

## **TENDER DOCUMENTS 2018-19**



**CHEMICALS/GLASSWARE/EQUIPMENT**  
**DEPARTMENT OF CHEMISTRY**  
*(NRPU Project No.5719)*

**HAZARA UNIVERSITY, MANSEHRA**



# HAZARA UNIVERSITY, MANSEHRA

## OFFICE OF THE PROCUREMENT OFFICER

Phone No. 0997-414178, Fax No. 0997-414111

### **1. GENERAL**

- i. Any bid without 2% earnest money of the total amount will not be entertained.
- ii. Conditional/incomplete/overwritten bid will not be entertained.
- iii. The prices quoted must be valid for at least 90 days from the date of tender opening for the evaluation of tender. The quoted prices once approved will remain valid for the whole financial year i.e upto June 30, 2019.
- iv. The successful bidders will be required to supply the items up-to the end of financial year 2018/2019.
- v. Telephonic/telexed/faxed/telegraphic quotations will not be entertained.
- vi. The bid must accompany the following:
  - a. Firm Registration Certificate with the Federal/Provincial Government.
  - b. National Tax Number
  - c. Sales Tax Registration Certificate Number.
  - d. Certificate to the effect that they have never been blacklisted by any Government/ Semi Government Organization.
  - e. Dealership Certificate from original manufacturer for Pakistan (where required)
  - f. All bids must be properly sealed and delivered through mail.
  - g. The provision of quoted rate in soft form is also required.

### **2. SCOPE OF SUPPLY**

The bidder shall supply the items according to the prescribed specifications. Any deviation will cause rejection of the supply order.

### **3. BID PRICE**

The bidder shall indicate in his offer, list of items with prescribed specifications, the unit price and total bid prices of the items. Taxes levied by the Government, if any, shall be recoverable from the bidder as per rules.

### **4. CURRENCY OF BID**

The Price should be quoted in FOR and C&F bases.

### **5. BID VALIDITY**

The bid should remain valid and open for acceptance of purchase for NFY 2018-19 from the date of opening of bids

## **6. PERFORMANCE GUARANTEE**

The winner of the bid shall submit a performance guarantee at the rate of 10% of the total bid amount in the form of draft/pay order/bank guarantee in favor of treasurer Hazara University, Mansehra.

## **7. BIDS PROPOSAL**

The bid should comprise a single package containing two separate envelopes. Each envelope should contain separately the financial proposal and technical proposal. The envelopes shall be marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold letters. Initially the technical proposal will be opened whereas the financial proposal will be retained in the custody without being opened.

The committee will evaluate the technical proposals. The Technical proposal not confirming to the requirements of the university will be rejected, the financial proposal of bids found technically nonresponsive will be returned un-opened to the respective bidders. Financial proposals of the technically responsive bids will be opened publicly at the time, date and venue which will be communicated well in time to the respective bidders.

The above stated standard evaluation criteria will be binding upon the bidders and will have no liability, on the University.

## **8. DEADLINE FOR SUBMISSION OF BIDS**

All bids must reach and be received by the University on or before Thursday, June 21, 2018 at 1330 hours. The bids will be opened at 1430 hours on the same day in the conference room, Hazara University in presence of the bidders or their authorized representatives, who wish to be present.

## **9. LATE BIDS**

Any bid received in the university after the prescribed deadline shall not be entertained.

## **10. UNIVERSITY'S RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS**

The University reserves the right to accept or reject any or all tenders fully or partially without assigning any reason whatsoever.

## **11. CANVASSING**

Unsolicited advice / clarifications and any personal approached at any stage of evaluations of bids are strictly prohibited and may lead to disqualification.

## **12. DELIVERY**

The bidders shall make delivery of the items within 45 days for local goods and 90 days for imported items from date of issuance of supply order. A penalty of 2% of the item price per day subject to the maximum of 10% may be charged after expiry of the delivery time till the supply of the items. The delivery of items, their installation, testing and functioning, shall be made at Hazara University Mansehra by the suppliers, at their own expense, and transportation arrangements.

## **13. MODE OF PAYMENT**

No advance payment will be made as per Government rules. 90% of gross bill payment will be made to the supplier after inspection of supplied items by a committee of experts constituted by the University after the successful and complete supply, installation and functioning of the items. The remaining 10% will be kept as performance guarantee where applicable for one year and will be released after one year from the date of satisfactory supply of items.

## **14. PRICE**

The price of items will be inclusive of transportation and all taxes etc. No separate payment will be made by the University on this account.

## **15. TAXES**

All Government taxes shall be deducted at source according to the government rules.

## **16. ARBITRATION**

The decision of the University in all relevant matters will be final and unchallengeable in any court of law anywhere.

### **SPECIAL CONDITIONS OF THE CONTRACT**

#### **1. Inspection of Equipments/materials**

All Equipments/Glassware shall be subject to inspection and shall be approved by Hazara University Purchase committee/Technical Committee before the same are fabricated or installed in position. The committee may reject such materials as are considered by him to be below standard specifications, size or quality. The Contractor shall provide all labour at his own expense for handling during inspection. Any materials rejected by the committee shall not be used and shall be removed from site by the Contractor.

## 2. Work to be opened for inspection.

All supply/works under or during the course of execution in pursuance of the Contractor, whether at site or at Contractor's workshop shall, all times, be opened for inspection and supervision of the Hazara University Purchase committee/Technical Committee at all times during the usual working hours, the contractor should either himself be present to receive the instructions or any responsible agent duly accredited in writing, present for this purpose. Instructions given to the Contractor's agent should be considered to have the same force as if these had been given to the Contractor himself.

## 3. Responsibility against damages

Before and up to the whole of the Supply/works are completed and have been finally handed over to the University and a proper completion certificate thereof obtained by the Contractor, the Contractor shall be responsible for all and any damage caused to the materials or installed works/equipments thorough accident, improper handling, transport or any other cause whatsoever and shall repair, remove or replace the same and compensate the University against all such losses.

## 4. Specifications

The work shall comply to the requirement/ specification laid down in the B.O.Q of the tender. Quality of each item should be supreme quality.

## 5. Laboratory Test

The Hazara University Purchase committee/Technical Committee has the power to order for Conducting Equipments/material quality assurance test which he deems necessary and cost of Such tests will be borne by the contractor. No claim in this regard will be entertained for Payment

S.#	Name of Equipment	Specifications	Qty	Total price
01	Differential Scanning Calorimeter (DSC)	<b>Specifications should be:</b> <ul style="list-style-type: none"><li>- The instrument must cover the temperature range ambient to 500°C (optional: 700°C).</li><li>- Cooling accessories must be optionally available</li><li>- An autonomous accessory (without external cooling fluid) for reaching -70°C</li><li>- Liquid nitrogen accessories (manual or automated)</li></ul>	01	

		<ul style="list-style-type: none"> <li>- The instrument must have heating rates from 0.1 to 50°C/min in 0.1°C/min increments (Optional: from 0.1 to 100°C/min in 0.1°C/min increments).</li> <li>- Gas panel features 2 inlets for gas flow (inert or reactive). Switching between the gases is made via a software controlled electro-valve. (OPTIONALLY: flow can be adjusted via a Mass Flow Controller).</li> <li>- Pressure vessel (OPTIONAL) Made of stainless steel: 1.4435 (AISI/SAE: 316 L, UNS: S 31603)</li> </ul> <p>DSC measurement requirements</p> <ul style="list-style-type: none"> <li>- The instrument must feature a plate shaped DSC sensor constructed from chromel-constantan (or FRS 6+/ceramic). Sensor must be user exchangeable and low cost (2 extra sensor must be included as spare parts). Sensor must fit in a low thermal inertia furnace so that time constant is small (1.8 to 3 second).</li> <li>- The instrument must have a digital resolution of 0.8µW (or 16.8 million points) with a noise level of 1.5 µW (isothermal at 200°C). Dynamic range must be at least from ±350 mW to ± 5000 mW</li> <li>- The instrument must offer aluminium and alumina crucibles as well as OPTIONAL Incoloy pressure tight crucibles for withstanding up to 500 bars at 600°C.</li> </ul> <p>Options requirements</p> <ul style="list-style-type: none"> <li>- The main unit (cooling accessory excluded) must be delivered with 3 years warranty</li> <li>-</li> </ul>		
		<ul style="list-style-type: none"> <li>- Instrument must be delivered with data acquisition and data processing software, which should allow processing of thermal analysis data originating from any brand of thermal analysers.</li> </ul> <p>Acquisition software features should include:</p> <ul style="list-style-type: none"> <li>- Program acquisition procedures (all experimental conditions and parameters) ;</li> <li>- Control one or more system via a single PC ;</li> <li>- Save experiment signals and monitor their progress in real time;</li> <li>- Change experimental conditions during an experiment.</li> </ul> <p>Processing software features should include:</p> <ul style="list-style-type: none"> <li>- Imports signal files from other equipment (mass spectrometers, FTIR, ...);</li> <li>- Powerful Baseline Calculation for the most precise integrations and calculations.</li> <li>- Data Presentation including shading, logo insertion and of multiple plot displays.</li> <li>- Peak deconvolution/separation for the separation of overlapping peaks and shoulders for optimal calculations and data presentations.</li> <li>- Direct Export of Curves in Word: with automatic resizing for optimum resolution and print reproduction.</li> <li>- Fast Cp Calculations</li> </ul>		

		<ul style="list-style-type: none"> <li>- Baseline Flattening</li> <li>- Easy exportation of raw or calculated data (xls, ascii, xml..) and graphical chart (png, gif, jpg, bmp..)</li> <li>- Various operations on curves including: Standard deviation Temperature correction, Mass variation, Tare, Glass transition, Temperature determination, Baseline and integration, Heat capacity, Baseline subtraction, Normed subtraction, Derivative, Cut signal, Interpolation, Natural logarithm, Inverse filtering, Slope correction, Regression tool, Drag point, Date spike removal...</li> </ul> <p>Make: Spain/UK/USA/Germany/France or Equivalent</p>		
02	Vacuum Line/Assembly	<p>Specifications should be:</p> <p>-Latest model with all accessories</p>	01	
03	Magnetic stirrer cum hot plate	<p>Specifications should be:</p> <p>High performance microprocessor Digital/Manual feedback control</p> <ul style="list-style-type: none"> <li>- Feed back control of the temp. on ceramic</li> <li>- Max. 380°C and <math>\pm 1^\circ\text{C}</math> control accuracy by optional PT sensor</li> <li>- Feed back control of speed &amp; Digital display</li> <li>- Included 99hr/59min digital timer</li> <li>- The set value storage function; temp. rpm and timer</li> <li>- Locking mode for experimental safety supported</li> </ul> <p>Top plate (WxL) 180x180 mm/ 300 x 300 mm  Heater Capacity 680W  Temp. Range Max. 380°C  Timer: Digital, 99hr/59min  Stirring Capacity up to 20L  Stirring Speed (rpm) 100-1800  Plate Material: Ceramic Coated Aluminum (Chemical/Acid Resistance)  Body Material: Powder Coated Aluminum  Control &amp; display M/processor feedback &amp; digital display  Electric Supply: 230V, 50Hz, 150W  Make: UK/USA/German/ Korea or Equivalent</p>	02	
04	Multi-position Analog Magnetic Hotplate Stirrer	<p>Features:</p> <ul style="list-style-type: none"> <li>- Electronic speed control for constant speed even during changes in load</li> <li>- All 10 positions are controlled simultaneously</li> <li>- High magnetic adhesion</li> <li>- Long life brushless motor</li> <li>- 2 to 3 YEAR WARRANTY</li> </ul> <p>Specifications:</p> <p>No. of Positions: Max 10 position  Temperature: Ambient to 120°C (Note: Liquid temperature 75-80°C)  Speed range: 0-1500 rpm  Speed display: Analog (OPTIONAL: Digital)  Max. dia./size of flasks: 3 to 4 inches (250 to 400 mL) if using all 10 positions. 4 to 6 inches (500 mL) if using 5 positions  Motor type: Brushless  Plate material: Stainless steel/silicone mat (Or ceramic coated Al with silicon mat)  Electric Supply: 230V, 50Hz, 150W  Make: UK/USA/German/ Korea or Equivalent</p>	01	
05	Rotary (Vane)	<p>Features</p>	01	

	Vacuum Pump	<ul style="list-style-type: none"> <li>- Wide range of free-air capacities to match specific applications</li> <li>- Portable direct-driven high vacuum pumps—ideal for freeze dryers, vacuum ovens, and concentrators</li> </ul>		
		<ul style="list-style-type: none"> <li>- Convenient inlet barb connection accepts two sets of tubing ID.</li> <li>- Gas ballast valve inhibits condensation of vapors—close for high-vacuum applications, open for applications - with moist vapors.</li> <li>- Isolation valve activates on power loss to prevent oil suckback and isolate vacuum chamber.</li> <li>- Time specific warning tag alerts you to change oil.</li> </ul> <p>Specifications:</p> <ul style="list-style-type: none"> <li>- Wetted Parts: Cast iron, stainless steel, aluminum, and fluoroelastomers</li> <li>- Free Air Capacity (CFM): 3.8</li> <li>- Free Air Capacity (LPM): 108</li> <li>- Max Vacuum (torr): <math>1 \times 10^{-4}</math></li> <li>- Max Vacuum (mm Hg): <math>1.3 \times 10^{-4}</math></li> <li>- Noise Level: <math>\leq 55</math> dB(A)</li> <li>- Oil Capacity (Liters): 0.9</li> <li>- Oil Capacity (oz): 25</li> <li>- Max Temperature (°F): 104</li> <li>- Max Temperature (° C): 40</li> <li>- Description: Rotary Vane Vacuum Pump</li> </ul> <p>Make: UK/USA/German/ Korea or Equivalent</p>		
06	Heating Mantle	<p>Specifications should be:</p> <p>Temperature Mix.: 450°C  Support Rod (Dia: 12.7 x 400L) with Clamp  Flask Capacity: 250/ 500/ 1000 &amp; 2000 ml  Electric Supply: 230V, 50Hz, 150W  Make: UK/USA/German/ Korea or Equivalent</p>	01	
07	Ultrasonic Bath	<p>Specifications should be:</p> <ul style="list-style-type: none"> <li>- Built-in microprocessor controller</li> <li>- Finished functions are ultrasonic power, set time, elapsed time, set temperature, current temperature, heater operation status etc.</li> <li>- Selectable use with ultrasonic strength controller (3 steps) -</li> </ul> <p>Built-in a digital thermometer and timer to Set a condition for cleaning</p> <ul style="list-style-type: none"> <li>- Easy to read operation status on digital display</li> <li>- Built-in drain valve</li> </ul> <p>Capacity 5.7/10 liters  Bath (WxBxH, mm) 300x155x150  Temp. Range Digital, 0 – 120°C  Timer Digital, 1 - 99 min  Transducer Industrial BLT 40 KHz  Display: Digital,  Function Thermostat  Material Engineering plastic exterior &amp; stainless steel bath  Electric Supply: 230V, 50Hz, 150W  Make: UK/USA/German/ Korea or Equivalent</p>	01	
08	Centrifuge	<p>Specifications should be:</p>	01	

		<p>Digital display of RPM, RCF, Temp., Temp Limit, program Brake and Time</p> <ul style="list-style-type: none"> <li>- Extensive choice of versatile rotors</li> <li>- Maintenance-free, quiet operation and brush less motor</li> <li>- Input of the Temp. Limit ensure proper Temp. Control</li> </ul> <p>Interlocking door for safety, gentle start-up and braking</p> <ul style="list-style-type: none"> <li>- Display of abnormality, imbalance, door-open, setting failure and over speed.</li> </ul> <p>Max. Speed Swing rotor 5,500 rpm (Optional: 6000 - 12,000 rpm)  Max. Speed Angle rotor 4,000 rpm (Optional: 6000 - 10,500 rpm)  Max. Capacity Swing rotor 32 x 15 ml/6 x 50 ml  Motor BLDC 700W  Timer: 99hrs, 59 min, 59 sec  Accel / Decel 10 segments  Digital Display: RPM, RCF, Time, Program, Accel/Decel time, Rotor Number, Rotor Radius  Accessories: Extra one to two rotors of different capacities and centrifuge tubes  Electric Supply: 230V, 50Hz, 150W  Make: UK/USA/German/ Korea or Equivalent</p>		
09	Hydrogen Gas Cylinder	Latest model with all accessories	01	

**CHEMICALS AND GLASSWARE:**

S.#	Name of Chemical	Specifications/Description	Qty	Total price
1.	Naphthalene	<ul style="list-style-type: none"> <li>- Analytical grade</li> <li>- high purity</li> <li>- Of reputable company/firm</li> </ul>	500g	
2.	Lithium	<ul style="list-style-type: none"> <li>- Analytical grade</li> <li>- high purity</li> <li>- Of reputable company/firm</li> </ul>	100 g	
3.	Di-n-butylmagnesium (1M in ether/hexane)	<ul style="list-style-type: none"> <li>- Analytical grade</li> <li>- high purity</li> <li>- Of reputable company/firm</li> </ul>	150 mL	
4.	NiCl <sub>2</sub>	<ul style="list-style-type: none"> <li>- Analytical grade</li> <li>- high purity</li> <li>- Of reputable company/firm</li> </ul>	100 g	
5.	Hydrazine (1M in THF/H <sub>2</sub> O)	<ul style="list-style-type: none"> <li>- Analytical grade</li> <li>- high purity</li> <li>- Of reputable company/firm</li> </ul>	150 mL	
6.	Hydrogen gas	<ul style="list-style-type: none"> <li>- Analytical grade</li> <li>- high purity</li> <li>- Of reputable company/firm</li> </ul>	50 Ltr.	
7.	THF	<ul style="list-style-type: none"> <li>- Analytical grade</li> <li>- high purity</li> <li>- Of reputable company/firm</li> </ul>	5 Ltr.	

8.	Hexane	- Analytical grade - high purity - Of reputable company/firm	2.5 Ltr.	
9.	2-Octanol	- Analytical grade - high purity - Of reputable company/firm	2.0 Ltr.	
10.	n-heptane	- Analytical grade - high purity - Of reputable company/firm	2.0 Ltr.	
11.	Cyclohexane	- Analytical grade - high purity - Of reputable company/firm	2.0 Ltr.	
12.	Cetyltrimethylammonium Bromide (CTAB)	- Analytical grade - high purity - Of reputable company/firm	500 g	
13.	Dioctyl sulfosuccinate sodium salt (AOT)	- Analytical grade - high purity - Of reputable company/firm	500 g	
14.	Triton X-100	- Analytical grade - high purity - Of reputable company/firm	250 g	
15.	1-Butyl-3-methylimidazolium tetrafluoroborate ([bmim][BF <sub>4</sub> ])	- Analytical grade - high purity - Of reputable company/firm	100 g	
16.	Ethanol	- Analytical grade - Absolute	5.0 Litr.	
		- high purity - Of reputable company/firm		
17.	Diethyl Ether	- Analytical grade - high purity - Of reputable company/firm	2.5 Litr.	
18.	Polyvinylidene Fluoride (PVDF)	- Analytical grade - high purity - Of reputable company/firm	300 g	
19.	Nickel (II) acetyl acetonate [Ni(acac) <sub>2</sub> ]	- Analytical grade - high purity - Of reputable company/firm	100 g	
20.	Dimethylzinc solution	- 2.0 M in toluene - Analytical grade - high purity - Of reputable company/firm	25 mL	
21.	Laponite Clay	- Analytical grade - high purity - Of reputable company/firm	1 KG	

22.	Tween 80	- Analytical grade - high purity - Of reputable company/firm	1 L	
23.	Styrene	- Analytical grade - high purity - Of reputable company/firm	1 KG	
24.	Potassium persulfate	- Analytical grade - high purity - Of reputable company/firm	250 g	
25.	Multi walled carbon nanotubes	- Analytical grade - high purity - Of reputable company/firm	100 g	
26.	Epoxy (Epon - 828)	- Analytical grade - high purity - Of reputable company/firm	1 L	
27.	Hardner (Dapson)	- Analytical grade - high purity - Of reputable company/firm	1 KG	
28.	Hexa Methylene diamine	- Analytical grade - high purity - Of reputable company/firm	500 g	
29.	Chitosan	- Analytical grade - high purity - Of reputable company/firm	1 KG	
30.	Sepolite Clay	- Analytical grade - high purity - Of reputable company/firm	1 KG	
31.	Dimethylformamide (DMF)	- Analytical grade - high purity - Of reputable company/firm	2.5 L	
32.	Tetraethyl orthosilicate (TEOS)	- Analytical grade - high purity - Of reputable company/firm	1 L	
33.	Teflon beaker	- 50 mL	6	
34.	Teflon beaker	- 100 mL	6	
35.	Teflon beaker	- 250 mL	2	
36.	Solvent Collection funnel	- Quick fit - Cone size: 14/23 - Socket size 14/23 - 1000 mL	2	
37.	Reflux Condenser	- Quick fit - Cone size 14/23 - Socket size 14/23	6	

38.	Round bottom flask	- Quick fit - Neck size 14/23 - 100mL	12	
39.	Round bottom flask	- Quick fit - Neck size 14/23 - 50mL	12	
40.	Round bottom flask	- Quick fit - Neck size 14/23 - 25mL	12	
41.	Round bottom flask	- Quick fit - Neck size 14/23 - 10mL	12	
42.	Round bottom flask	- Quick fit - Neck size 14/23 - 500mL	02	
43.	Round bottom flask	- Quick fit - Neck size 14/23 - 1000mL	02	
44.	Round bottom two neck flask	- Quick fit - two necks - Neck size 14/23 - 50mL	12	
45.	Round bottom two neck flask	- Quick fit - two necks - Neck size 14/23 - 100mL	12	
46.	Round bottom two neck flask	- Quick fit - two necks	6	
		- Neck size 14/23 - 250mL		
47.	Round bottom three neck flask	- Quick fit - three necks - Neck size 14/23 - 100mL	12	
48.	Round bottom three neck flask	- Quick fit - three necks - Neck size 14/23 - 250mL	6	
49.	Beakers	- 25 mL	12	
50.	Beakers	- 50 mL	24	
51.	Beakers	- 100 mL	24	
52.	Eppendorf/microcentrifuge tubes	- 1.5 ml	2 pac.	
53.	Filter Paper	- No. 42	5 pac.	
54.	Glass Pipettes	- 1 mL	06	

55.	Glass Pipettes	- 2 mL	06	
56.	Glass Pipettes	- 5 mL	24	
57.	Glass Pipettes	- 10 mL	24	
58.	Glass Pipettes	- 50 mL	12	
59.	Glass Pipettes	- 100 mL	02	
60.	Reagent Bottles with caps	- 25 mL	12	
61.	Reagent Bottles with caps	- 50 mL	12	
62.	Reagent Bottles with caps x	- 100 mL	12	
63.	Reagent Bottles with caps	- 250 mL	03	
64.	Laboratory wash bottles	- 250 mL	12	
65.	Laboratory wash bottles	- 500 mL	12	
66.	Microscope Slides	- glass	5 pac.	
67.	Glass Petri Dishes	- 30 mm	24	
68.	Glass Petri Dishes	- 60 mm	24	
69.	Glass Petri Dishes	- 100 mm	24	
70.	Glass Petri Dishes	- 120 mm	24	
71.	Addition GPressure Equalizing Dropping Funnel	- Quick fit - Cone size 14/23 - Socket size 14/23 - 25mL	12	
72.	Addition GPressure Equalizing Dropping Funnel	- Quick fit - Cone size 14/23 - Socket size 14/23 - 50mL	12	
73.	Addition GPressure Equalizing Dropping Funnel	- Quick fit - Cone size 14/23 - Socket size 14/23	6	
		- 100mL		
74.	Magnetic Stir Bar	- Teflon coated - small size ~ 6 mm	24	
75.	Magnetic Stir Bar	- Teflon coated - small size ~ 10 mm	24	
76.	Magnetic Stir Bar	- Teflon coated - medium size ~ 15 mm	24	
77.	Magnetic Stir Bar	- Teflon coated - small size ~ 20 mm	6	

78.	Agate Mortar and Pestle	<ul style="list-style-type: none"> <li>- Octagonal shaped, thick walled agate mortar with pestle</li> <li>- Highly polished grinding surfaces of both - Octagonal/cylindrical Pestle Handle.</li> <li>- Excellent for preparing laboratory samples and high purity powders.</li> <li>- Grinds medium-hard to very hard samples with minimal contamination</li> <li>- Outer Diameter: 100-105 mm</li> <li>- Top Inner Diameter: 85-90 mm</li> <li>- Height: 50-55 mm</li> <li>- Inner Depth: 23-25 mm</li> <li>- Pestle Length: 95-100 mm</li> <li>- Pestle Diameter (Grinding Face): 25-30 mm</li> </ul>	01 Piece	
79.	Agate Mortar and Pestle	<ul style="list-style-type: none"> <li>- Octagonal shaped, thick walled agate mortar with pestle</li> <li>- Highly polished grinding surfaces of both - Octagonal/cylindrical Pestle Handle.</li> <li>- Excellent for preparing laboratory samples and high purity powders.</li> <li>- Grinds medium-hard to very hard samples with minimal contamination</li> <li>- Outer Diameter: 70-80 mm</li> <li>- Top Inner Diameter: 60-65 mm</li> <li>- Height: 38-42 mm</li> <li>- Inner Depth: 15-20 mm</li> <li>- Pestle Length: 75-80 mm</li> <li>- Pestle Diameter (Grinding Face): 21-25 mm</li> </ul>	01 Piece	

**This information Must be kept in Technical proposal Envelop**

To be filled by the bidders.

1. Name of bidders: -----

----- 2. Address: -----

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----- 3. Phone: ----- Mobile -----

----- 4. Fax No. -----

-- E-mail: ----- 5. NIC Tax No. -----

----- Sales Tax No.: -----

6. Branches (if any):

i. -----

----- ii. -----

----- iii. -----

-----

7. Type of Business:

i. -----

----- ii. -----

----- iii. -----

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8. Facilities:

i. List of technical staff with qualification and experience-----

----- ii. Authorization of distribution / dealership -----

----- iii. Any other: -----

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9. Previous Experience (name of organization where said or like equipment supplied/installed/commissioned):