

COOCH BEHAR COLLEGE
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Dist. Cooch Behar
Ph. & Fax : 03582256798
Website : www.coochbeharcollege.org.in

Tender Notice

Ref: - 11 /41-21

Date : 09/01/2021

The undersigned invites sealed Quotations, Tender from bona fide suppliers/agency/firm for the supply/work of the following articles/ equipments for the use of the College (Sl. No. 1 to 43). Last date of submission of quotation is 27-01-2021, time up to 12.30 p.m. The quotation will be opened on 27-01-2021 at 1.00 p.m. The Authority reserves the right to reject any or whole of the quotation without assigning any reason whatsoever. S.T. / P.T. / VAT Clearance Certificate to be enclosed with the quotation. **The rates with or without GST, ED, Freight & delivery charge, if any should be mentioned separately & clearly.** Tender price to be given in discrete component item wise as well as complete set wise All supply/work will be received/done in the premises of the college. Quotation received after the scheduled time and date will not be entertained. Advanced Fax copy/Email copy of the quotation will be accepted from the outstation suppliers/agency/firm subject to the submission of the full quotation with necessary documents including photo copy of NEFT transaction receipt of Rs. 200.00 within the last date & time of submission (Fax No. 03582-256798 E-mail : principal@coochbeharcollege.org.in). With every quotation (Item mentioned against) an NEFT of Rs. 200.00 (Rupees two hundred) only non-refundable must be enclosed as processing fee. in favor of "GRANT DONATION AND MISCELLANEOUS RECEIPTS" A/C No. 50266786735, IFSC - ALLA 0211721, Allahabad Bank, Cooch Behar Branch

Sd/-
(Dr. P. K. Debnath)
Principal
Cooch Behar College

Note for Suppliers:

1. Apparatus/Equipments must be as per latest Cooch Behar Panchanan Barma University B.Sc. Physics (HONOURS)/Program Practical CBCS Syllabus only.
2. All items are to be delivered at Physics Lab. At the time of delivery each set is to be mounted/hanged/demonstrated/tested in presence of students with the help of supplier's materials; only electric and water supply will be provided by College. So **Technical Person** has to come during delivery.
3. Challan will be signed and bill will be received once only after finishing of delivery of items. Incomplete item delivered challan will not be signed.
4. Payment will be made on completion of delivery of all supply-ordered items in proper condition. Delay in delivery of items may be considered but the payment will be deferred accordingly. Please attach photocopy of this supply order copy with bill. **GST amount & % and other charges, if any, must be given in separate column each item wise in the bill in compliance with amount to pay (ATP) as in quotation.**
5. Apparatus for each experiment should be complete in all respects. All the necessary components/accessories should be accompanied.
6. Equipment/Apparatus should include Manual and Sample Result.
7. Warranty & Guaranty papers are to be given.
8. Free small loose small spare parts with any set-up will be accepted thankfully.

Purchase & Supply of Apparatus/Equipments: QUOTATION FORMAT (MANDATORY) IS GIVEN BELOW.**DIGITAL PHOTOGRAPHY IN CD OR ONLINE E-MAILED FORM OF EACH ITEM-WISE & COMPLETE ARRANGED SET-WISE IS MUST**

<u>Sl. No.</u>	<u>Name of Apparatus/ Equipments [As per CBPBU CBCS B.Sc. Physics Honours/Program Course Standard] EACH SET COMPLETE WITH INDIVIDUAL COMPONENTS</u>	<u>QUANTITY REQUIRED</u>	<u>ITEM/COMPONENT NAME</u>	<u>MANUFACTURING COMPANY NAME</u>	<u>ITEM/COMPONENT WEIGHT, DIMENSION, MEASUREMENT RANGE/ACCURACY, QUALITY ETC</u>	<u>INDIVIDUAL COMPONENT PRICE</u>	<u>COMPLETE SET PRICE</u>	<u>GST (%)</u>	<u>OTHER CHARGES IF ANY</u>	<u>GROSS UNIT PRICE (ATP#)</u>	<u>WHETHER PHOTO IN CD/DVD GIVEN? Y/N</u>
1.	Study of Electron spin resonance - determine magnetic field as a function of the resonance frequency – COMPLETE SET WITH ALL COMPONENTS	1 set									
2.	To show the tunneling effect in tunnel diode using I-V characteristics. –COMPLETE SET WITH ALL COMPONENTS	2 sets									
3.	Quantum efficiency of CCDs – COMPLETE SET WITH ALL COMPONENTS	2 SETS									
4.	Measurement of susceptibility of paramagnetic solution (Quinck's Tube Method) – COMPLETE SET WITH ALL	2 SETS									

	COMPONENTS											
5.	To measure the Magnetic susceptibility of Solids. – COMPLETE SET WITH ALL COMPONENTS	2 SETS										
6.	To determine the Coupling Coefficient of a Piezoelectric crystal. –COMPLETE SET WITH ALL COMPONENTS	2 SETS										
7.	To determine the complex dielectric constant and plasma frequency of metal using Surface Plasmon resonance (SPR) –COMPLETE SET WITH ALL COMPONENTS	2 SETS										
8.	To determine the refractive index of a dielectric layer using SPR –COMPLETE SET WITH ALL COMPONENTS	2 SETS										
9.	To study the PE Hysteresis loop of a Ferroelectric Crystal. – COMPLETE SET WITH ALL COMPONENTS	2 SETS										
10.	To draw the BH curve of Fe using Solenoid & determine energy loss from Hysteresis. – COMPLETE SET WITH ALL COMPONENTS	2 SETS										
11.	To measure the resistivity of a semiconductor (Ge) with temperature by four-probe method (room temperature to 150 °C) and to determine its band gap. –COMPLETE SET WITH ALL COMPONENTS	2 SETS										
12.	To determine the Hall coefficient of a semiconductor sample. –COMPLETE SET WITH ALL COMPONENTS	2 SETS										
13.	To design an Amplitude Modulator using Transistor –	2 SETS										

	COMPLETE SET WITH ALL COMPONENTS										
14.	To study AM Transmitter and Receiver –COMPLETE SET WITH ALL COMPONENTS	2 SETS									
15.	To study FM Transmitter and Receiver –COMPLETE SET WITH ALL COMPONENTS	2 SETS									
16.	To study Time Division Multiplexing (TDM) – COMPLETE SET WITH ALL COMPONENTS	2 SETS									
17.	To study Pulse Amplitude Modulation (PAM) –COMPLETE SET WITH ALL COMPONENTS	1 SET									
18.	To study Pulse Width Modulation (PWM) – COMPLETE SET WITH ALL COMPONENTS	2 SETS									
19.	To study Pulse Position Modulation (PPM) –COMPLETE SET WITH ALL COMPONENTS	2 SETS									
20.	To study ASK, PSK and FSK modulators –COMPLETE SET WITH ALL COMPONENTS	2 SETS									
21.	To verify the Law of Malus for plane polarized light. A complete setup with all accessories	2 SETS									
22.	To analyze elliptically polarized Light by using a Babinet's compensator . A complete setup with all accessories	2 SETS									
23.	To determine the wavelength and velocity of ultrasonic waves in a liquid (Kerosene Oil, Xylene, etc.) by studying the diffraction through ultrasonic grating. A complete setup with all accessories	2 SETS									
24.	To study the reflection,	2									

	refraction of microwaves A complete setup with all accessories	SETS									
25.	To determine the refractive index of liquid by total internal reflection using Wollaston's air-film . A complete setup with all accessories	2 SETS									
26.	To determine the refractive Index of (1) glass and (2) a liquid by total internal reflection using a Gaussian eyepiece . A complete setup with all accessories	2 SETS									
27.	To study the polarization of light by reflection and determine the polarizing angle for air-glass interface. A complete setup with all accessories	2 SETS									
28.	To verify the Stefan's law of radiation and to determine Stefan's constant. A complete setup with all accessories	2 SETS									
29.	To determine the Boltzmann constant using V-I characteristics of PN junction diode. A complete setup with all accessories	2 SETS									
30.	Determine output characteristics of a LVDT & measure displacement using LVDT. A complete setup with all accessories	2 SETS									
31.	Measurement of Strain using Strain Gauge . A complete setup with all accessories	2 SETS									
32.	Measurement of level using capacitive transducer . A complete setup with all accessories	2 SETS									

33.	To study the characteristics of a Thermostat and determine its parameters. A complete setup with all accessories	2 SETS										
34.	Study of distance measurement using ultrasonic transducer A complete setup with all accessories.	2 SETS										
35.	Calibrate Semiconductor type temperature sensor (AD590, LM35, or LM75) A complete setup with all accessories	2 SETS										
36.	To measure the change in temperature of ambient using Resistance. Temperature Device (RTD) . A complete setup with all accessories	2 SETS										
37.	Create vacuum in a small chamber using a mechanical (rotary) pump and measure the chamber pressure using a pressure gauge. A complete setup with all accessories	2 SETS										
38.	Comparison of pickup of noise in cables of different types (co-axial, single shielded, double shielded, without shielding) of 2m length, understanding of importance of grounding using function generator of mV level & an oscilloscope. A complete setup with all accessories	2 SETS										
39.	To design and study the Sample and Hold Circuit.. A complete setup with all accessories	2 SETS										
40.	Design and analyze the Clippers and Clampers circuits using junction diode. A complete setup with all accessories	2 SETS										

41.	To plot the frequency response of a microphone . A complete setup with all accessories	2 SETS									
42.	To measure Q of a coil and influence of frequency, using a Q-meter . A complete setup with all accessories	2 SETS									
43.	Cathod Ray Oscilloscope (CRO)	2 SETS									

**Also please Include Digital Photo of Supplies Company/Firm/Show Room/sales counter/Stocks
ATP# : AMOUNT TENDERED BY Suppliers Company and hence TO PAY BY THE COLLEGE TO THEM**