



GOVERNMENT GENERAL DEGREE COLLEGE, RANIBANDH
Office of the Principal

Vill + P.O. : Rautara *P.S. : Barikul *Dist. : Bankura *Pin Code: 722135* West Bengal* India

Ph. : +917872790264 ■ e-mail : govtencol.ranibandh@gmail.com ■ Website : ranibandhgovtcollege.org

- Ref. No. RGC/24-25/ETEN/NIT/PHSH/01

Date: 16.06.2024

E-TENDER NOTICE (PHSH)

Quotations are invited by the Office of The Principal, Government General Degree College at Ranibandh, VPO-Rautara, P.S.-Barikul, Block-Ranibandh, Dist.-Bankura, W.B.-722135 from reputed firms/ suppliers for supply of the following categories of Laboratory items for Physics Department through www.wbtenders.gov.in adhering to the guidelines of e-tendering. Payment of Rs. 10,000.00 as **Earnest Money Deposit (EMD)** will be through Online Payment Mode either through NEFT/RTGS OR NET BANKING as per Finance order No 3975F(y) Dated: 28/07/2016.

Laboratory Equipments for Department of Physics.

Detailed specifications of items in all categories for which quotations are to be submitted are provided in **Annexure-I**. The following must be adhered to while submission of quotations:

- Quotations must be submitted in self-made format in original in official pad of the company along with detailed specifications of items along with all relevant information, including terms and conditions (if any) and mentioning all levies, installation charges, service charges, GST and other taxes, etc., and any other charges thereon.
- Quotations must be submitted through www.wbtenders.gov.in adhering to the guidelines of e-tendering.
- For any item for which the bidder does not wish to submit a quotation they are not to insert 0 (Zero); instead keep the Basic Rate Blank in the BOQ for that respective item only and insert values for all those items for which they wish to submit quotation.
- Quotations and all bills must be addressed to “The Officer-in-Charge, Government General Degree College at Ranibandh”



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- (e) All legal documents including necessary governmental/municipal approval, permissions and certificates must be uploaded.
- (f) Quotation documents are non-returnable.
- (g) GST TDS will be deducted as per Government rules.
- (h) The quantity of each item to be procured shall be decided by the college authority subject to approval and availability of funds from the Department of Higher Education, Science & Technology and Biotechnology of Govt. of West Bengal.
- (i) The name of the manufacturer for the laboratory items should be explicitly mentioned in your bid submission. The manufacturers must be **REPUTED MANUFACTURER (CERTIFIED)**.
- (j) **In the BOQ, bidders must enter the basic rates in Column 13 based on the total quantity required, instead of providing the unit rates.**
- (k) All quotations shall remain valid up to 31st March 2025.

The last date for submission of quotations through www.wbtenders.gov.in shall be 24/06/2024 up to 5:00 p.m., and quotations shall be opened on 25/06/2024 at 9:00 a.m.

The Principal/Officer-in-Charge, Government General Degree College at Ranibandh, reserves the right to accept or reject any or all of the quotations without assigning any reasons thereof.

Officer-in-Charge
Government General Degree College at Ranibandh

MADHUSUDAN GARAIN
W.B.E.S.
Officer-in-Charge
Govt. General Degree College
Ranibandh, VPO.- Rautara
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Annexure-I

LIST OF ITEMS: EQUIPMENTS FOR DEPARTMENT OF PHYSICS : 2024-2025

<u>Sl No</u>	<u>Apparatus</u>	<u>Specifications</u>	<u>Quantity</u>
1.	To study the zero-crossing detector and comparator.	Full Set: Op-amp IC 741, Dual Regulated Power supply ($\pm 12V$), Oscilloscope (20MHz, Dual Channel),	1
2.	To determine the Boltzmann constant using I-V characteristics of PN junction diode.	In form of a Trainer-Board kit which should contain: Voltmeter ($\sim 2V$), Milliammeter (20mA), Voltage regulator, Connectors, Diode, Additional [oven, digital thermometer]	1
3.	To determine work function of material of filament of directly heated vacuum diode	LEEI-26 Apparatus of work function & specific charge of electron	1



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Annexure-I

4.	To determine the wavelength of H-alpha emission line of Hydrogen atom	Full Set: Hydrogen vapor lamp and power supply, Diffraction grating (transmission type), Meter sticks (2), Collimator	1
5.	Measurement of susceptibility of paramagnetic solution (Quinck's Tube Method)	Full Set: Electromagnet (max magnetic field: 1T), Constant current power supply with output current variable within range 0-4A, Gauss probe holder with mount, Digital Gaussmeter (Range:1-20K Gauss), Travelling microscope, Quinck's tube with stand, Connecting wires, Test sample	1
6.	To determine the Hall coefficient of a semiconductor sample.	Full Set: (Preferably of PHYWE) Electromagnet (max magnetic field: 1T), Constant current power supply with output current variable within range 0-4A, Gauss probe holder with mount, Digital Gaussmeter (Range:1-20K Gauss), Hall Effect Control Unit (0-10mA, 0-200mV, 20*4 alphanumeric LED), Connecting wires, Test sample. Sample control Holder with Rigid Base (preferably of Aluminum alloy)	1



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7.	To determine the wavelength and velocity of ultrasonic waves in a liquid (Kerosene Oil, Xylene, etc.) by studying the diffraction through ultrasonic grating	Full Set: Radio frequency oscillator fitted with a frequency meter, Quartz crystal slab fitted with two leads. Spectrometer, Glass cell with sample liquid (kerosene/Toluene/Turpentine oil etc), Sodium lamp	1
8.	To verify the Stefan's law of radiation and to determine Stefan's Constant	In form of a kit	1
9.	Digital electronics trainer kit	In form of a kit	2
10.	Amplitude Modulation & Demodulation	Amplitude Modulation & Demodulation trainer kit, C.R.O (20MHz), Function generator (1MHz), Connecting chords & probes.	1
11.	Frequency Modulation	FM Transmitter & Receiver Kit, ACT-10, for Laboratory	1
12.	Babinet Compensator Setup	Full Setup	1
13.	2 Channel Digital Storage Oscilloscope	1. 7-inch WVGA color display with 15 horizontal divisions. 2. Dual window FFT with simultaneous time and frequency domain views. 3. Trigger frequency counter 4. Pan and zoom capability 5. Fanless design for low noise operation	2



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Annexure-1

		6. 50 MHz Analog Bandwidth 7. Record Length of 20k points 8. Sample Rate of 1 GS/s	
14.	Sodium Vapour Lamp	1. Power = 35 Watt	8
15.	Melde's Experiment.	Determination of the Frequency of an Electrically Maintained Tuning Fork by Melde's Experiment and to verify $\lambda^2 - T$ Law	2
16.	Maxwell needle Experiment	Determination of the modulus of rigidity of material of a given wire by dynamical method using Maxwell needle.	2

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