**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.483/Phy/CET Date:-15/03/2021

**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 Instruments with specifications** | **Quantity** | **Unit Price without GST** | **GST %**  **& Cost** | **Unit Price with GST** | **Total Amount** |
| 1 | **Dispersive & Resolving Power of a Grating**  *Technical Specification*  Spectrometer:  Scale: Brass, Dia :7 inch, L.C :30 Second  Objective : Achromatic lens, f : 178mm  Aperture :32mm , Slit : Brass with micrometer  Reticule : 90 cross etched on glass  Eyepiece : 10XGauss eyepiece, in-built magnifier  Base : 190mm Triangular, Cast Iron  Grating, White Light Source | 01 No. |  |  |  |  |
| 2 | **Melde’s Apparatus**  *Technical Specification*  Heavy steel fork ,Heavy cast iron base, Electromagnet  Weight box 1, Voltage source 1.5V – 12V / 3A, Pulley with clamp Reel of thread,  Meter scale of length 1m,Scale pan | 02 Nos. |  |  |  |  |
| 3 | **Potentiometer for low resistance measurement**  *Technical Specification*  DC Supply : 2V/150mA (Fixed) & 0-20V (Variable)  Standard Cell : 1.018V DC  Unknown Resistor : 1Ω,5Ω,10Ω  Galvanometer: 30-0-30µA (Moving Coil)  DC Ammeter : 0-100mA  Potentiometer with jockey  Circuit & Symbol diagram printed on front panel | 01 No. |  |  |  |  |
| 4 | **Carey foster Bridge**  *Technical Specification*  DC Supply : 1.5V/250mA (Switch Controlled)  Decade Resistance Box : 0.1Ω to 10Ω-2nos (Fractional)  Galvanometer: 30-0-30µA (Moving Coil)  DC Regulated Fixed Power Supply : 1.5V/250mA  Fixed Resistors :10Ω±1% -2nos  Carry Foster Bridge with jockey  Circuit & Symbol diagram printed on front panel | 02 Nos. |  |  |  |  |
| 5 | ***To design a Wien bridge oscillator for given frequency using an op -amp****.*  *Technical Specification*  DC Supply: +5V, BJT:CL100S  Resistor : 4.7KΩ,100KΩ,6.8KΩ,3.3KΩ,680Ω,10KΩ  Capacitor:0.01µF,0.047µF,0.2µF  Front panel built with high class insulated sheet, Circuit & Symbol diagram printed on front panel, Mains Power :230V/50Hz | 02 Nos. |  |  |  |  |
| 6 | ***To design a phase shift oscillator***  *Technical Specification*  DC Supply:+5V  BJT:CL100S  Resistor:4.7KΩ-3nos,47KΩ,10KΩ,2.2KΩ,680Ω  Capacitor:0.1µF-3nos,1µF,22µF  Interconnection:2mm patch cord  Front panel built with high class insulated sheet, Circuit & Symbol diagram printed on front panel, Mains Power :230V/50Hz | 02 Nos. |  |  |  |  |
| 7 | **Planck’s Constant**  *Technical Specification*  Selector Switch : V-I and T-I experiment  Selector Switch at V-I position :-  Voltmeter & current Display: 3½ digit, 7segment,  Voltage Range : 0.000-2.000V, Current Range : 0-2000mA  Selector Switch at T-I position :-  Current Display : 3½ digit, 7segment LED  Current Range : 0-20mA  Temperature Display : 3½ digit, 7segment LED  Temperature Range : Room temperature to 60.0°C  Oven , Oven Connector : 5 Pin, DIN type  LED Connector : 3 Pin, DIN type  Oven with Temperature Sensor  Heating Element : 20 ohm, Oven Connector : 5 Pin, DIN  Ambient Temp. : 60° C, Temp. Sensor : Pt100  Output Pin:Heater pin 4 &5.,  Temperature pin 1 & 2 | 01 Nos. |  |  |  |  |
| 8 | **OP-AMP Advance Trainer Kit**  Technical Specification:  The Instrument comprises of the Following built in Parts:-  Two continuously variable DC regulated power supplies of +1.5V-10V Dc,  Two Controls Switches mounted on the panel or a Digital panel voltmeter in place of switches.  2 fixed voltage DC Regulated power supplies +15V is on Board for internal op-amp biasing.  One fixed voltage DC Regulated power supplies +12V is on Board.  One fixed voltage DC Regulated power supplies +12V and +5V is on Board.  Six Numbers Variable Resistor (Potentiometer) having different values are mounted on the board.  One Bread Board is mounted on the Panel Board.  One 16 Pins ZIF Socket is mounted on the panel.  N number of Resistances and Capacitors are on board for the required operations to be performed.  4 Diode 1N4007, 2 LED and 1 number of Zener Diode having value of 6.2V and 5.1V are mounted on the board.  Two numbers of 741 Operational Amplifiers are mounted on the board.  One NE555 IC is mounted on the panel.  One LM331 IC is mounted on the board.  Two Triggering Pulsar are mounted on the Panel.  NPN Transistor and IRF540 Mosfet are mounted on the panel.  Operated on 230V, 50Hz power supply +10% | 02 Nos. |  |  |  |  |

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 **30.03.2021 up 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.