

**DEPARTMENT OF PHYSICS, THE UNIVERSITY OF BURDWAN  
INVITATION FOR TENDER**

**No PHY/ 2017-18/ PUR/ 01**

**Date: 25/01/2018**

Sealed quotations are hereby invited from the manufacturer/ authorized distributors/ suppliers for supplying or/ and repair of the following items to be procured for the Department of Physics, The University of Burdwan, Golapbag, Burdwan 713104 in 2017-18:

Sl No	Nature of Work/Items	Work to be done
1.	Repair & maintenance of Equipment	(i) Battery Pack for 5 KVA UPS for Computer Lab (opposite to Office) (Make: Any reputed manufacturer, Specification: 26/42 AH with 3 year onsite replacement warranty) [15 numbers] (ii) Geiger Counter repair in Nuclear Physics Lab (1) (iii) Repairing of hydraulic press (1) (iv) Repair of Philips Oscilloscope (1) (v) Repair of Sterling Cooled Detector (1) (vi) Ball mill (P-5) (1)
2.	Repair & maintenance of Labs, Instrument Room etc	(i) Preparation of Dark room in Composite Building 1 <sup>st</sup> Floor Lab. (ii) Repairing of the damaged roof in Dr A Dutta's lab
3.	Repair & maintenance of Computer & Peripherals	(i) Printers (5) (ii) UPS (5) (iii) Computer repair/up gradation (6) (iv) Computer Monitors (4) (v) Toner Cartridge repair (equivalent of HP88A original) (2)
4.	Repair & maintenance of furniture	(i) Desks of Gallery-I (20) (ii) Chairs in Seminar Room (15) (iii) Hatch Bolt fit in 2 <sup>nd</sup> Door of Gallery-2 in composite building (2) (iv) Tables and Chairs in sitting rooms of faculty members (10) (v) Drawer of the sitting desk (2) (vi) Wooden Almira (polish and change of glass) (4)
5.	Repair & Maintenance of AC, Refrigerator	Chiller (1)
6.	Repair & maintenance, Modernization of Seminar Library	Some Tables, Chairs and desks ( total 15)
7.	Technical aids including Teaching aids	Dusters (10) and dust-free Chalks (20 packets, each of 100) of very good quality
8.	Chemicals	(i) Double distilled water (Good quality preferably AR grade) (ii) KBr powder for FTIR measurement (iii) Silica Gel (Good quality preferably AR Grade)
9.	Computer stationaries, consumables & Antivirus	(i) Paper (A4 size) (25 standard Packets, each with 500 pages) (ii) Pen drive (64 GB) (21) (iii) Laser Printer cartridge (refilling) (10)
10.	Computer & Peripherals	(i) New Computer from reputed manufacturer with following specifications: (1) <b>Processor:</b> Intel 7 <sup>th</sup> Gen Core i3-7100T with 3.4 GHz and 3MB cache; <b>Chipset:</b> Intel H270 or higher; <b>Motherboard:</b> OEM Motherboard; <b>Memory:</b> 4GB DD4 2400MHz RAM; expandable up to 32 GB DDR4 2400 MT/s with at least two SO-DIMM slots; <b>Ports:</b> Minimum 6 USB Ports with at least 4 USB 3.1 and minimum 2 ports in front, Charging option should be available with at least 3 ports, 1 Universal audio jack, 1 × Display, 1 × Serial, 2 × PS/2 ports; <b>Hard Disk Driver:</b> 1 TB 7200 RPM SATA HDD with pre-failure alert indicator; <b>Optical Drive:</b> 8 × DVD writer; <b>Display:</b> 20 inch or above , HD+, Anti Glare Non-Touch Display, Resolution - 1600×900 or above , Minimum viewing angle 170 deg(H) & 160 deg(V) or better, Contrast ratio – 1000:1 or higher, Brightness – 250 nits or higher; <b>Network Connectivity:</b> 10/100/1000 Gigabit Ethernet, Wi-Fi; <b>Graphics:</b> Integrated Graphics; <b>Stand :</b> Adjustable Height Stand; <b>Speaker:</b> Inbuilt stereo speaker; <b>Wall Mount</b>

		<p><b>Capability:</b> VESA 100 × 100; <b>Mic:</b> <a href="#">Inbuilt dual Mic</a>; <b>Slots:</b> 2 × M.2 slot; <b>Bays:</b> (1 ) Optical Disc Drive Bay, (1) 2.5”Hard Disk Drive Bay; <b>Form Factor:</b> AIO; <b>Power Supply:</b> 90 W or less External power adaptor with minimum 89%; <b>Keyboard:</b> OEM USB Keyboard; <b>Mouse:</b> OEM USB Mouse; <b>Operating System:</b> DOS; <b>Webcam:</b> 1MP webcam with 1920 × 1080 resolution or higher; <b>Security:</b> Drive lock, Power-on password (via BIOS), Setup password (via BIOS), Support for chassis padlocks and cable lock devices, Trusted Platform Module TPM 2.0 Embedded Security Chip, SATA port disablement (via BIOS), Serial, USB enable / disable (via BIOS), Integrated hood sensor; <b>Certification:</b> Energy Star, EPEAT India registered, Windows 10, ISO 9001, 14001,20001, 27001; <b>System Weight:</b> Weight no more than 6 kg( without stand); <b>Information accessibility:</b> Brochure and specification sheets of the product to be available in public domain; <b>Support:</b> 3 Yrs Onsite warranty from OEM; <b>Warranty:</b> One year On-site.</p> <p>(ii) New Monitor from reputed manufacturer with following specifications: (1) 20 inch or above, HD+, Anti-Glare Non-Touch Display, Resolution - 1600×900 or above , Minimum viewing angle 170 deg(H) &amp; 160 deg(V) or better, Contrast ratio – 1000:1 or higher, Brightness – 250 nits or higher;</p>
11.	Furniture	<p>(i) New Chairs (30) (ii) New Working Table (4) (iii) New Multi stair rack to keep different (4) instruments. (ii) New Almirah (2) (Make: Any reputed manufacturer for all these items)</p>
12.	TV/VCR/Sound system/Public Address system, Digital Camera, CCTV etc	<p>(i) SKYPE installation (1) (ii) Sound system for Gallery-1 (1) (Make: Any reputed manufacturer for all these items)</p>
13	Autoclave for Hydrothermal Synthesis etc.	<p>Reputed and well established Manufacturer make with following specifications:</p> <ul style="list-style-type: none"> <li>• Volume: 200ml.</li> <li>• Max working pressure: 3Mpa.</li> <li>• Max temperature: ~ 250°C.</li> <li>• Made of standard stainless steel 304 or SS 316 with high quality PTFE chamber.</li> </ul>
14	Incubator	<p>Reputed and well established Manufacturer make with following specifications:</p> <ul style="list-style-type: none"> <li>• Temperature Range : 2-100 °C.</li> <li>• Capacity : ~ 22 liters.</li> <li>• Display Type : LED.</li> </ul>
15	Microwave Oven	<p>Reputed and well established Manufacturer make with following specifications:</p> <ul style="list-style-type: none"> <li>• Microwave Oven with Convection and Grill.</li> <li>• Capacity: 28 L.</li> <li>• Control : Tact Dial Control Type.</li> <li>• Combines an interior fan to evenly distribute heat with powerful down streaming hot air.</li> <li>• Ceramic base plate</li> </ul>
16	Mortar & Pestle	<p>Make: <b>Agate</b> with following specifications:</p> <ul style="list-style-type: none"> <li>• Outer Diameter ~12 cm,</li> <li>• Inner Diameter ~ 8 cm.</li> </ul>
17	Bath Sonicator	Make: <b>TELSONIC</b>
18	Magnetic Stirrers with uniform heating capability for round bottom flask	<p>Make: <b>REMI</b> with following specifications:</p> <ul style="list-style-type: none"> <li>• Type of Product : Rotamantles</li> <li>• Stirring Quantity : 1000 ml. or 2000 ml.</li> </ul>

		<ul style="list-style-type: none"> <li>• Speed Range : 100 to 1200 rpm.</li> <li>• Stirring Paddle (PTFE coated) : Q-19 (9 x 25 mm) or Q-19A (9 x 35 mm)</li> <li>• Heating power (W) : 300 or 400</li> <li>• Dimensions (WxDxH) (mm) : 210 x 210 x 205 mm or 260 x 260 x 240 mm</li> <li>• Temperature Range : ~ 30 to 250 °C.</li> </ul>
19	Mechanical Stirrers	<p>Make: <b>REMI</b> with following specifications:</p> <ul style="list-style-type: none"> <li>• Digital Speed Indicator.</li> <li>• Permitting height adjustment.</li> <li>• Type of Product : Direct Drive Stirrer.</li> <li>• Stirling Shaft Dia x Length(mm) : 8x50</li> <li>• Stirring Fluid : Water/Light Oil</li> <li>• Stirring Capacity (Ltrs.) : 10 LTRS.</li> <li>• Impeller : Axial Turbine.</li> <li>• Motor : PMDC</li> </ul>

*It must be noted that all the works mentioned above may not be done or the purchase of new items may not be fulfilled if necessary fund is not available. Vendors are requested to inspect to understand the details of requirement/repair/maintenance etc before sending quotation for all the enlisted items.*

**TERMS and CONDITIONS:**

- Complete technical specification for each of the items must be enclosed
- The quotations must be strictly according to the specifications mentioned above.
- All Taxes and other charges (if any) must be mentioned clearly.
- Payment will be made only after the successful installation of the items.
- A vendor may submit quotation for a single item or for more than one items. VAT registration, IT clearance certificates and credentials for last two years must be submitted along with the quotation.
- The quotations must be submitted to:**  
**Head of The Department**  
**Department of Physics**  
**The University of Burdwan, Golapbag, Burdwan 713 104**
- The last date for submission of the quotation is 16.02.2018, 05:00 pm.**
- The University of Burdwan reserves the right to cancel a part of or the whole tender without showing any reason.**

Udit Chatterjee  
Head of the Department