

6.12.2023

## NOTICE INVITING QUOTATIONS

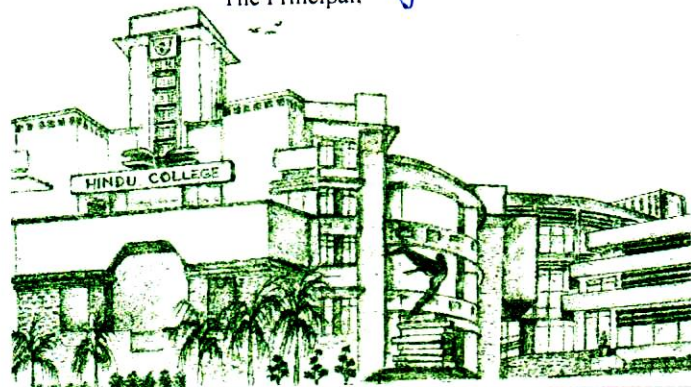
Hindu College, University of Delhi, Delhi invites sealed quotations from the eligible registered Companies / Manufacturers / authorized dealer for the purchase of following equipment under the DBT star college Grant. The sealed quotations (Technical bid and Financial bid sealed in separate envelope) should reach the undersigned on or before 19-12-2023 at 5:00 PM by registered post/courier or by hand addressed to "The Principal, Hindu College, University of Delhi, Delhi-110007"

Further, the sealed quotations should clearly mention on the top of the envelope "Quotations for the Purchase of Equipment under DBT STAR COLLEGE SCHEME" and Quotations should be on the letter head of the company with reference no. and date.

S. No	Name of the product/item	Quantity
1.	Magnetic Stirrer with hot plate	08
2.	Micro weighing Balance	01
3.	pH Meter	06
4.	Digital Conductivity Meter	07
5.	Digital Colorimeter	08
6.	Hot Air Oven	01
7.	Spectrophotometer Visible Range	01
8.	Surface Plasmon Resonance	01
9.	Transformer Trainer	01
10.	Black Body radiation setup	01
11.	Workstation	02
12.	Sonicator (Sonicator bath)	01
13.	Vacuum pump	05
14.	Vertical Gel Electrophoresis	04
15.	Microscope	01
16.	Biosafety cabinet	01
17.	Distilled Water Unit	01
18.	Horizontal Electrophoresis	01
19.	Digital water bath shaker	01
20.	Laminar Flow	01
21.	Leaf area meter	01
22.	B.O.D. Incubator	04
23.	Vortex Mixers	01
24.	Mechanical shakers	01
25.	Elisa Reader	01

Prof Anju Srivastava  
The Principal.

Prof Reena Jain  
DBT Star College Coordinator,



**Hindu College, University of Delhi, Delhi-110007**  
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**HINDU COLLEGE,**  
**UNIVERSITY OF DELHI, DELHI**

**PROFORMA QUOTATION FOR PURCHASE OF INSTRUMENTS/ CHEMICAL**

1. Name of the organization with Particulars of proprietor -----  
-----
2. Whether registered or not if yes, furnish registration number -----  
(copy of the same to be enclosed) -----
3. Address, Landline number and Mobile number -----  
-----
4. Experience in Field -----  
  
For the past 05 years (give details and attach certificates, if any) -----
5. In case of OEM/Sole supplier/Authorized Vendor, certificate to this effect to enclosed -----  
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## **Description of the product/items**

### **Item No.1: Magnetic Stirrer with hot plate and Number of Units: 08**

#### **Technical Specifications:**

Max. stirring capacity (Water): 2 L Liters, Heating capacity 300 W, Temperature of hot plate 70°C, digital temperature display and speed range 500 rpm. Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like Borosil, Remi etc.

### **Item No.2: Micro weighing Balance and Number of Units: 01**

#### **Technical Specifications:**

Readability (g): 0.0001, repeatability (+/- g): 0.0001 and typical stabilization time is 2 second, Minimum sample weight: 0.12 g and Maximum weighing capacity: 220 g along with Colored touch screen. Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like Sartorius, Mettler Toledo etc.

### **Item No.3: pH Meter and Number of Units: 06**

#### **Technical Specifications:**

Graphical display having auto temperature compensation, range 0.00 to 14.00 pH, resolution 0.1, auto buffer recognition with data storage facility up to 1000 samples. Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like Labtronics, Mettler Toledo, EU Tech etc.

### **Item No.4: Digital Conductivity Meter and Number of Units: 07**

#### **Technical Specifications:**

Auto ranging, digit LED display with facility for temperature compensation, digital cell constant adjustment along with conductivity cell. Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like Labtronics, Mettler Toledo, EU Tech etc.

### **Item No.5: Digital Colorimeter and Number of Units: 08**

#### **Technical Specifications:**

- Digital display
- Display read out Abs. (OD): 0.00 to 1.99.
- Wavelength Range 400 to 700 nm.
- Filters and glass filters.
- Resolution 0.01Abs.

- Nine (09) digital filters with automatic zero setting with finger touch.

Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like Labtronics, Mettler Toledo, EU Tech etc.

#### **Item No.6: Hot Air Oven and Number of Units: 01**

##### **Technical Specifications**

Size: (18"x18"x18") (455x455x455 mm) Double walled, inside of non-rustable SS304, outside of MS duly powder coated. 3.5" gap between the walls is filled with blanket of high efficiency mineral wool. The door is fitted with chromium plated brass hinges with a spring and roller type latch. Three heating elements made from the best quality nickel chromium wire are used on refractory supports. Temperature is controlled by Digital Temp. Indicator cum Controller upto 250 °C with an accuracy of 2-3° C. Air circulation fan for uniformity of Temperature. Fitted with Air ventilators on the top & sides of the Oven, two pilot lamps, perforated SS shelves, 3 core wire and plug for use on 220 Volts A/C. Built in Back up controller and circuit breaker. Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like Khera Instruments, Remi, Ambassador etc.

#### **Item No.7: Spectrophotometer Visible range and Number of Units: 01**

##### **Technical Specifications:**

Single Beam, Display : LCD, Wavelength Range : 340 to 1000 nm Spectral Bandwidth : 2 nm, Wave Length Accuracy :  $\pm 3$  nm Repeatability :  $\pm 2$  nm Resolution : 1 nm Out Put Range: Abs. (OD) : 0.097-to 2.000A, %T: 0-100, Conc. : 0 – 1999. Resolution: %T : 0.1 %T, Abs : 0 to 0.001, Conc. : 1, Direct Concentration measurement :Yes Available Monochromator : 600 Lines / mm, Lamp : Tungsten–Halogen Lamp 12V/20W Detector : Silicon Photodiode Readability :  $\pm 0.3\%$  T, Stray Light:  $< 0.3\%$  T Stability :  $\pm 0.002$  A/h (At 500 nm, after warming up) Standard Cell Holder : 4-position 10 mm cell changer Interface to PC : U.S.B. / RS-232 window operated Software Sample Holder : 4 Position adjustable sample holder Power Supply : 230 V  $\pm 10\%$  AC, 50 Hz.

Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like Thermo Fisher Scientific, Labtronics, EU Tech etc.

#### **Item No.8: Surface Plasmon Resonance and Number of Units: 01**

##### **Technical Specifications:**

- Complete setup for Surface plasma resonance with Theta vs two theta stage,
- S-polarized laser ,
- Gold coated high RI prism and
- Sensor with output measuring unit

#### **Item No.9: Transformer Trainer and Number of Units: 01**

##### **Technical Specifications:**

- Transformer Three phase 2 KVA, 400/230V, 50 Hz, air cooled copper double wound tapping at 50% on

- primary & secondary side housed in m.s. box with rubber footings.
- All connections of primary & secondary winding with tapping shell be brought over to insulating
- Bakelite sheet fixed on the top of transformer.
- The transformer can be CORE type.
- Ammeter 0-2A, 0-10A,
- Voltmeter 0-300V, 0-600V, educational type insulating terminal, Indicating Lights, TP MCB, LPF wattmeter 2.5/5 Amp 150/300/600 V
- Balanced and unbalanced loads. Variac.

Experiments that can be performed:

- Study of Three phase low voltage power supply
- Study of Three phase star connection
- Study of Three phase delta connection
- Study of Three phase circuits with balanced load
- Study of Three phase circuits with unbalanced load
- Study of Three phase power measurement

#### **Item No.10: Black Body radiation Set-up and Number of Units: 01**

##### **Technical Specifications:**

- Bromine tungsten Light source with adjustable voltage regulator from 2 to 12 V.
- Filters: Spectral Range 1st: 800 ~ 1000 nm, 2nd: 1000 ~ 1600 nm, 3rd: 1600 ~ 2500 nm, slit width adjustable 0 ~ 2.5 mm,
- Mirror Focal length = 302.5 mm.
- Lead sulfide (PbS) detector, receiver unit, optical system, and Grating: 300 lines/mm, blazed wavelength = 1400 nm

Experiments that can be performed

1. Verify the Planck's law of radiation
2. Verify the Stefan-Boltzmann Law
3. Verify the Wien's Displacement Law
4. Study the relationship of radiation intensity between a blackbody and a non-blackbody emitter
5. Learn how to measure the radiation energy curve of a non-blackbody emitter

#### **Item No.11: Workstation and Number of Units: 01**

##### **Technical Specifications:**

- Workstation with DLDI0294 CPU Intel Core I7- 13700 13<sup>th</sup> Generation,
- RAM 32 GB, HDD 1TB (minimum)
- M.2 PCIE NVME SSD,
- WINDOWS 11 + MS OFFICE 21,
- Integrated keyboard & mouse,
- MCAFEE Antivirus 15M, with minimum 1 year warranty.

**Item No.12: Sonicator Bath and Number of Units: 01**

**Technical Specifications:**

- Tank Capacity:4.5 Litres, Tank size 300 x 150 x 100mm,
- Ultrasonic Power: 180W,
- Heating Power: 200W, Time Setting:1-30 mins,
- Temperature Setting: 0-80°C,
- Display: LED and Material SS304

**Ultrasonic Bath/ Sonicator with temperature controller and Number of Units: 01**

**Technical Specifications:**

Tank Capacity:6.5 Litre, Ultrasonic Power:150W, Heating Power:300W, Time Setting:1-99min, Temperature Setting:0-80°C, Frequency:40KHz. Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like Labtronics, Mettler Toledo, EU Tech etc.

**Item No.13: Vacuum Pump and Number of Units: 01**

**Technical Specifications:**

Stage: Double; Free Air Displacement : 350 to 1200 ltrs./min.; Absolute Pressure : 0.005 mm Hg at closed suction; Power required : 1 to 2 HP, 1440 rpm, 3 Phase. Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like PROMIVAC, etc.

**Item No.14: Vertical Gel Electrophoresis and Number of Units: 05**

**Technical Specifications:**

Model: Dual Midi Gel System, Gel Size: 16 x 14 cms. x 2 gels, Principal Material: Acrylic, Upper Buffer Tank Dimension : 140 x 70 x 20 mm, Lower Buffer Tank Dimension : 200 x 160 x 190 mm, No. of Combs : 13 Well Teflon Comb 0.5 mm-2 Nos., 13 Well Teflon Comb 1mm 2 Nos., Teflon Spacers : 0.5 mm, Teflon Spacers 4 Nos., 1 mm Teflon Spacers 4 Nos., Connecting Cord : red and black (1 each). No. of Platinum. Electrodes : red and black (1 each). Glass plate: Notched and Rectangular 2 sets. Gasket: Fixed

**Item No.15: Microscope and Number of Units: 04**

**Technical Specifications:**

- ☐ Binocular Laboratory Microscope for UG students
- ☐ Siedentop observation head for individual choice of adjustment. Siedentop inclined 30°, Rotatable 360°
- ☐ Eye piece of 5X & 10X, Objective 5X,10X&45X & 100X oil immersion.
- ☐ High performance aspheric lenses in the abbe condenser & light relay system for bright & uniform illumination

**Item No.16: Biosafety cabinet and Number of Units: 01**

**Technical Specifications:**

- CLASS – 100/II Type A2 (70%Recirculation, 30%exhaust).
- The initial filtration should be through high throughput pre-filters and secondary filtration through H.E.P.A. filters which have a high efficiency as high as 99.99% and 99.97% with hot DOP for all articles = 0.3 microns.
- Motor blower assembly: Statically and dynamically balanced blower require a heavy duty motor with noise level: less than 65 decibels.
- Illumination: LED.
- Working bench: stainless steel table Top with perforation for recirculation and exhaust.
- Door: Should be made of polycarbonate and 100% U.V Opaque.

**Item No.17: Distilled Water Unit and Number of Units: 01**

**Technical Specifications:**

- All Glass Distillation Unit,
- Type: Vertical Double Distillation with auto cutoff.
- Material: Glass assembly with wall mounted stand.
- Heater: Quartz and
- Capacity: Output Capacity 1.5 Ltr/hour

**Item No.18: Horizontal Electrophoresis and Number of Units: 01**

**Technical Specifications:**

Inner tank dimension: 215 x 141 x 55 mm,  
Trays: 130 x 130 mm, 130 x 65 mm – 2 Nos. 65 x 60 mm – 4 Nos.,  
Combs with sample wells: 13 Well Analytical Acrylic Comb, 1.5 mm thick.  
8 Well Analytical Acrylic Comb 1.5 mm thick x 4 Nos.,  
3 Well Preparative Acrylic Comb 3 mm thick x 1 No.  
No. of gel casting tray: 1 universal.  
Connecting Cord: red and black (1 each).  
No. of Platinum electrodes: red and black (1 each) and  
Lid: 1 No.

**Item No.19: Digital Water Bath Shaker and Number of Units: 01**

**Technical Specifications:**

Capacity: 15 liters, Temperature Range: Ambient +2°C to 100°C, Motion: Orbital 30-150 rpm, shaking at variable speed. Digital Temperature control, Digital RPM display and Test tube holding mash/ Flask

**Item No.20: Laminar Flow and Number of Units: 01**

**Technical Specifications:**

Laminar Air Flows based on a principle of double filtration system, The initial filtration should be through valuable pre-filters and secondary filtration through H.E.P.A. Filters which have a high efficiency as high as 99.99% and 99.97% . With hot DOP for all articles = 0.3 microns. Motor blower assembly :Statically and dynamically balanced motor blower assembly. **Noise Level:** less than 65 decibel. **ILLUMINATION:** LED. **WORKING BENCH:** stainless steel table Top. **Door:** Folding Made of Perspex. **Other accessories :** Static Pressure Manometer ,built in U.V. , Cock for Gas Air or Vacuum Lines etc. Panel: fitted with switch for main, u.v. & illumination supplied complete with cord & plug.

**Item No.21: Leaf area meter and Number of Units: 01**

**Technical Specifications:**

- High-resolution laser scanner, data logger, and display should be all enclosed in a single, hand-held palette lightweight unit.
- With pc software
- Measurements to be precise/ accurate
- Should be durable and lightweight
- Should be ideal for field use
- Should be durable and portable; ideal for field use
- Multi leaf measuring system
- Fast, non-destructive measurements
- Measurements to be precise/ accurate
- Should be able to store over 64gb data points
- Graphic mode
- Battery backup

**Item No.22: BOD incubator and Number of Units: 01**

**Technical Specifications:**

- Capacity: 180 L
- It should be double-walled with inner S.S. 304 Outer M.S. Duly Powder Coated.
- Full view inner glass door.
- Lock & Key arrangement,
- Temp. range 5°C to 60°C.
- LED light illumination system inside the chamber.

- Supplied by wire mesh trays for uniform temp.
- Should be provided with cord and plug to work on 220 Volts A.C.
- Photoperiod timer.

**Item No.23: Vortex Mixers and Number of Units: 04**

Vortex Mixer with brushless motor & suitable for Interchangeable mixing Heads. Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like Remi, etc.

**Item No.24: Mechanical shakers/Water bath shaker and Number of Units: 01**

*Technical Specifications:*

Ambient +2°C to 100°C, Orbital 20-400 rpm, Capacity of 10 liters of chamber volume, shaking at variable speed, Temperature control unit, test tube holding mash. Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like Impact, etc.

**Item No.25: Elisa Reader, microplate reader and Number of Units: 01**

*Technical Specifications:*

- Absorbance range: 0.000-4.00 Abs
- Resolution: 0.001 Abs (display)
- Accuracy:  $\pm 0.1\%$  or  $\pm 0.005$  Abs
- Type of microplate: Standard with 96-well and strip
- Wavelength: 405, 450, 492, 630 nm, additional filters (400-700nm)
- Optic System: 8 Channel optic fiber system
- Light source: halogen lamp
- Wavelength accuracy:  $\pm 1$  nm
- Bandwidth:  $< 8$  nm
- Reading speed: 5 second for 96 well plate (single wavelength), multi-assay enabling 12 assays on one plate.
- Memory: More than 100 programs, up to 100,000 test results
- Interface: RS-232, USB, SD card interface
- Display: 6" LCD (with touch screen function)
- Easy windows operation system with touch screen or mouse, large LCD display

Equipment should be from one of the leading manufacturers having experience in making these kinds of instruments like Thermo Fisher Scientific, Labtronics, Bangalore genei etc.

### **General Terms and Conditions:-**

1. The firms having credentials of supplying these instruments/chemicals will be eligible for the same. The firms should have valid PAN / Goods and Services Tax registration number (copies are to be enclosed). Performance certificates from reputed institutes like IIT, central universities etc.
2. The Firms which have already completed at least three similar work of value Rs 15 lakhs and above in each contract in Govt., Semi Govt. Govt undertaking and Govt Autonomous Organizations / Private Institutions/University/College will be eligible.
3. The firm must provide experience of last five years, at least for similar work.
4. An undertaking that the agency hasn't been blacklisted by Central/ State/ U.T. Government and there has been no conviction against any government department/university.
5. Undertaking that no near relative is employed in the college/Institute. If found, at the later stage the tender may be cancelled, without notice.
6. Financial standing through latest I.T.R. , Annual report (balance sheet and profit and loss Account) of last 3 years ( duly signed and stamped by the charter accountant )
7. Acceptance of other terms and condition as worked out at the time of signing or work order.
8. Price/Financial bid to be item wise.

### **Submission of Quotations /Bid:**

- a) Each bidder should submit sealed quotations (in two separate part i.e. Technical (Part -1 and Financial (Part -2) in separate envelopes.
- b) The following documents will form the technical part of the bid (Photo copy duly self-attested to be compulsorily enclosed)
  1. Establishment/Firm Registration certificate.
  2. Current Return of Income tax.
  3. Goods and Services Tax registration
  4. Commercial Tax Clearance Certificate.
  5. Certification of authorization of the company.
  6. Details of work experience.
- c) The financial Bid (Part-2) will only be opened if the bidder's Technical bid is found in order. The financial bid shall consist of only Rate/Price on the company's firm letter pad. All the column and requisite information must be filled in the proper format. Bidder must quote the item wise price inclusive of all taxes.

**Validity Quotation:**

Quotation shall remain valid for a period only for 30 days after the dead line date specified for submission.

**Evaluation of Quotations:**

The purchaser will evaluate and compare quotations determined to be substantially responsive i.e.:

- a. Are properly signed with stamped and
- b. Confirm to terms, conditions, specifications and qualifications conditions.

**Award of Contract/Work Order:**

The purchaser will award the contract/ work order to the bidder whose quotations has been determined to be substantially responsive and who has offered the lowest evaluated quoted price.

1. Not with-standing the above, the purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of the contract without any notice whatsoever.
2. The bidder whose bid is accepted will be notified of the award of contract by the purchaser. The terms of the accepted offer shall be incorporated in supply order. The validity period may be extended by the purchaser by another 15 day in exceptional cases only with prior permission with the purchaser.

**Other Terms and Conditions:**

- a) Hindu college reserves the right to Proponed/Postponed/Cancelled the bid, the bidder will have to abide with the decision.
- b) Payment shall be made after the supply and submission of bills which will be subject to satisfactory performance (certificate by the committee constituted for the purpose). Organizing Committee will certify the quality and quantity of the items supplied/ works done as per specifications and recommend accordingly the extent of payment.
- c) No preference will be given to any bidder of class of bidders, either for the price or for other terms and conditions.
- d) Quotation may be submitted on printed letter head of the bidder in the prescribed format supplied with IFQ.
- e) Successful bidder will have to enter into agreement with Hindu College for timely execution of the purchase order
- f) No payment will be made for any damage of goods supplied.
- g) Liquidated damages provisions for damages shall be included in conditions of the contract when delays in delivery of goods, completion of work or failure of the goods or works to meet performance

requirements would result in extra cost or loss of revenue or loss of other benefits to the implementing agency.

- h) **NO ADVANCE PAYMENT:-**No advance payment shall be made on any account to the vendor. All payments will be processed on successful completion of the work, subject to satisfactory supply of goods and services, deficiency in services, supply of goods will be recovered from the amount payable to the vendor.
- i) **DELIVERY PERIOD:** Instruments/chemicals should be supplied within a period of four weeks' time from the date of supply order, failing which a penalty clause of 1.0 % per week of total order shall be imposed/ recovered.

**Hindu COLLEGE**

**Performa for Technical Bid (Part 1)**

<b>S.No.</b>	<b>Particulars</b>	<b>To be filled by the tenderer</b>
1.	Name of the agency	
2.	Date of establishment of the agency	
3.	Detailed office address of the agency with office Telephone number, and mobile number and name of the contact person	
4.	Whether the firm Is registered under company act, partnership or proprietorship.(copies to be enclosed)	
5.	PAN/TAN /Number copy enclosed.	
6.	GST Registration Number (Copy to be enclosed).	
7.	Attested copy of return of last month/quarter as the case may be submitted.	
8.	Attested copies of IT returns of last three years.	
9.	Whether firm is blacklisted by any government department or any criminal case is registered against the firm or its owners/partners anywhere in India.	
10.	Experience in dealing with Govt. Departments/University/ PSU/CABs attaches copies of supply orders placed on the agency.	
11.	Whether bid document of all pages of the terms and conditions duly signed, in token of acceptance of the same is attached.	
12.	Whether agency profile is attached?	

**FINANCIAL BIDS (Part 2):**

**To be submitted in tabular form, item wise, cost wise in Indian rupee.**

**No Installation Cost/ Hidden Cost.**

Place:

Signature of the Bidder

Date:

Company/ Firms's Seal