



YASHWANTRAO CHAVAN MAHARASHTRA OPEN UNIVERSITY

Dnyangangotry, Near Gangapur Dam, Nashik 422 222 (Maharashtra, India)

Telephones : (253) 2230024, 2230227, 2233698, 2234459, 2234716-18

Visit us on Internet <http://www.ycmou.digitaluniversity.ac.> & ycmou.ac.in

To,

Enquiry No. : 904

Date : 09.01.2024

Subject : Quotation for “ Laying and installation of Fiber Optics Cable and Supply & Installation of Media Converter, Managed Switch & Wi-Fi Access Points”

Dear Sir,

- (01) We need the item listed in the table below from Dealer and as per **Technical/Other Terms and Conditions** attached herewith. **Rates are quoted on your letterhead.**
- (02) Please let us have your most competitive offer clearly stating your normal terms and conditions, Delivery Time, Payment Terms, GST, Warranty Period,
- (03) Please send your sealed quotation to the "**Dy. Registrar, Purchase Section, Yashwantrao Chavan Maharashtra Open University, Dnyangangotry, Near Gangapur Dam, Nashik 422222**".
- (04) **The final Date for receiving quotation is 25.01.2024.**
- (05) The quotation should be valid for 60 days from the date of enquiry.
- (06) Please write on sealed envelope in bold letter "**Enquiry No. 904, date: 09.01.2024 and quotation for “ Laying and installation of Fiber Optics Cable and Supply & Installation of Media Converter, Managed Switch & Wi-Fi Access Points”**"
- (07) The supplier should necessarily follow the above instructions otherwise quotation will not be considered for further process.
- (08) Your GST registration number must be shown in your invoice.
- (09) The Supplier must have Certification of ISO 9001:2015, ISO 20000-1:2008, ISO 27001:2013.
- (10) The Supplier must have Local Service Centre in Nashik and minimum 25 Technical Resource on Pay-Roll.
- (11) The Supplier must have worth Certificate and PF, ESIC Registration.

Rates Should be quoted as per our Proforma as follows

Sr. No.	Material Description	Unit	Qty	Unit Rate	Total Amount	Remark, (if any)
A)	PART (A)					
1)	24 F OFC , 9/125 Micron Single Mode (University will Provide)	Mtrs	1000	Nil	Nil	
2)	a) PLB HDPE DUCT Pipe 40/33 mm (University will Provide)	Mtrs	500	Nil	Nil	
	b) PLB HDPE DUCT Pipe 40/33 mm	Mtrs	200			
3)	PVC Pipe (University will Provide)	Mtrs	200	Nil	Nil	
4)	Charges for Soft Digging and Levelling for optical fiber laying (Depth of 1 Mtr and width of around 4 inches) Approx.	Mtrs	750			
5)	Charges for Hard Digging and Levelling for optical fiber laying, including road boring (Depth of 1 Mtr and width of around 4 inches) Approx.	Mtrs	80			
6)	12 Port LOADED LIU with SC Coupler and SC Pigtails (Wall Mount) D-Link Make	No	2			

7)	6 Port LOADED LIU with SC Coupler and SC Pigtails (Wall Mount) D-Link Make	Nos	5			
8)	Push Fittings Kit (HDPE Pipe Joiner)	Nos.	15			
9)	Optical Fiber Termination/Splicing	Nos.	24			
10)	Supply 2" GI Pipe per Meter	Mtrs	50			
11)	RCC Joint Protection Chamber 1.2 x 1.2 x 2m with RCC Cover	Nos.	10			
12)	RCC Route Indicator	Nos.	15			
13)	Supply 1" Flexible Pipe per Meter	Mtrs	50			
14)	Optical Fiber Joint Closure 24 F - 4 Cable entry	Nos.	10			
15)	Clamping OFC through PVC Pipe including necessary accessories in the Building per Meter	Mtrs	150			
16)	PLB Laying, Push Fit Coupler leading into room, OFC Blowing Charges per Meter.	Mtrs	750			
17)	Cat 6 Cable Laying Charges with necessary accessories and Fitting	Mtrs	100			
B)	Part (B)					
1)	OFC Patch Cord Single Mode Duplex LC-SC Duplex 3 Mtr. D-Link Make	Nos.	10			
2)	D-Link Media Converter : D-Link Media Converter Single Mode Dual Fiber 10/100 , 1310 nm. Model : DFE-855S-151 with 3 Years Warranty .	Nos.	3			
3)	D-Link DGS-1210 -10P Managed POE Switch D-Link Make. 8 x 10/100/1000BASE-T PoE ports .2 x SFP ports with Mounting Kit, Power Cord Indian. Supply, Installation, Configuration	Nos.	5			
	D-LINK 1000 BASE-LX Single Mode LC SFP Transceiver DEM-310GT	Nos.	7			
4)	Wi-Fi Access Points DAP -X2810 D-Link with Mounting Kit. Supply, Installation, Configuration	Nos.	2			
5)	Wi-Fi Access Points DAP-2610 D-Link with Mounting Kit. Supply, Installation, Configuration	Nos.	3			
	All Active Components are With 3 Years Warranty					
6)	CAT 6 Cable D-Link Make (305 Mtrs)	Box	1			
7)	Information Outlet : Cat 6 Information Outlet (Single) with BOX and Face plate	Nos.	20			
8)	19" Wall Mount 4 U RACK with Necessary Accessories	Nos	6			
9)	Crimping of Information Outlet	Nos	20			
			Total Amount Rs.			
			Add Taxes			

Technical/Other Terms and Conditions

1. Eligibility & Technical :

Authorization letter from D-Link to provide service support to D-link Network Product:

The Supplier must be authorized by the manufacturer of the equipment (Active Components only) for quoting their product. The Supplier must submit authorization letter from D-Link that they will provide service support to supplied D-Link Network product.

2. SCOPE OF SERVICE:

The description of scope of work/job to be done is as mentioned below. Please note that the quantity for cables and excavation work are approximate. Interested agencies are advised to measure and work out the exact quantity by visiting and inspecting site in person. The parties shall visit our office during office hours between 11.00hrs to 17.30hrs on all working days except Sunday and holidays and shall take note of the actual work to be carried out.

The Scope of work broadly covers the supply and laying of HDPE Pipe, Laying of Optical Fiber Cable inside HDPE, including splicing and termination of OFC Cable. Digging and laying of Optical Fibre Cable (OFC) in trenches in different types of soil and back-filling the same after HDPE pipe is laid.

Parameters of site Design and Quality of Work:

- Copper cable should be routed through casing capping or conduit.
- All passive components should be of the same make.
- The cabling system proposed should meet the specifications as prescribed in ANSI/TIA/EIA-568.B CAT-6 standard, ISO 11801 and EN standards.
- The cabling solution should be flexible and capable of including new facilities or technologies, as they become required or available.
- Dust covers need to be provided for unutilized ports of faceplate if applicable.
- All the accessories used for cable laying should be ISI certified materials
- Each equipment, panel and outgoing cable from the patch panels shall be labelled. Proper labelling and numbering shall also be provided on the outlets. All cable labels are to be of clear wrap around self-adhesive type & each cable is to be labelled at each end at 100mm from termination point. Labelling to be machine typed.
- The bidder shall plan the cabling system and routing to ensure system-integrity and performance, and that it does not present problems of maintenance, access nor conflict with the operation and maintenance of other systems.
- The bidder shall provide adequate support for all cabling that is vertically installed, ensuring that the weight of the cables is sufficiently supported.
- The bidder shall ensure that the cabling & terminations are done in accordance with the industry standards. Machine crimped patch cords/ cables shall only be used. No manual crimping shall be acceptable.
- Proper earthing of the racks shall be done.

UTP Related : Structured cabling standards shall be strictly followed.

- i. Casing and Capping/ PVC Pipe : Casing and capping / PVC Pipe fitting is to be done Neatly. Screws (1.5"), fillers, Clamps etc. have to be provisioned by the contractor and attached every 3-4 feet.
- ii. Cat 6 UTP cable installation: Cat 6 UTP cables shall be installed inside casing and capping / PVC Pipe so that it is not exposed anywhere. Velcro cable ties provisioned by the contractor shall be used for keeping cables bundled.
- iii. IO Box installation: Complete IO box assemblies shall be installed
- iv. UTP cable termination: Standards based termination of UTP cables at both ends – patch panel and RJ45 jacks of IO outlets. Use of Patch Cords to connect the patch panel and the network switch
- v. Printed IDs for cables and IO boxes

Feruling and Labelling Requirements:

- i. Lettering and numbering shall be black, longitudinal to cables, shall be typed in readable format, permanent and smudge-proof. Cable labels shall have a white background unless specified elsewhere in this specification. Labels shall have waterproof jackets. Hand-written labels will only be acceptable on a temporary basis during installation.
- ii. Labels at the communications rack or cabinet should identify the location, e.g., room number of workplace outlet and to cable number. Labels at workplace outlet should identify the communication cabinet and cable number.

Support for 3 years for solving connectivity problems between Nodes and Racks including Patch Panels, Information Outlets, LAN and Fiber Cables etc.

Laying of Fiber Cable :

- The Cable will be routed through HDPE pipe in underground trench.
- For fiber being laid under road should be passed through ISI mark GI Pipe.
- Fiber is to laid in one meter deep trench over layer of bricks and sand. Fiber is to be placed on the sand and should be pass through HDPE or GI pipe as mentioned above. The pit is to be covered with concrete layer or hume pipe (Cement half round) with one layer of sand and soil.
- Bricks –chambers of size 1.2x1.2x2 M will be made as per required.
- At every entry of fiber cable into a building a ramp of 1'x 3' should be constructed.
- Standard markers to be placed all along fiber cable route with permanent marker for every 200 mtrs.
- Indoor fiber cable should be pass through PVC pipe.
- Proper termination of OFC cable in wall mount LIU.
- Mounting of LIU boxes on wall
- Splicing with proper Feruling of Optical Fiber Cores in LIU Box.
- Fixing Optic cable in pipe on the wall / Ceiling / Column etc. with clamps, saddles, screws etc. as required.
- The length of cables laid in trenches, through pipes and through ducts shall be measured by use of OTDR. The length should be cross-verified with the marking of lengths on the cables. The lengths shall be recorded in sheet provided in the measurement book.

Route Indicators:

The RCC indicators embedded in concrete of specified size and shape may be provided at every 200 M or at suitable bends and corners as may be required. A minimum of 30 cm of its top portion should be kept above the ground level. The route indicators may be painted and numbered as directed and may be put along the road at a suitable distance away from the cable trench such that they are clearly visible from road side.

Chamber : Constructing bricks chamber , wall of brick chamber having internal dimensions of 1.2m x 1.2 m x 2 m. wall thickness of 9". Chamber cover with RCC cover with side two handle.

3. Repeated failure :

If during the warranty period any Active Components has any failure on two or more occasions, it shall be replaced by equivalent new Active Components by the supplier at no extra cost.

Right to use defective Equipment: If after delivery, acceptance and installation and within the guarantee and warranty period the operation or use of the equipment proves to be unsatisfactory, the University shall have the right to continue to operate or use such equipment until rectification's of defect/error or omission by repair or by partial or complete replacement is made without interfering with the University operation.

4. Penalty :

- (i) Response time of a call should be within 24 hours and in case of any failure to respond within the stipulated time, a penalty (as per details given below) shall be imposed which will be deducted from the Security deposit amount.

Table of Reference for Penalty

Sr. No.	Types of computer/Equipment	Suggested down time Penalty
1	Managed Switch and Access Point	Rs.300/-per day
2	If equivalent standby is given immediately	No penalty

- (ii) In case of intermittent failure and repeated failure the System will be considered continuously down and down time penalty clause will apply accordingly.
- (iii) Penalty to be imposed will be subject to maximum of total value of the Security Deposit. In case of the gross negligence and downtime, Security deposit by the firm can be forfeited besides immediate cancellation of the Contract.

5. Security Deposit:

- 5.1 After acceptance of Quotations, the Successful Supplier's shall be paid Rs. 50000/- as Security Deposit. The amount of Security Deposit will be retained by the university till the expiry of the **3 Years Warranty periods**. No interest shall be payable on this deposit.
- 5.2 The amount of Security Deposit shall be forfeited in case successful supplier refuses to accept the work after allotment or successful supplier fails to start & complete work in scheduled time which is fixed by concerned authority.
- 5.3 The Security Deposit shall be discharged (forfeited) as a compensation for any loss resulting from the failure to perform the obligations under the contract or in the event of termination of the contract or in any event as the Purchaser thinks fit and proper.

6. Warranty Period : Warranty Period will be 36 (Thirty-six) months.


7. Payment : Payment will be made after Installation, configuration, Testing of Passive and Active Components and Satisfactory report from Competent Authority of the University.

8. Delivery and Installation & Commissioning : The Active and Passive Networking Components must be deliver within 4 weeks from the date of Purchase Order . The bidder should as far as possible deliver all the material in one lot. The installation, commissioning of the Network must be completed within 60 Days from the date of Purchase Order.

Installation and Commissioning: Installation of all ordered equipment's including Active components and configuring of all network equipment's shall be the responsibility of the Supplier

Technical Specification

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 Deputy Registrar
 Purchase Section