 pages black and 7500 pages coloured. With 1 year warranty.		

13.	Inkjet Printer with Ink Tanks; Printer, Output - Colour, Pages per minute - 27 pages (Black & White), 15 pages (Colour) ; Paper size- A4/Legal , Warranty - 1 year onsite		
14.	Option 1: LaserJet Printer (HP/ Ricoh/ Canon/ Epson) Print speed 15ppm, Paper size- A4/Legal, with one year onsite warranty.		
15.	Option 2: LaserJet Duplex Printer (HP/ Ricoh/ Canon/ Epson) Print speed 15ppm, Paper size- A4/Legal, with one year onsite warranty.		
16.	Option 3: LaserJet Duplex and N/W Printer (HP/ Ricoh/ Canon/ Epson) Print speed 15ppm, Paper size- A4/Legal, with one year onsite warranty.		
17.	Option 4: LaserJet Duplex Printer and N/W with Wi-Fi (HP/ Ricoh/ Canon/ Epson) Print speed 15ppm, Paper size- A4/Legal, with one year onsite warranty.		
18.	LaserJet Print Speed 30ppm A4, 15ppm A3, Duplex printing, USB, Ethernet, Memory 128 MB or above (HP/ Ricoh/ Canon/ Epson)		
19.	Option 1: LaserJet MFP (HP/ Ricoh/ Canon/ Epson): MONO Laser Jet Printer with Print, Copy and Scan Functions. Duplex, Network ready, 18 PPM (Printer Speed Black), with ADF, Scan Resolution upto 600 dpi coloured and 1200 dpi mono on flat with one year onsite warranty		
20.	Option 2: MFP (HP/ Ricoh/ Canon/ Epson): MONO Laser Jet Printer with Print, Copy and Scan Functions. Duplex, Wi-Fi ready, 18 PPM (Printer Speed Black), with ADF, Scan Resolution upto 600 dpi coloured and 1200 dpi mono on flat with one year onsite warranty		
21.	(Ricoh/Canon/Sharp/HP/KonicaMinolta/Toshiba) Photocopier Machine, Continuous 20 ppm, minimum memory 256 MB, Network Ready, paper size Standard paper tray(s): A3, A4, A5, By-pass Tray A3, A4, A5, A6, Paper Input Capacity Standard: 350 sheets, Paper Weight Standard paper tray(s):52 - 105 g/m ² , Bypass tray: 52 - 216 g/m ² , Duplex: 64 - 105 g/m ² , Multiple Copying Up to 99 copies, Resolution Up to 600 dpi, Zoom From 50% to 200%, Scan Speed Colour: Maximum 6 originals per minute, B/W Maximum 15 originals per minute, Resolution Maximum 600 dpi.		

22.	Printronix HD Matrix P8003H Open Print HD Printer 36 IPM			
23.	Servers: Xeon gold 6136, RAM128 GB DDR4, Storage single rack 6 to8 TB, Raid 1 and 3, RAM slots 24, 4 TB Firecuda SATA HDD, Redundant power supply , 21.5" LED, keyboard, mouse, Server Rack 6 U, 24x7 after sales support. Make : HP/DELL/LENOVO			
24.	UPS (Intex/APC/ Numeric/ Luminous/): 600 VA OR Above			
25.	UPS 2KVA online with 8 42AH Batteries			
26.	UPS 3KVA online with 6 batteries of 26AH			
27.	UPS 3KVA online UPS with 8 batteries of 100AH			
28.	ESRI India GIS Academy Program (EIGAP), ESRI ArcGIS Advance with desktop extensions: Network Analyst Extension (Qty-05), Spatial Analyst Extension, Geo-Statistical Analyst Extension, 3D Analyst Extension, Data Interoperability, Maplex, Arc Scan, Data Reviewer, Arc Schematics Extension, Arc Publisher Extension, Complementary Esri India User Conference Registration, ESRI Arc GIS Server Advance Enterprise (Qty-1), Subscription Terms: 3 Years, 3 days Training (Maximum for 5 faculty Members), Inclusive of all taxes, Installation in the Department.			
29.	<ul style="list-style-type: none"> • Smart Class Room Solution with i5 7th generation processor, 4GB DDR4 RAM, 1TB hard disk, Built in speakers with amplifier, wireless keyboard and mouse, Central controller for system on-off, PC on-off, Projector on-off volume control keys, External PC Input VGA input external ports, USB Ports, HDMI-VGA ports, External mic port, RJ-45 port, RH-232 port, Audio port, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement • Ceramic Interactive Board and Short Throw Projector • Cordless Mic. & Collar Mic. • Imported Wall Mount Projector Kit for Short Throw Projector, wall hanging All-in-one PC-DTD machine with cabinet, frame and control panel one switch on-off controller. • One KVA UPS with case with wall mounting aluminium frame • Visualizer • OS supports : Windows and Linux • Screen Recording, Play Videos On-board, Auto Calibration, Auto Save Everything, PDF 			

	<p>Ready</p> <ul style="list-style-type: none"> • one year onsite warranty 			
30.	<ul style="list-style-type: none"> • Smart Class Room Solution with i5 7th generation processor, 4GB DDR4 RAM, 1TB hard disk, Built in speakers with amplifier, wireless keyboard and mouse, Central controller for system on-off, PC on-off, Projector on-off volume control keys, External PC Input VGA input external ports, USB Ports, HDMI-VGA ports, External mic port, RJ-45 port, RH-232 port, Audio port, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement • Ceramic Interactive Board and Short Throw Projector • Cordless Mic. & Collar Mic. • Imported Wall Mount Projector Kit for Short Throw Projector, wall hanging All-in-one PC-DTD machine with cabinet, frame and control panel one switch on-off controller. • One KVA UPS with case with wall mounting aluminium frame • Visualizer • OS supports : Windows and Linux • Screen Recording, Play Videos On-board, Auto Calibration, Auto Save Everything, PDF Ready • one year onsite warranty <p>With following addition features:</p> <ul style="list-style-type: none"> • Rich multimedia content-enabled education system • Wide combination of Multimedia elements such as 3d, 2d, Video, Animations, Rich Graphics and real time images and text etc. 			
31.	<ul style="list-style-type: none"> • Smart Class Room Solution with i5 8th generation processor, 4GB DDR4 RAM, 1TB hard disk, Built in speakers with amplifier, wireless keyboard and mouse, Central controller for system on-off, PC on-off, Projector on-off volume control keys, External PC Input VGA input external ports, USB Ports, HDMI-VGA ports, External mic port, RJ-45 port, RH-232 port, Audio port, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement • Ceramic Interactive Board and Short Throw Projector • Cordless Mic. & Collar Mic. • Imported Wall Mount Projector Kit for Short Throw Projector, wall hanging All-in-one 			

	<p>PC-DTD machine with cabinet, frame and control panel one switch on-off controller.</p> <ul style="list-style-type: none"> • One KVA UPS with case with wall mounting aluminium frame • Visualizer • OS supports : Windows and Linux • Screen Recording, Play Videos On-board, Auto Calibration, Auto Save Everything, PDF Ready • one year onsite warranty 			
32.	<ul style="list-style-type: none"> • Smart Class Room Solution with i5 8th generation processor, 4GB DDR4 RAM, 1TB hard disk, Built in speakers with amplifier, wireless keyboard and mouse, Central controller for system on-off, PC on-off, Projector on-off volume control keys, External PC Input VGA input external ports, USB Ports, HDMI-VGA ports, External mic port, RJ-45 port, RH-232 port, Audio port, Windows 10 home single language (English) 64 Bit upgradable through Campus Licence Agreement • Ceramic Interactive Board and Short Throw Projector • Cordless Mic. & Collar Mic. • Imported Wall Mount Projector Kit for Short Throw Projector, wall hanging All-in-one PC-DTD machine with cabinet, frame and control panel one switch on-off controller. • One KVA UPS with case with wall mounting aluminium frame • Visualizer • OS supports : Windows and Linux • Screen Recording, Play Videos On-board, Auto Calibration, Auto Save Everything, PDF Ready • one year onsite warranty <p>With following addition features:</p> <ul style="list-style-type: none"> • Rich multimedia content-enabled education system • Wide combination of Multimedia elements such as 3d, 2d, Video, Animations, Rich Graphics and real time images and text etc. 			
33.	<p>LED Projector, XGA, 2700 Lumens, Normal Throw, HDMI port, Direct Power On/ Off, 5 yrs. Warranty on Lamp, 3 yrs. warranty on whole projector,</p>			

34.	LED Projector, XGA, 3000 Lumens, Normal Throw, HDMI port, Direct Power On/ Off, 5 yrs. Warranty on Lamp, 3 yrs. warranty on whole projector,			
35.	LCD Projector, 3000 Lumens, Normal Throw, HDMI port, Direct Power On/ Off, 2 yrs. Warranty			
36.	DLP Projector, 2700 Lumens, Normal Throw, HDMI port, Direct Power On/ Off, 2 yrs. Warranty			
37.	Ceiling mount kit, 20 m HDMI Cable, Iron Cage, Ceiling Mount Kit & Installation			
38.	Wall mount Projector Screen 6 Ft. x 4 Ft.			
39.	Wall mount Projector Screen 5 Ft. x 7 Ft.			
40.	Native Resolution-WXGA (1280x800) HD720P Brightness=800 ANSI Lumens, Contract Ration=30,000:1 Max. Resolution=UXGA (1600x1200) @ 60Hz, Native Aspect Ratio=16:10, Lamp Life and Type=30,000 Hours LED, Display Type=Single Chip DLP, Chip Size=0.45' DMD Throw Ration=1.55:1, Image size 30"~90" Project Distance 1-3m Project Distance, Project lens F/1.9, f=15.3, Zoom Ratio 1x, offset (Based on Full Image Height) 105% keystone correction=Vertical + 33/ -45, Speakers=2W x 1 , i/o connection Ports = HDMI, Audio-Out, USB Type A for Display and Jpg Reader, portable not more than 500 gms, Noise level 34db/ 30 db, Power Supply AC 100-240V, 50/60Hz Consumption 66W/52W, <0.5 w, Wifi USB Dongle USB type A Built in, Standard Accessories = HDMI-MHL cable, user manual, carrying case, quick start guide warranty card, remote controller, wifiusb dongle usb type a, AC power cord, optional accessories = remote control			

Part 2:

- 17. Order can be placed to different vendors for different Projects. Only one vendor will execute a single project to its entire completion.
- 18. All costs shall include the installation of the equipment (including all necessary materials, labour, etc.) except for **Project 'C'**.
- 19. Project wise earnest money has been depicted in the e-Tender Notice on the website www.punjabiuniversity.ac.in.

PROJECT 'A'			
S No.	Item	Do you meet the specifications? (Yes/No)	Make

1	Switch (Unmanaged) 24 Ports portable		
2	12 U Rack fully loaded		
3	Jack Panel Fully loaded 24 port		
4	I/o CAT 6		
5	Patch Cords (2m Length)		

PROJECT 'B'

S.No	Item	Do you meet the specifications? (Yes/No)	Make
1	Indoor Wireless Access Points AC Series, 4x4:4 Wave 2, min 2.5 Gbps or higher(including the cost of Lifetime Licenses; if required) with Hardware Controller; Minimum 5 Years Warranty		
	Note: No Licenses required if compatible with Wireless Controller Ruijie WS 6008; available with the University Computer Centre		
2	24 Port POE Switch with SFP (Gigabit Managed Switches) Min. 370W		
3	8 Port POE Switch with SFP (Gigabit Managed Switches) Min. 130W		
4	OFC SM Six core OS2 standard in meters		
5	LIU 6 Port unloaded		
6	SC Adaptors SM		
7	Pigtails SM		
8	SC Adaptors Plates		
9	SC-LC Patch Cord SM		
10	6 U Rack with accessories		
11	12 U Rack with Accessories		
12	CAT 6 Cable roll 305 meter		
13	CAT 6 jack Panel		
14	CAT 6 Patch Cord1 Meter		

15	Cat 6 I/O		
16	SFP Module SM		
17	Conduit Pipe 1" (ISI) with Clips & Accessories in meters		
18	Splicing		
19	Iron Cages for AP		
20	Manual Digging in meters (including laying charges)		
21	Fibre Patch Cords LC-SC (Multi Mode)		
22	Fibre Pig Tales LC (Multi Mode)		

PROJECT 'C'

S No.	Item	Do you meet the specifications? (Yes/No)	Make
1	Layer 3 Switch with minimum 16 SFP ports, 4 SFP+ and 8 combo ports, including essential fitments like power supply etc. Lifetime warranty (minimum 5 year). Must be fully compatible with HP iMC Network Management software for full alerts and backups etc.,		
2	PoE Layer 2 Switch, 370 W PoE, 24 gigabit ethernet ports, 2/4 SFP ports, Lifetime warranty (minimum 5 year). Must be fully compatible with HP iMC Network Management software for full alerts and backups etc.		
3	Layer 2, Non PoE, 24 gigabit Ethernet ports, 2/4 SFP ports, Lifetime warranty (minimum 5 year). Must be fully compatible with HP iMC Network Management software for full alerts and backups etc.		

PROJECT 'D'

S No.	Item	Do you meet the specifications? (Yes/No)	Make
1	Indoor access point 802.11b/g/n/ac POE port, Minimum 50 metres range, Minimum 300MB data transfer, support Minimum 20 concurrent connections.		
2	Cat-6 UTP		
3	Conduit Pipe (1 inch) ISI		
4	I/O CAT 6		

PROJECT 'E'

S No.	Item	Do you meet the specifications? (Yes/No)	Make
1	Indoor Wireless access point with same specifications as per Annexure 'B'		
2	Cat-6 UTP		
3	Conduit Pipe (1 inch) ISI		
4	POE kit compatible to access point		
5	I/O CAT 6		
6	Cat 6 Patchcord 1 mtr		

PROJECT 'F'			
S.No	Item	Do you meet the specifications? (Yes/No)	Make
1	Outdoor Wireless Access Point minimum 1.3 GBPS or Above per AP Concurrent dual-radio dual-band,802.11a/b/g/n/ac, ,WAVE 2802.11b/g/n: 2.4GHz to 2.483GHz,Built-in Omni-directional Smart Antenna (4dBi),Spatial Streams 3,IP Rating IP67,Service Port 10/100/1000Mbps ETH1/PoE IN port (RJ-45 connector) OR Small Form-Factor Pluggable (SFP) port, 1 Console Port(RJ45)as Management Port ,Power Supply of PoE+ (802.3at) or DC Power Input, Minimum 100 clients per AP, Should Support Configuring the authentication mode. Encryption mechanism and VLAN attributes for each SSID, Static IP address or DHCP reservation, Should support IPv6 CAPWAP tunnel,ICMPv6,Manual or automatic configuration of IPv6 address, SNMP v1/v2C/v3, Telnet, SSH, TFTP, and FTP and web management, Operating Temperature: -40°C to 70°C,Wall/pole-mount installation.		
2	Wifi Controller Hardware Based, Centralized Management of at least 100 APs with Single appliances (At least 30 APs licenses enabled on day one),Controller should support distributed traffic forwarding allowing traffic to flow directly from source to destination, eliminating needless traffic to pass through the controller, delivering better performance and faster more-responsive applications., User isolation based on AC, AP and WLAN ,Wireless QoS: AP-based bandwidth limiting, WLAN-based bandwidth limiting, Static speed limiting and smart speed limiting based on user, At least 6000 wireless clients with MAC Authentication, AP-based load balancing; AP traffic-based load balancing;5G priority access; RSSI threshold, Roaming across Subnets and VLANs, Multi-Controller Redundancy, clustering, Management of both Indoor and Outdoor AP's (802.11 a/b/g/n/ac),CAPWAP or equivalent encrypted communications between AP and Controller, Dynamic RF channel and power management, Integrated captive portal,802.11 security and encryption,IPv6 management and Static & Dynamic routing, Console and Web management		
3	24-Port 10/100/1000 Mbps + 2-Port SFP 1000 Mbps PoE switch, POE 10BASE-T/100BASE-TX/1000BASE-T: 24,1000BASE-X SFP Ports: 2, Gigabit Managed Switches, Min. 370 watts, Internal/external surge protection on all Ethernet ports. Lifetime Warranty		
4	8-Port 10/100/1000 Mbps + 2-Port SFP 1000 Mbps PoE switch, POE 10BASE-T/100BASE-TX/1000BASE-T: 8,1000BASE-X SFP Ports: 2, Gigabit Managed Switches, Switching Capacity: 20 Gbps, Internal/external surge protection on all Ethernet ports, Lifetime Warranty (Min. 5 Years).		
5	CAT 6 UTP cable (in meters)		
6	Patch Panel UTP Keystone- 24 Port- loaded (Cat 6)		

7	CAT 6 I/O		
8	Patch Cord (1 Meter CAT 6)		
9	Patch Cord (2 Meter CAT 6)		
10	Rack 9 U with accessories		
11	Pole for Camera (Iron cast 5 meter for AP along with AP mounting kits & installation)		
12	Iron angle arms with AP mounting kit & installation		
13	PVC Junction box with pre Moulded cable entry IP 66-67 with RAL7035		
14	Industrial grade flexible LAP Make conduit pipe Roll		
15	PVC Conduit pipe 1" ISI with clips & bends (in meters)		
16	Cable Laying (in meters)		
17	Conduit laying (in meters)		
18	Digging Manual at 3ft depth (in meters)		