**COLLEGE OF ENGINEERING AND TECHNOLOGY**

**(An Autonomous & Constituent College of BijuPatnaik University of Technology, Odisha)**

**Techno Campus, Ghatikia, PO- Mahalaxmivihar, Bhubaneswar -751029**

**Phone: 0674-2386075 Fax: 0674-2386182**

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 Letter No.468/Phy/CET Date23/02/2021

**QUOTATION CALL NOTICE**

Sealed quotations are invited from registered original Equipment Manufacturer/ Suppliers/Agencies/Authorized dealers having GSTIN, PAN for supply of Laboratory Instruments at Department of Physics, College of Engineering and Technology, Technocampus, Ghatikia, Mahalaxmivihar, Bhubaneswar- 751029.

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| --- | --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Name of the Instrumentswith specifications** | **Quantity** | **Unit Price without GST**  | **GST%****&Cost** | **Unit Price with GST** | **Total Amount** |
| 1 | **Solar Cell Apparatus**Solar trainer to familiarise with IV characteristics of solar cell. Ø Set up of 4 nos. of solar cell and 100W light source for easy handling Ø Light source intensity variation facility.Ø Each solar cell terminated in connectors Ø Inbuilt digital voltmeter and current meter for easy reading. Ø Variable potentiometer provider as Load. Ø Set up suitable for study parallel and series effect of solar cells. Ø Connection through stackable patch cords. Ø Enclosed in strong cabinet. | 01 No. |  |  |  |  |
| 2 | **Four Probe Setup (Measurement of Resistivity)***Four Probe Setup*Voltmeter Display: 31/2 digit, 7 segment LED, auto polarity &Voltage Range: X1(0-200.0mV DC) & X10(0-2.00V DC), Current Display: 31/2 digit, 7segment LED, Current Range: 0-20mA DC, 4mm socketOven Supply: 45v Ac (Switch position LOW), 60V AC (Switch position HIGH), Oven Connector: 5 pin, DIN typeInput Voltage: 220V, 50Hz AC, Fuse: 1A, 250V*Oven With Thermometer*Heating Element:35ohm, 75watt, Oven Supply: 45V/60V ACOven Connector: 5 pin, DIN type, Ambient Temperature: 1750 CFuse: 2A, Type: Mercury, Temperature Range: 0-2000 CLeast Count: 10 C, Length: 300mm approx.*Four Probe Arrangement*Four probe: Spring type, Probe Spacing: 25mmCrystal: Ge Wafer, P type, Crystal Size: 12×14×0.5mm(L×W×Thickness)Resistivity: 1~ 10 ohm-cm, Orientation: <100> | 01 No. |  |  |  |  |
| 3 | Lecher Wire Kit | 01 No. |  |  |  |  |
| 4 | **To study the output characteristics of a MOSFET***Technical Specification* DC Supply: 0-5V & 0- 30V Variable DC Voltmeter: 0-5V &0-30V (Moving coil) DC Ammeter: 0-25mA(Moving Coil) MOSFIT: IRF540 Fixed Resistor: 10KΩ,2.2KΩInterconnection : 4mm patch cord Front panel built with high class insulated sheet Circuit & Symbol diagram printed on front panel Mains Power: 230V/50Hz | 01 Nos. |  |  |  |  |
| 5 | **Junction Capacitance of PN Junction Diode** *Technical Specification** Selector Switch: V-I and V-T experiment, Bias & Junction
* Voltmeter & Current Display: 31/2 digit, 7segment LED
* Voltage Range: 0.000 -1.999V & Current range: 0-20mA
* Display: 31/2 digit, 7segment LED
* Selector Switch at V-T position/Junction:
* Voltage Range: 0.000 -1.999V
* Temperature Display: 31/2 digit, 7segment LED
* Temperature Range: 273k to 353k
* Oven: Heater pin 4 & 5. Temperature pin 1 & 2
* Oven Connector: 5 pin, DIN type
* Diode and Transistor: 4mm safety socket
* Input Voltage: 220V, 50Hz AC
* TEMPERATURE SENSOR –
* Heating Element: 35 ohm
* Oven Connector: 5 pin, Din type
* Ambient Temperature: 353k
* Temperature Sensor: Pt100

Output pin: Heater pin 4 & 5. Pemperature pin 1 & 2 | 01 No. |  |  |  |  |
| 6 | **Rectification of Junction Diode kit using Various Filter***Technical Specification** AC Supply: 12V-0-12V
* AC Voltmeter: 0-30V (Moving Coil)
* DC Voltmeter: 0-30V (Moving Coil)
* DC Ammeter: 0-250mA (Moving Coil)
* Diode: 1N4007:6nos.
* Capacotor:1000µF/25V,100µF/25V
* Inductor: 200mH
* Resistor: 50Ω,100Ω,220Ω,330Ω,500Ω,1KΩ,10KΩ in 7 decade step
* Front Pannel built with high class insulated sheet
* Circuit & Symbol diagram printed on front panel

Mains Power: 230v/50Hz. | 01 No. |  |  |  |  |

 The intenders are required to submit the offer enclosing GSTIN, PAN along with Authorized dealer certificate in their quotations. The registered original equipment manufacturer/suppliers/Agencies/Authorized dealers should write quotations for **"Supply of Instruments to the Department of Physics, CET"** in bold letters on covered envelops. The intenders should quote as per the above format in their letter head.

 The last date submission of quotations is **10.03.2021up to 4.00 PM** addressing to the **Principal, College of Engineering and Technology, Techno Campus, Ghatikia,P.O. Mahalaxmivihar, Bhubaneswar- 751029** by Speed post/Registered post only. Through Hand and Courier service delivery are not accepted. The authority will not responsible for any postal delay. The quotations will not be received after scheduled date and time. Suitable penalty amount will be imposed if the supply, installation and commissioning is not fully completed within the stipulated date.

 The authority reserves the right to reject any or all quotations without assigning any reason thereof.

**Terms and Conditions.**

1.The cost of the above-mentioned items should be quoted mentioning make, model number and detailed technical specification.

2.The rate Quoted should be inclusive of all packing & delivery at Department of Physics, CET, Bhubaneswar.

3.Delivery of materials and installation of the same at Department of Physics, CET, Bhubaneswar should be made within the stipulated period from the date of communication acceptance letter.

4. It will be responsibility of intenders to provide necessary spares consumable which may be required during the installation at his own cost.

5. The supplied materials shall be covered under two years or more comprehensive on side warranty period from the date of installation.

6. The intenders are required to submit the offer along with PAN/GSTIN/Registration certificates.

7. The firm should not be black listed during last three financial years.

 Sd/-

 **Head of the Department**

**CC:** PA to Principal, CET for kind information and necessary action.