

## DEPARTMENT OF PHYSICS, THE UNIVERSITY OF BURDWAN

**No. PHYS/2018-19/PUR/01 dated 04/07/2018**

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 2018-19.

**[A] Vendors are requested to inspect the following AC and refrigerator machines for maintenance and necessary repairing.**

Laboratory wise distribution of AC machines, Refrigerators and their details are given below.

Laboratory/Seminar/ Sitting etc. rooms	Contact	No. of AC Machines	Nature of work for inspection
Seminar	Head of the Department	04	Service and maintenance
Computer Lab-1	Head of the Department	03	Service and maintenance
Advanced Practical Labs	Head of the Department	02	Service and maintenance
Student Lab (Dark room)	Head of the Department	01	Service and maintenance
HOD's Office Room	Head of the Department	01(Refrigerator)	Service and maintenance
Room No. P217	Head of the Department	01	Service and maintenance
CAS Lab	Prof. P.K. Chakrabarti	03	Service and maintenance
Electronics Lab	Dr. J. Chakravorty	05	Service and maintenance
Solid State Lab	Prof. P.K. Chakrabarti	05	Service and maintenance
Solid State Lab	Prof. P.K. Chakrabarti	01(Refrigerator)	Service and maintenance
Materials Science Lab	Prof. S.K. Pradhan	01	Service and maintenance
Materials Science Lab	Prof P Mitra	01	Service and maintenance
Laser Lab	Prof S Das	02	Service and maintenance
Laser Lab	Prof. U. Chatterjee	04	Service and maintenance
Nuclear Lab	Dr. A. Dutta	01	Service and maintenance

**[B] Vendors are requested to inspect the following instruments for maintenance and necessary repairing.**

SI No	Items and Contact	Qty
01	Repair and maintenance by original equipment manufacturer (OEM) or by authorized dealer of OEM for Dye laser [One of the two Dye circulators of our Dye laser (Sirah, Germany; Model CSTR-D-532 single cell Cobra stretch with double-grating resonator and CSTR-Amp) (Prof. U. Chatterjee)	01
02	Repair and maintenance by original equipment manufacturer (OEM) or by authorized dealer of OEM for the remote control of a Nd:YAG laser (Spectra Physics, USA; Model: DCR-11) (Prof. U. Chatterjee)	01
03	Repairing of magnetic susceptibility measuring system (Prof P K Chakrabarti)	01
04	Repair and maintenance by original equipment manufacturer (OEM) or by authorized dealer of OEM FTIR (Perkin Elmer; Model: Frontier MIR FIR; SI No.	01

	99851) (Head of the Department)	
05	Repair and Maintenance by original equipment manufacturer (OEM) or by authorized dealer of OEM for 10KVA online UPS (Powerone make) used for X-Ray diffractometer . (Head of the Department)	01
06	Neon Discharge Tube with power supply for Zeeman Effect experiment. (Dr A Chakraborti)	02
07	Repair of vacuum tube furnace (max temp 1400C)	01
08	Repair of Ultrasonic Vibrator (Prof. S.K. Pradhan)	01
09	Repair of Anamed make Electronic Balance (Prof. S.K. Pradhan)	01

**[C] Vendors are requested to inspect the following computers and accessories for maintenance and necessary repairing.**

SI No	Items and contact	Qty
01	Laser Printer [HP LASERJET 1020] (Dr. A. Mondal)	01
02	Laser Printer [HP DeskJET F4488] ( Prof. B. Ghosh)	01
03	Computer [Desktop] (Prof. S. K. Pradhan)	01
04	Computer [Desktop] (Dr. J. Chakraborti)	01
05	Laser Printer [HP LASERJET 1020] (Prof. S. Mukhopadhyay)	01
06	UPS Battery (APC 600 VA) (Prof. S.K. Pradhan)	01
07	UPS Battery (APC 1100 VA) (Prof. S.K. Pradhan)	01
08	UPSs (One APC Back-UPS, One Zebronics UPS Model No. ZEB-U333, One Tech-Com Power Master UPS Model No. SSD-UPS-600) (Professor S Mukhopadhyay)	03
09	CPU and Monitor ) (Professor S Mukhopadhyay)	02+01

**[D] Vendors are requested to quote the following computer software and peripherals.**

SI No	Items	Qty
01	Laser jet Printer (Black and White Print, Print speed: 14 ppm or higher; Print Quality: 600x600 dpi minimum; Minimum 1 Hi-Speed USB 2.0 port; Compatible with Windows 8.1 (32-bit and 64-bit), Windows 8 (32-bit and 64-bit), Windows 7 (32-bit and 64-bit), Windows Vista (32-bit and 64-bit), Windows XP (32-bit) (SP2 or higher); Supported Paper Size: A4, Legal etc Warranty: Minimum 1 year on-site	06

**[E] Vendors are requested to quote the following items.**

SI No	Items	Qty
01	He-Ne Laser (2 mW and 1 mW) with power supply	02+03
02	SF10 Glass (Cylindrical, diameter 5 mm, length 7 cm) For Faraday Effect experiment	03
03	(i) Digital Photocopier Machine with Speed 35 cpm Minimum and (ii) Digital Photocopier Machine with Speed 65 cpm Minimum. (In both cases process speed	01 01

	600 MHz; Resolution 600 dpi; Zoom 50 to 200%; Multiple Copies 1-99, Memory 2GB; Hard Disc Drive 100; Warm up time: Max 30 sec; Life of machine: 1000000/- Copies; Warranty: Minimum 1 year on-site.	
04	Analogue Oscilloscope for ESR and NMR setup and electronics lab	04
05	Temperature oven (air cooled). Temp range 20 to 200°C with regulation of 1°C, Temperature stability $\pm 0.5^\circ\text{C}$ , with controller, temperature sensor and read out. Oven size: 40x40x30 mm <sup>3</sup> with a opening having dimension 10x10 mm <sup>2</sup> throughout the oven at the center and with the provision that top can be opened and closed to take out and insert sample inside.	01
06	Electric Furnace (1000°C) (Heating element: SiC)	01
07	Function Generator	05
08	0.5 and/or 1.0 W LED's (Blue, Green and Red each) with Power Supply.	06 (2 Blue, 2 Green and 2 Red LEDS)
09	GM tube [specifications: End window GM detector, suitable for beta and gamma counting; Operating voltage range 450-600 V; Gas filled He + HaI; Detector should have a very wide plateau length with plateau slope better than 6% per 100V. Detector to be supplied in a cylindrical PVC enclosure (25 D X 77 H mm) with MHV socket arrangement for applying HV bias voltage. Tube dimensions: maximum overall length 2.125 inches.	02
10	Stand for GM detector [specifications - designed to hold PVC enclosed End Window G.M. tube. Stand should be housed inside the lead shielding if required. It should have both sample and absorber trays. Sample tray should hold planchets or disc type radioactive standard source (Beta or Gamma). Aluminium absorber discs can be interposed between the source and the detector. Captive screw holds the detector PVC tube to any height. To increase the distance between end window & source one could lift the PVC tube further up which can be held by captive screw.]	01
11	Nuclear Counter [specification: microcontroller based nuclear detector; coaxial cable with UHF connector connects GM tube; should store 1000 readings in non-volatile memory; Dimensions 200 Lx220 Dx70 H mm]	01
12	Partially silvered mirror [Diameter approx. 2 cm; used for Fabry Perot Interferometer]	04
13	Fabry Perot Interferometer	01
14	TEM Grid (300/400 mesh)	4 boxes (50 pieces each)

**[F] Vendors are requested to quote the following Public Address Systems and peripherals.**

SI No	Items	Qty
01	Portable sound system for class room	01

**[G] Vendors are requested to quote the following Computer Stationaries, Consumables and Antivirus:**

SI No	Items	Qty
01	Antivirus software shall have a 3 – in – 1 protection of Antivirus, Anti spy ware and Firewall. This will continuously protect the PC from viruses, spy wares, and hackers. Antivirus software is protection for PC. Antivirus software shall be upgraded regularly.	01 (20 user system)

**[H] Vendors are requested to quote the following Computer Stationaries, Consumables and Antivirus:**

SI No	Items	Qty
01	Software for highly advanced mathematical processing that is capable of creation of user interfaces, interfacing with programs written in other languages that includes C, C++, C#, Java, Fortran etc, matrix manipulations, plotting of functions and data, implementation of algorithms as well as graphical multi-domain simulation and model-based design for dynamic and embedded systems.	01 (multiuser)


**[I] Vendors are requested to quote the following LCD Projector:**

SI No	Items	Qty
01	Standard LCD Projector for class room and/or conference presentation.	01

*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. Quantity (Qty) numbers mentioned are only approximate and may increase or decrease subject to the availability of grants. 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:**

1. Complete technical specification for each of the items must be enclosed. The quotations must be strictly according to the specifications mentioned above.
2. All taxes and other charges (if any) must be mentioned clearly.
3. Payment will be made only after successful installation of the items.
4. A vendor may submit quotation for a single item or for more than one item. GST documents, IT clearance Certificates, Credentials for last two years need to be submitted along with quotation as and where applicable.
5. The quotations must be submitted to:  
Head of the Department  
Department of Physics  
The University of Burdwan, Golapbag, Burdwan-713104
- 6. The last date and time of submission of the quotation is 23.7.2018, 05:00 p.m.**
7. 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)