

ALL INDIA INSTITUTE OF MEDICAL SCIENCES  
DEPARTMENT OF MICROBIOLOGY

Rate Enquiry No. 61 /Micro/2015-2016

Dated 28-12-2015

Quotations are invited for the supply of items mentioned below which are required for Microbiology Department, AIIMS.

1. Water Bath
2. Mini Cold Refrigerator
3. Air Condition – 3 Nos.
4. Fluid Resistant anti static reusable - 10 Nos.  
Lab. Coats (4 small, 6 medium)
5. UPS online 5 KVA – 2 Nos.
6. Computer & Printer
7. Incubator 37 C
8. Air Sampler
9. Vertical Electrophoresis
10. LED Fluorescent Microscope
11. Hybridization Oven

The quotations should be submitted to Prof. & Head, Department of Microbiology Deptt., Room No.2057 /2060 IInd Floor, Teaching Block, AIIMS, New Delhi by 10-12-2015 upto 5.00 PM. The quotations will be opened on 11-12-2015 at 3.00 PM Room No.2093. All quotations should be typewriter or in ink. All over writing and erased entries will be deleted from the quotations. The quotation should be duly sealed in an envelope marked R.E.No. 61 /Micro/2015-2016.

Terms & Conditions:

1. The quotation for each item should be submitted in a separate envelope with the "name of the item" clearly written on top of the envelope.
2. The Rate Enquiry must quote for Five years Comprehensive warranty.
3. Authority letter from manufacturers/principal for supplying item without which tender will not be considered.
4. Price reasonable certificate.
5. An undertaking that the firm has been blacklisted in the past by any Institution, Government/Private.
6. The names & contact numbers of AIIMS/Govt. departments where the supplier/dealer has supplied the equipment (user list).
7. Information for electronic payment viz RTGS/NEFT – Name of the beneficiary, Account number of the beneficiary, IFSC code of the bank/branch.
8. If applicable,, VAT/sales tax or any other kind of tax must be mentioned separately against each item.
9. The firm must be able to install the equipment on the site, free of cost.
10. The firm must supply the items within the date mentioned on the supply order copy.

*Akapi*  
*28/12/15*  
**Dr. Gita Satpathy**  
Prof. & Head  
Department of Microbiology

*Akapi*  
*28/12/15*  
**Dr. Arti Kapil**  
Professor of Microbiology  
Officer Incharge Store

 **Dr. ARTI KAPIL, M.D.**  
Professor  
Department of Microbiology  
A.I.I.M.S., New Delhi-110029

ALL INDIA INSTITUTE OF MEDICAL SCIENCES  
DEPARTMENT OF MICROBIOLOGY

Dated 28-12-2015

To

The Prof. Incharge  
Computer Facility  
AIIMS

Subject: Request to upload the short Rate Enquiry.

Rate Enquiry No.61/Micro/2015-2016

Sir,

Please upload the attached file as early as possible in AIIMS website for inviting quotations against the Short Rate Enquiry. The required details are given below.

R.E. No.61/Micro/2015-2016

Date of submission : 10-12-2015

Date of quotation opening : 11-12-2015

*for akapil  
acting HoD  
28/12/15*

**Dr. Gita Satpathy**  
Prof. & Head  
Department of Microbiology

*akapil  
28/12/15*

**Dr. Arti Kapil**  
Professor of Microbiology  
Officer Incharge Store



**Dr. ARTI KAPIL, M.D.**

Professor  
Department of Microbiology  
A.I.I.M.S., New Delhi-110029

Encl: Copy to Rate Enquiry and Technical Specifications.

### WATER BATH

1. Should have capacity 17-20L
2. Should have easy-to-maintain, seamless-stainless steel interior chamber and epoxy powder-coated exterior are resistant to corrosion and chemical damage
3. Should be able to maintain water temperature from ambient to 95°C or 99.9°C
4. Should have front-mounted controls simplify operation
5. Should have over-temperature safety circuitry prevents thermal runaway
6. Should allow temperature setpoint with  $\pm 0.1^{\circ}\text{C}$  precision at the push of a button
7. Should have microprocessor control with bright three-digit LED temperature readout
8. Should have automatic over-temperature protection
9. Should have stainless steel gable cover
10. Should have temp. uniformity (37°C)/Control Resolution of  $\pm 0.2^{\circ}\text{C}$  /  $\pm 0.1^{\circ}\text{C}$  or better
11. Should have dimensions in the range 49-50 × 29-30 × 15-16cm (L x B x H) (Internal) and 58-60 × 34-35 × 24-25 cm (External) (L x B x H)
12. Electrical requirement: 230V 50/60Hz/600w
13. Should be UL listed.
14. Five years comprehensive warranty.

Certified that the specifications are broad based, general in respect to the requirement and not suit to any particular firm/brand.

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MINI COLD REFRIGERATOR

1. The basic equipment should be a vertical type model.
2. The instrument should have double door with key locks on all doors.
3. The doors should be self closing and must have magnetic gasket
4. Should have a minimum capacity of 950 litres.
5. It should have CFC free insulation and coolant.
6. Should have foamed in place insulation (high density polyurethane foam)
7. The equipment must have polished aluminum preferable 40 grade exterior.
8. Should have PVC coated adjustable shelves.
9. The equipment should be Microprocessor controlled
10. Should have heavy duty spring loaded hinges.
11. Contain fan motor for forced air circulation
12. Digital LED display with audio-visual alarm
13. Must contain full length rust free stainless steel pull handles.
14. The wires in the equipment should be epoxy coated.
15. The exterior top and bottom should be made of galvanized steel
16. The equipment should have cold wall evaporator.
17. Should be provided with 5 KVA servo voltage stabilizer
18. Provided with 4 pin safety lock
19. Five years comprehensive warranty.
20. ISI/ISO/CE equivalent certificate will be preferred
21. CE(EU)/US-FDA/BIS Certification

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**FLUID RESISTANT ANTI STATIC REUSABLE LABORATORY COATS**

The laboratory coats should be resistant to fluids and harmful chemicals and should be able to shield the user from static charges. The laboratory Coat should be washable and reusable.

1. The coat should be full length with high collar, with two or three double stitched pockets.
2. It should have 1 breast pocket and 2 lower pockets on either side, bar track reinforced at top corners.
3. The coat must have side vents for access to pants and hang loops.
4. It should have long elasticated, comfortable cuffs that should be strain resistant, low spill, spun woven polyester. The cuffs should be over gloved to provide protection to forearm.
5. The sleeves should be tapered to prevent catching on things when reaching.
6. The coat must have heavy duty snap closures.
7. The coat should provide particle barrier against dust and dirt.
8. The coat should have stitched seams with front stud fastening.
9. The coat should compliance to EN14126:2003 barrier against infective agent.
10. It should comply with EN 1073-2: protection against radioactive contamination.
11. Five years comprehensive warranty.

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**UPS ONLINE 5 KVA**

1. The basic equipment should be a 5 KVA online UPS with power back up on minimum of 30 minutes.
2. The system should have 2 phase voltage range of 230 V
3. The system should be able to work at 50 Hz frequency
4. It should have voltage regulation precision of 1%
5. The harmonic distortion should be less than 3%
6. The system should be able to cope with overload for atleast 10 minutes.
7. The crest factor of the equipment should be  $> 4:1$
8. The system should have transient recovery within 3 cycles.
9. The system electronics should be able to detect faults and trips with audio visual indication such as battery overvoltage, Output AC overvoltage, Battery under voltage, output overload, short circuit.
10. The system should have digital display for output voltage, battery voltage, output current, output frequency etc. and should be customizable.
11. The system should have operating temperature of 1 to 50 degrees, relative humidity of 95 RH
12. The noise level should be less than 55 dB at 5 KVA.
13. 5 years comprehensive warranty from the date of installation.

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## Computers with Printers

### Computer

1. Should have at least Microprocessor of 4<sup>th</sup> Gen Intel Core i7 Processor or higher
  2. Should have at least RAM of 4 GB ,Upgradeable to 16 GB
  3. Should have Hard Drive of 1 TB Hard drive or more
  4. Should have minimum Display of at least 24" with Anti-Glare Touchscreen, Full HD LED Display
  5. Should have Full High Definition Display – Resolution : 1920 x 1080 (1080p) ; Brightness - 250 nits Aspect Ratio – 16:9
  6. Should have Slim Tray Super Multi DVD Writer with 24X max CD-ROM/CD-R/RW Read / Write and 5X max DVD-RAM Read / Write
  7. Should have Video Graphics card
  8. Should have minimum 4GB DDR3 dedicated Graphics Memory
  9. Should have Integrated Stereo Speakers and Digital Media Reader
  10. Computer should be Wired LAN - Integrated 10/100/1000 Gigabit Ethernet
  11. Should have Wireless LAN with WIDI and Bluetooth
  12. Should be equipped with Webcam and Microphones and Built-in array Microphones
  13. Should have at least 2 USB Side Access Ports and 4 USB Rear Access Ports
  14. Should be provided with Peripherals Wireless Keyboard and Wireless Mouse
  15. Should be equipped with Operating System Windows 8.1 or higher
  16. Should be provided with a 2 KVA UPS with warranty of 5 years.
- Should be provided with comprehensive warranty of 5 years.
- Should be ISO 9001 and 14001 certified. The instrument should be an original make from the company and not assembled locally.

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**Printer:**

1. Printer should be laser printer with scanner
  2. Should have a processor of at least 600 MHz
  3. Should have a memory of 128MB-512MB
  4. Display should be of 2 line LCD(Text)
  5. Operational panel of 2 line LCD, Numeric Keyboard
  6. Interface should have a high speed USB 2.0 built in ethernet 10/100base X network port
  7. Noise level should be 57dBA-26dBA
  8. Should have a printing speed of upto 38ppm in A-4(40ppm in letter)
  9. Should have a copy resolution of upto 1200x1200dpi (text and graphics)
  10. Should have a built in duplex print
  11. Should have automatic features like double sided print,barcode print and secure print.
  12. Should have a monthly duty cycle of upto 30000 pages.
  13. Should have a first print out time of 6.5 (seconds from ready mode)
- Should be provided with comprehensive warranty of 5 years.
- Should be ISO 9001 and 14001 certified. The instrument should be an original make from the company and not assembled locally.
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### SPECIFICATION FOR INCUBATOR

- Should have a capacity at least 100 liters.
- Temperature range: ambient +5°C to 100 °C
- Microprocessor controlled operation, digital keypad controls to increase or decrease setpoint temperature in 0.1°C increments
- Should have a disinfection routine at 100 °C
- Should have a preheating chamber technology
- Should have an inner door made of tempered safety glass, which allows sample viewing without affecting temperature
- Should have Class 3.1 independent temperature safety device according to standards with visual and audible temperature alarm.
- Should have adjustable exhaust air flap
- Should have a high-quality inner chamber made of stainless steel 304 quality.
- Should have a condensation-free inner chamber.
- Number of shelves should be at least 3 or more.
- Should have a double door seal.
- Should have Computer interface: RS 422
- Should have a rated voltage/frequency of: 230VAC/50Hz
- Plugs/sockets/electrical requirements conforming to Indian standards.
- Should be provided with a suitable and compatible servo stabilizer SKVA.
- User/Technical/Maintenance manuals to be supplied in English.
- Should be provided with comprehensive warranty of 5 years.
- The system should have FDA, CE/TUV and VDE certificates
- The instrument should be an original make from the company and not assembled.
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**VERTICAL ELECTROPHORESIS SYSTEM**

1. Versatile, easy to use, should run 1-4 mini gels (8 to 9 x 7 to 8 cm) SDS page simultaneously.
2. Flexible- Capable of running hand cast as well as precast gel (8 to 9 x 6 to 7 cm).
3. Running and casting module should be different
4. Interchangeable module- Should be upgradeable/ capable of using blotting module to do western blotting.
5. Grounded glass plates with permanently bonded spacers (10 to 11 X 8 to 9 cm) & Leak proof, tape free and easy assembly
6. Short Plate Size (10 to 11 X 7 to 8 cm)
7. One pack of 10% fast running stain free gel solution sufficient to cast as many as 50 gels of 1.00 mm thickness should be included.

**Power Pack Basic Power Supply :-**

1. System should have following specifications
  2. Volts 10-300V
  3. Current 4-400mA
  4. Power 75 W
  5. Type of output -constant voltage, constant current, constant power
  6. 4 output terminals
  7. Timer 1 Min -999 min
  8. Pause & Resume function available
  9. Option of automatic recovery
  10. System should be Stackable
  11. System failure error indication for NO load, Sudden load change, short circuit ,over voltage
  12. Number of output Jacks:4 sets in parallel
  13. LED display 3 Digit
  14. Five years comprehensive warranty.
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**TECHNICAL SPECIFICATION: LED FLUORESCENT MICROSCOPE**

1. The basic instrument should have a trinocular head.
2. It should have wide field eyepieces of at least 10x/20 mm.
3. It should have diopter adjustment on both eyepieces.
4. It should have reversed quintuple revolving / quadruple nose piece on multiple ball- bearings.
5. It should have high quality Achromatic Objective lenses of 4x, 10x, 40x, 100x oil immersion infinity corrected objectives.
6. The system should have coaxial coarse and fine focusing with cross roller guide.
7. The basic instrument should have fluorescence objective FL 10x and 40 x both
8. All optical parts should be anti-fungus treated.
9. It should have double slide Holder.
10. It should have at least 140x 135 mm mechanical stage preferably ceramic quoted, rectangular with a minimum of two slide holder capacity provided with marking scale on it.
11. It should have height adjustable universal condenser with iris diaphragm and filter holder.

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12. It should have at least diascopic LED illumination with adjustable intensity with internal power supply of at least 80- 250 V (CE) / Reflected fluorescence Unit power unit 110 V / 220 V.
13. The system should have high illumination white light LED illumination with 40,000 to 50,000 hours lamp eco-uniform illumination
14. It should have at least Reflected 450 nm LED epi- illumination attachment with a single cube with filters for Auramine-O, Auramine-Rhodamine, Acridine Orange fluorochrome.
15. System should have capability to upgrade in Phase contrast, Dark-field, Polarizing technique, teaching heads, Drawing tube as required.
16. It should be delivered with power cord and dust cover.
17. Voltage regulator of appropriate rating to be included to cope with 160- 260 V.
18. The apparatus should confirm to IS:4381-1967 (reaffirmed 2007) with latest amendments or equivalent national or international standards for general requirements for optical components and optical instruments, marking and packing.
19. The system should have ISO/CE under laboratory (UL), FDA certification.
20. The complete unit shall be provided with 5 years comprehensive warranty including hardware, software and spares.

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8

### Air sampler

1. The sampler should have an air intake minimum of 100 L/Min and impact of < 20 m/sec, should capture particles from 3 to 10 microns.
2. 90 mm plate compatible, stainless steel, autoclavable, minimum of 250 holes with each of 0.7 mm diameter.
3. Weight of not more than 2 kg.
4. Sampler should have software with different sampling parameter, audible and visual alarm at end of cycle, and programmable startup (1-60 minutes).
5. Sample data management facility required.
6. Noise level not more than 50 dBA at 1 meter distance.
7. After charging battery should last for minimum of 4 hours and the users will be alerted with alarms at the end of battery autonomy.
8. Microprocessor controlled electric fan.
9. The system should be provided with charger and tripod stand.
10. The sample body should be resistant to disinfectants, with smooth surface and no dead angles.
11. Equipments with an anodized aluminium sampling head with minimum of 3 nos and it should be autoclavable.
12. The system should have an infra red (IR) control and interface for PC connection.
13. The sampler should be ISO and CE/US-FDA certified.
14. Sampler should come with proper carrier bag.
15. Comprehensive warranty for 5 years

***Certified that the specifications are broad based, general in respect to the requirement and not suit to any particular firm/brand.***

Prepared by



Approved by



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HYBRIDIZATION OVEN

1. Should have temperature range: 35° to 85°C
2. Should have temperature uniformity  $\pm 0.25^{\circ}\text{C}$  within bottle
3. Should be stackable
4. Should be capable of operating either rotisserie or shaking platform (size range LxW 24-25 x 18-20) for additional functionality
5. Rotisserie speed range should be 5 to 15 rpm
6. Should be able to set up compact triple-oven tower for three distinct functions at different temperatures
7. Should have digital LED display and controls
8. Should have capacity for 10 medium bottles
9. Should have accurate temperature control.
10. Should have temperature uniformity for low backgrounds
11. Should have multiple rotisserie fittings for flexible choice of consumable
12. Should have Interchangeable rotisserie/shaking platform (max. load of 1kg/2.2 lb.) for hybridization and washing procedures
13. Should have variable speed settings for protocol optimization
14. Should have up/down shaking motion
15. Should be quoted with Shaker platform, 10-bottle capacity rotisserie, adjustable feet, drip tray
16. Electrical requirement: 220V, 250w
17. The system should have CE certification.
18. The system should be provided with 5 years comprehensive warranty.

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Prepared By

Dr. Kiferall Arantem

Checked By

Dr. Urishi B Singh

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AIR CONDITIONER

1. The basic unit shall comprise of 1.5 tonnage split air conditioner
2. The external dimension of indoor unit should be 300-330 mm (H) x 900-950 mm (W) x 238 mm (D).
3. The external dimension of the outdoor unit should be 650 to 700 mm (H) x 800-850 mm (W) x 200-250 mm (D).
4. It should have a cooling capacity of 18000 to 19000 BTU/hr and 5000 to 5500 watts.
5. The unit shall have capacity to remove moisture at 1.5 to 2.0 lt/hr rate.
6. The air flow from the equipment should be between 1000 to 1100 m<sup>3</sup>/hr and 500 to 600 cfm.
7. The noise level of the indoor unit shall not exceed 40 dB.
8. The system shall provide a operating temperature range from 21 to 50 degrees.
9. The unit shall have a rotary compressor and R410A refrigerant.
10. Five years comprehensive warranty.

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