**Format for Submission of Expression of Interest (EOI)**

# Brief about Expression of Interest

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| --- | --- |
| Name of the Equipment/ Goods | **Equipment for Optoelectronics and Photonics Laboratory.** |
| Location of the Supply | College of Engineering & Technology (CET)Techno-Campus, Ghatikia, Bhubaneswar-751029 |
| Name of Authority | Principal |
| Eligible firms | The firm should be the OEM/Authorized Dealers of the OEM having experience in supply and maintenance of the same item earlier.  |
| Date of Submission of EOI | Last Date is 20.03.2019 |
| Contact person | HOD of the concerned Department |
| Phone Number of Contact person | 9438708280 |
| Email | hodie@cet.edu.in |
| Address for submission of EoI | PrincipalCollege of Engineering & Technology (CET)Techno-campus, Ghatikia, P.O. Mahalaxmi Vihar Bhubaneswar-751029 |
| Selection Process | Stage1: Expression of Interest (EOI);Stage 2: Quotation proposal submission in TEQIP-III format  |
| * **The EoI will be submitted by Speed Post/Registered Post only**
* The sealed envelope containing the EoI should be super scribed with “**Expression of Interest (EoI) for supply of ………………..in Department of…………………..”**
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**Technical Specification:**

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| --- | --- | --- |
| Sl No | List of equipments with Specification | Quantity  |
| **1.** | **Physics of Fiber Optics Lab** **Specifications:-**  Physics of Fiber Optic System laboratory should have the following Components required to complete a series of experiments. The below mentioned System should be quoted as SET as we need **Compatibility.**  This System should consist of the following * He-Ne laser source with 2mW output power at 633.5 nm wavelength along with LASER Holder
* Laser to fiber coupler with Lens adjustment facility to adjust beam into core of fiber, Coupling Efficiency of >70% for SM fibers and > 90% for MM fibers, Wavelength of operation 180 to 2000 nm, Power Handling capacity more than 1 watt.
* Laser to Fiber Coupler for Bare Fiber with X-Y-Z Positioners.
* Laser power meter with separate Sensor unit with stand and separate display unit, Power measurement range upto 40mW, Wavelength of operation 400 to 1100 nm and calibrated to 633nm Optical Breadboard with Dimension of 60cm X 60cm.
* X-Y-Z Fiber Positioners and Rotary stage with angle rotation of isteps better than 1/2 degree
* Optical Fiber Cable of length 1 Km, 500 Mts and 100 Mts.

 **Optical patch chords and accessories required for experimentation purpose:** * 9 /125 micron single mode glass fiber patch chords
* 62.5 /125 micron multimode glass fiber patch chords
* 100/140 micron multimode glass fiber patch chords
* Display screen
 | **01** |
| **2.** | **Fiber Optic Trainer Kit for Glass and Plastic Fiber** **Specifications:-**Single Board System having LASER Diode and LED with Corresponding Detectors.  **Source 1**Type: Laser, Central wavelength: 1310nm, Output power: 1.5mW  **Source 2** Type: Visible LED, Central wavelength: 660nm, Receptacle housing: “Connector-less” style package  **Detector 1** Type: In GaAs PIN photo diode,Spectral Bandwidth : 1250nm ~ 1600nm, Responsively : 0.9 A/W @ 10 µW of 1310 nm,Bandwidth : 1.5 GHz  **Detector 2** Type: Silicon PIN photo transistor, Spectral Bandwidth : 400 nm ~ 1100nm, Max. Photosensitivity Lambda : 850 nm.  **Fiber cable** Type : Glass fiber single & multimode | **02** |
| **3.** | **ADVANCED FIBER OPTIC COMMUNICATION TRAINER** **Specifications:-**  **Coding/ decoding**: Manchester coding/decoding technique **Noise generator**: White noise source output **Amplitude** : 0 ~ 5Vpp **PRBS generator**: 16-bit switch selectable **Clock** : 32 KHz, 64 KHz, 128 KHz **Bit error rate**: 10-bit counter with LED indication upto 255 count **Measurement Multiplexing**: Time division multiplexing, 16 Channels (64 Kbits/Sec) **Frame marker** : Two 8-bit user selectable markers in alternate frames**Data rate**: 1.024 MBits / Sec **Voice PCM**: 2 channels voice PCM with telephone handsets (A Law) **Analog input** : 1Vpp **Analog bandwidth** : 300 KHz **FWHM spectral width** : 100 nm **PC to PC communication** : PC to PC communication using 660 nm and 950 nm LED through RS-232 standard **RS-232PortType:** Two9PinD type connector **Baud rate**: Maximum 115.2KBps Baud  **Fiber optic cable** : Type: plastic optical cable, step index, multimode Core refractive index-n1 : 1.492 Clad refractive index-n2 : 1.406 Numerical aperture : 0.50 Acceptance angle : 60º Fiber diameter : 1000microns Outer diameter : 2.2mm Number of Fibers : 4 Fiber length :1Meter,3Meter Switch Faults : 8 switch faults Test points : 45 test points Interconnections : 2mm banana sockets Power supply : GND,+5V,+12V, -12V  | **02** |
| **4.** | **CONNECTORISATION CUM SPLICING KIT** **Specifications:-**  ST fiber polishing disc: 01 no. * Fiber polishing sheets : quantity 10
* Fiber polishing pad: 01 no.
* Fiber optic zoom microscope: 01 no.
* Fiber optic diamond scribe: 01 no.
* Jacket stripper: 01 no.
* Buffer stripper: 01 no.
* Universal crimp tool: 01 no.
* Tweezer: 01 no.
* Optic prep: 01 pack
* Cotton swabs : 01 pack
* Disposable syringe with needle : quantity 02
* ST connector : quantity 02
* Epoxy : 02 packs
* Ultra splice : quantity 02
* Measurement scale: 01 no.
* Carrying case: 01 no.
* Instruction manual : 01 no.
 | **01** |
| **5.** | **CONTINUITY TESTER**Fiber Type : Single mode & MultimodWavelength: 660 nm Red Visible Typical output power: -20dBm Stability (+ / -dB): 0.03 for 1 Hour,0.1Connector Style: ST Type Power Supply: 1.5V Battery (2 Nos.) | **01** |
| **6.** | **Accessories (Assorted)*** FC /SC /ST/SMA Connector adaptors(10 each)
* FC /SC/ST Patch Chords 3 meters each (Glass Fiber)
* Plastic Fiber 100 Mts
* Glass Fiber ----10 Mts
* Multimode Fixed Attenuators 10 Nos
* Variable attenuator ---02
* UV Mechanical splicer ---10 Nos
* Fiber optics transmitter visible range ---05 Nos
* Fiber optics transmitter visible range ---05 Nos
* Fiber optics Receiver visible range ---05 Nos
* Fiber optics Receiver visible range ---05 Nos
* Fiber optics Couplers ---------------------05 Nos
 | **1set** |
| **7.** | **Mechanical Splice Installation Kit.** UV – Bond 01 Bottle UV – Lamp 01 No. Batteries for UV Lamp 04 Nos. UV Protective Goggles 01 No. Glass Plate 01 No.OPTO splice 05 Nos. Buffer Stripper 01 No. Diamond Scribe 01 No. Blade & Scissors 01 Set 100 X Fiber Optic Mic. 01 Nos. Batteries for Micro. 02 No. Carrying Case 01 No. Instruction manual 01 No. | **1set** |
| **8.** | **100MHz Digital Storage Oscilloscope**100 MHz 2 Channel Digital storage Oscilloscope; Band width:- DC to 100MHz (-3dB)Trigger system:- Auto/Level; Trigger Band width:- 100MHz; Auto time base; Display:- LCD based;. Accessories : 2 x 1:1/1:10 switchable probes, 2 x BNC-Crocodile probe | **05** |

**APPLICANT’S EXPRESSION OF INTEREST**

To,

Principal,

College of Engineering and Technology

Techno-Campus, Ghatikia

Bhubaneswar-751029

Odisha

Sub: **Submission of Expression of Interest for supply of ………….. with the given Technical specification under TEQIP-III**

Dear sir

In response to the Invitation for Expressions of Interest (EOI) published on\_\_\_\_\_\_\_ for the above purpose, we would like to express interest to carry out the above proposed task. As instructed, we agree to supply the equipment /item with the following Technical specification:

**Technical specifications**

 **Organizational Details** :

1. Name of the Organization
2. Complete postal address with pin code:
3. GST NO:
4. Telephone No.
5. Fax Number
6. Mail Id:
7. Name of representative:
8. Representative Mobile Number :
9. Representative E mail Id:

**Experience in related fields:** Attach the purchase order if supplied any other Institute.

**Additional information (if any):**

**Declaration**: We hereby confirm that we are interested in supplying the above equipment/item as per the given Technical specification to CET, Bhubaneswar under TEQIP III and we certify that our organization has not been blacklisted during last three financial years. All the information provided herewith is genuine and accurate.

Sincerely Yours,

Signature of the applicant

[Full name of applicant]

Stamp........................

Date:

**Note: This is to be furnished on the letter head of the organization and signed in every page.**