

**ATMA RAM SANATAN DHARMA COLLEGE**  
**(UNIVERSITY OF DELHI)**  
**DHAULA KUAN, NEW DELHI - 110021**

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**Tender notice**

Sealed tenders/quotation are invited from reputed, qualified and experienced vendors for the **Physics Practical Instruments** as per the list given in Annexure A. Your sealed tenders/quotations should be submitted latest by 3:00 p.m. on 08.01.2020

**Important Information:**

- (i) All details regarding the subject tender are available on our websites [arsdcollege.ac.in](http://arsdcollege.ac.in). Bidders are therefore, requested to visit the mentioned websites regularly to keep themselves updated.

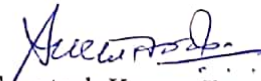
|                           |                      |
|---------------------------|----------------------|
| Tender Type               | Open                 |
| Product Category          | Goods                |
| Tender Fee                | 0                    |
| EMD Amount                | 0                    |
| Bid Submission Start Date | 24.12.2019 (3:00 pm) |
| Bid Submission end Date   | 08.01.2020 (3:00 pm) |
| Bid Opening Date          | 09.01.2020 (3:00 pm) |

- (ii) Your sealed tenders/quotations should be complete in all respects on your firms' letter head and enclosed in a sealed envelope superscribed "Tender/Quotation for Physics Practical Instruments" and addressed to **The Principal**, Atma Ram Sanatan Dharma College, University of Delhi, Dhaula Kuan, New Delhi-110021.
- (iii) Clarifications/ queries, if any, can be addressed to Dr. Avanish Pratap Singh Rajput, Department of Physics, A. R. S. D. College, Delhi University through email [avanishpratap@gmail.com](mailto:avanishpratap@gmail.com); [apsrajput@arsd.du.ac.in](mailto:apsrajput@arsd.du.ac.in)

Thanking you,  
Yours sincerely



Dr. Avanish Pratap Singh Rajput  
Teacher-in-charge



Dr. Gyantosh Kumar Jha  
Principal

### Apparatus List

The purchase committee finalises following items to purchase using open market survey survey basis / tendering.

| Si No. | Apparatus/Instruments/items And their Technical Specifications  | Quantity |
|--------|---|----------|
| 1      | <b>Planck's constant apparatus with Led KIT</b><br>With solid state power supply 0-5V ,2000 microamp with display of V and I by 3.5 digital panel meters and a separate box of Led with different (5) known wavelength leds.<br>Complete unit | 3        |
| 2      | <b>Vernier calipers</b> With least count 0.05 mm  | 6        |
| 3      | <b>He-Ne Laser Light</b> in a box with built in hard sealed laser tube output power upto 2mwatt made in USA with compatible power supply 1500V DC made in USA -all unit in one box AC 220V operated   | 1        |
| 4      | <b>Single Slit</b> metallic with LC 0.01mm micrometer controlled or film type with different width slits (min 3)  | 4        |
| 5      | <b>Double Slit</b> : metallic with LC 0.01mm and 2 micrometer controlled or film type with different width slits (min 3)  | 4        |
| 6      | <b>Traveling microscope (Vertical)</b> : Finely grinded with heavy base -LC 0.01mm with brass tube and dovetails in brass and achromatic lenses used ... bed should be heavy and stable   | 1        |
| 7      | <b>Ultrasonic grating</b> : with gold plated crystal mounted on tank and a high Volate RF oscillator -along with specially designed spectrometer dia 7 inch<br>Optional sodium lamp housing and transformer                                   | 4        |
| 8      | <b>B-H Curve apparatus</b> with a sloneoid and wires and a power supply   | 2        |
| 9      | <b>Flexible spring for spring Constant</b> —made of iron with painted and a small weight for elasticity compensation  | 4        |
| 10     | <b>Highly sensitive thermometer</b> (Step 0.1°C) -mercury with 110C /200 Cmaxm temp   | 10       |
| 11     | <b>Highly sensitive thermometer</b> (Step 0.5°C)-mercury with maxm temp 110C  | 10       |
| 12     | <b>Bad conductor Disk</b> with specifications (backlite) dia 85mm with 2mm thickness  | 8        |



|    |  |   |
|----|--|---|
| 13 | <b>Thermocouple Best quality:</b> two junction on bakelite plate with stand -material iron constantan or silver constantan or better   | 4 |
| 14 | <b>Thermocouple (Two junction)</b> for giving good potential difference  | 4 |
| 15 | <b>Optical lever setup:</b> complete setup with tripod with brass hanger and weights.. optical lever with true reflector and small tripod to hold optical lever with levelling screw<br>Supplied along with telescope with scale having V and H motion   | 1 |
| 16 | <b>Mechanical Equivalent of Heat, J, by Callender and Barne"s constant flow method</b><br>--Setup on thick wooden platform and brass vessels without bottom screws but a cup to hold them tightly.. with AC voltmeter and ammeter and a variable AC supply upto 24V , 2-3 A current and a constant level water tank                              | 2 |
| 17 | <b>The Coefficient of Thermal Conductivity of Cu by Searle"s Apparatus.</b><br>In heavy teak wood box with copper rod of 1.5 inch in dia along with holes to hold thermometers at distances .. jointless steam boilers with heater and silicon tubing and silicone corks   | 2 |
| 18 | <b>To determine the Coefficient of Thermal Conductivity of Cu by Angstrom"s Method.</b><br>Electrically driven apparatus in wood box open at one end with 1inch dia copper rod with holes to measure temp at various points, The setup is with AC power supply variable up to 220V and has provision to give pulses to heater with variable time | 2 |
| 19 | <b>Determination of the ionization potential of mercury.</b><br>Setup with solid state power supply and digital meters and 110 turn pot along with Mercury filled tetrode  | 2 |
| 20 | <b>Determination of the absorption lines in the rotational spectrum of Iodine vapour</b><br>Setup with specially designed spectrometer dia 7 inch with white light bulb and a glass tube with heater mounted on it and enclosed in a box with two openings for filling Iodine crystals.<br>An Ac supply is also there to heat the tube           | 2 |

*Bram*