Notice Calling for Quotation/Tender

Department Of Microbiology
Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh- 202002, UP

No. Ext.......................... Dated:.............

M/s...............................

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Sealed Quotations/Bids (one Technical and one Financial, Separately) are invited from manufacturers or their authorized Dealers for the following scientific equipments which should be sealed by the tenderer in separate covers duly super scribed and both these sealed covers are to be put in a bigger cover which should be sealed and duly super scribed on the terms and conditions mentioned below if the outer envelope is not marked properly as above, the purchase will not assume any responsibility for its misplacement, premature opening, late opening etc.

"Last Date for the Receipt of Quotations is 31 December 2016 by 3:00 PM"

Prof Indu Shukla
Dept. of Microbiology

Terms & Conditions:

1. Only typed quotations/tenders bearing Sales Tax & TIN Nos. on original letter head will be entertained.
2. Cutting/over writing on quotations/tenders will not be accepted.
3. The firm must be registered supplier in any Govt./Semi Govt. or in A.M.U. Aligarh.
4. List of users for the quoted item with contract no. should be provided
   - Photocopy of purchase order along with terms and conditions of contract received from any Govt./Public sector institution in last 2 years for supply of offered equipment must be enclosed with the price bid.
   - Installation and commissioning will be the responsibility of the supplier.
5. The Equipment/Instruments might be called for demo. and approval. It is sole discretion of the department to approve or disapprove the quality.
6. After sale services should be provided.
7. User/Technical/Maintenance manuals to be supplied in English.
8. Certificates of IVD/CE approval should be provide along with the quotations
10. The job description of the company service engineers should be clearly spelt out.
11. Company should provide all Accessories for installation & initial training. Certification of the onsite training should also be issued by the company.
12. Company should supply all the start up reagents free of cost
13. Comprehensive on site warranty and After sale service should be provided for at least 04 year
List of the equipment for which Quotation/Tender requested:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of equipment</th>
<th>Number required</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Biosafety Cabinet</td>
<td>Two</td>
</tr>
<tr>
<td>B</td>
<td>Laminar Air-flow</td>
<td>One</td>
</tr>
<tr>
<td>C</td>
<td>RT-PCR Machine</td>
<td>One</td>
</tr>
<tr>
<td>D</td>
<td>Thermal cycler</td>
<td>One</td>
</tr>
<tr>
<td>E</td>
<td>Gel documentation unit</td>
<td>One</td>
</tr>
<tr>
<td>F</td>
<td>Automated ELISA Microplate Washer</td>
<td>One</td>
</tr>
<tr>
<td>G</td>
<td>ELISA Plate Reader</td>
<td>One</td>
</tr>
<tr>
<td>H</td>
<td>Centrifuge-Refrigerated high speed</td>
<td>One</td>
</tr>
<tr>
<td>I</td>
<td>Micro centrifuge Refrigerated</td>
<td>One</td>
</tr>
<tr>
<td>J</td>
<td>Vertical Autoclave</td>
<td>One</td>
</tr>
<tr>
<td>K</td>
<td>BOD Microbiological Incubator</td>
<td>One</td>
</tr>
</tbody>
</table>
A. Biological Safety Cabinet

Number required: 2 (Two)

Specifications:

General: Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance may be forwarded with all the details for verification.

Technical:

Certification: NSF 49/EN1249 or Equivalent standard. The certificate of the quoted model should be attached (The bidder without this certificate will not be evaluated and considered rejected straightforward).

Design: Approximately 4 Feet length X 2 feet Depth
Bio safety cabinets Class II, Type A2 ;
304 stainless steel interior
Epoxy-coated steel exterior
Removable, seamless, dished work surface with lift out knobs
Door- Fully closing, clear ¼” tempered safety glass sash
Counter balanced with base stand

Circulation: Class 100, Supply and exhaust through HEPA filters. Inflow velocity of 105 fpm (0.5 m/sec),
Down flow velocity of 55 fpm (0.3 m/sec)
70 % air recirculation.

Light: UV and sufficient illumination for work space.

Gauges: For monitoring the condition of all HEPA filters as well as work space.

Services Required:
Installation & onsite validation
Calibration certificates
Manuals: Operation, maintenance & part list with detailed specifications
Operational & maintenance Training

Ergonomics: Must be supplied with two adjustable saddle stools.
One footrest must be provided
The cabinet noise level must be less than 65 dBA

Power Supply:
Should include 210-240V/50 Hz
B. Laminar Air Flow

Specifications:

General: Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance may be forwarded with all the details for verification.

Technical:

Certification: FN12469 OR equivalent

Design: Vertical laminar flow cabinet
Approximately 4 Feet length X 2 feet depth, 304SS interior, epoxy/powder coated exterior
Door fully closing with hinged sash.
Support stand, solid one piece dished work surfaces

Circulation: Down flow velocity of 40-70 fpm, ISO Class 5 or higher air

Filters: HEPA filter, (99.99% efficient on particles 0.3 micron)/ULPA filter (efficiency of >99.999% at 0.1 to 0.3 micron sizes) provided with pre-filter

Light: UV and sufficient illumination for work space

Gauges: For monitoring the condition of all HEPA filters as well as work space.

Power Supply: Should include 210-240V/50-60 Hz

C. Real time RT-PCR

Number required: 1 (one)

Specifications:

General: Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance may be forwarded with all the details for verification.

Technical: 1)Table top model.
2) Complete system including basic system, essential accessories, the state-of-art computer workstation, acquisition and analysis software, startup kit inclusive of calibration standards and Adapter etc.

3) Open system to accommodate Taqman, SYBR green and all other fluorescent dye based chemistries.

4) Peltier based 96 well block

5) Standard optical 96 well plates, 0.2 ml strips, 0.1ml tubes compatibility

6) Reaction volume range: 10-30 µl or more

7) CCD camera with halogen/LED and at least five excitation and five emission filters

8) Advance User defined 6 zone temperatures for standardization of sample

9) Multiplexing ability up-to five dyes in a single run,


11) Facility to calibrate new dye within the wavelength range without addition of new filters

12) Passive reference dye ROX or any other calibrated dye and should be optional

13) Option for melt curve analysis

14) The machine should be IVD certified

15) Temperature range 4°C to 100°C

16) Sensitivity: Detection of 1 copy of template

17) Software applications: Comparative Ct, Standard Curve, Relative Standard Curve, Allelic Discrimination / SNP Genotyping, Plus/Minus, dissociation / melt curve

18) 220 V /50Hz. All accessories including USB(online)
20) Comprehensive on-site warranty and After sale services including calibration (if required) should be provided for at least 05 years

D. Thermal Cycler

Number required: 1 (one)

Specifications:

**General:**
Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance may be forwarded with all the details for verification.

**Technical:**

**Design:**
96 well, with 6 separate peltier blocks to provide independent temperature zones to run gradient PCR with hot bonnet.

**Capability:**
0.2ml, 0.5ml PCR tubes or microplates; to accommodate PCR volumes ranging from 10-100ul.

**Run Mode:**
Standard and fast run

**Temperature:**
Range +4-100°C
Accuracy +/-0.25 from 35-99°C
Uniformity <0.5°C (20 sec after reaching 95°C)

**Ramp rate:**
Maximum should be 5°C/sec and adjustable between 3 -5°C/sec

**Program:**
Around 800 typical programs; with USB flash drive expansion

**Power Supply:**
Should include 210-240V/50-60 Hz
E. Gel Documentation System

Number required: 1 (one)

Specifications:

General: Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance may be forwarded with all the details for verification.

Technical:

1. Imaging system should have Automatic capabilities with Application driven, user selected or recalled by a protocol.
2. Should have 100% repeatability via recallable protocols.
3. System should have image resolution of more than 4MP and pixel size of 4.65 x 4.65 μm.
4. Should have true 12 bit true CCD camera.
5. Should have motorized zoom lens- f/1.2, 12-75mm with numerical feedback value to reduce the experimental variation - Capable of optimizing, saving, and quickly recalling the imaging acquisition settings.
6. System should have pre-calibrated focus for any zoom settings & sample height.
7. Should have appropriate flat fielding correction automatically & consistently applied to image data for every application.
8. Versatile system to support wide range of applications like- Quantitation etc. Nucleic Acid Gels: Ethidium bromide, SYBR® Gold, Fast Blast™, SYBR® Green, GelGreen, SYBR® Safe, GelRed; Protein Gels: Coomassie Blue, Oriole™ fluorescent gel stain, Coomassie Fluor Orange, Silver stain, Copper stain, SYPRO Ruby, Flamingo™ fluorescent gel Stain, Zinc stain, Stain Free, Krypton; Blots: Colorimetric reagent, Stain Free.
9. System should come with Tran-UV range of 302nm as standard.
10. System should have option of white light & blue light conversion screen with suitable filter.
11. System should have Stain-Free capability for stain-free gels and blots.
12. System can take max. Sample size 28 X 36 cm
13. System should have precalibrated & optimized dynamic image flat fielding.
14. It should universal dark hood & upgradeable to chemiluminescence.
15. Safe DNA Imaging without UV exposure- using Conversion screen to prevent damage from UV and preserve samples for downstream protein production.
16. Should have feature of reproducibly position or center the sample on the image platen by using gel alignment templates.
17. Should come with latest full version image analysis software with following features:
   • Software should have highest level of automation in hardware calibration, image optimization, capture, and analysis.
   • Software should mandatorily have the algorithm for automated normalization/ house-keeping protein free normalization.
• Software should have features to analyze molecular weight, Annotation, Lane/Band Detection, Normalization, Quantitation (Absolute & Relative), Volumetric analysis.
• Should have automated workflow recorded in a protocol file from image capture to results thus eliminates need for training.
• Should allow 100% repeatability of the workflow by any user and ensures optimized image data and analysis from a gel in a single uninterrupted, fast, and completely reproducible workflow.
• Should have one-button acquisition from image capture to result.
• Should generate the publication ready images with one click export option.

F. Automated ELISA Microplate Washer

Specifications:

General: Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance may be forwarded with all the details for verification.

Technical:

Capability: 96 well microplates and strips, with flat, round, or “V” bottom well

Manifold: 12 Channels
Vacuum and Fluid delivery Systems: In built with Positive displacement syringe pump, drive with adjustable flow rates

Program: Memory for around 100 programs including dispensing Volume (50 to 300ul/well) and multispeed microplate shaking program

Bottles: Wash Bottles 2 or 3 bottles x 2-6 litres.
Waste Bottle 1 bottle x 2-6 litres.
Rinse Bottle 1 bottle x 2-6 litres.
Wash and waste bottles with auto alarm function and liquid-surface detecting system.

Safety devices: Aerosol cover, removable Plate carrier, spill over protection and overflow protection safety system

Display: LCD Display with Membrane Keypad

Power Supply: 210-240V/50-60Hz
G. ELISA Plate reader

Specifications:

**General:**
Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance may be forwarded with all the details for verification.

**Technical:**

**Capability:**
96 well micro plates

**Spectral Range:**
340 to 850nm, Accuracy ±1nm

**Light Source:** Quartz-halogen lamp

**Absorbance:**
0-4 O.D.

**Range:**
0 to 6 Abs

**Accuracy:**
Up to 0.001 O.D.

**Provision:**
Curve fittings formulas transformations & control assay validation, with compatible interface with PC & external printer.

**Accessories:**
Spare Lamps 2 Nos.

**Power Supply:**
210-240V/50-60 Hz

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H. Centrifuge-Refrigerated high speed

Number required: 1 (one)

Specifications:

**General:**
Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance may be forwarded with all the details for verification.

**Technical:**

**Certification:**
CE or UL certified

**Temperature**
-20 to +40°C
Range: Speed: Up to 18000 rpm
Display: Digital for temperature for air and chamber, time and RPM/RCF, Microprocessor controlled
Drive System: Brushless direct
Programmable: Programs 90-99 and with program recall facility
Rotors: Fixed angle rotor: 15ml and 50 ml tubes
(Optional Rotors) Fixed angle rotor: 24x1.5 ml tubes, 250 ml Swing out Rotor and adopters for 5-10 ml tubes, 15ml, 50ml and 250 ml tubes, micro plate.
Power Supply: 210-240V/50-60 Hz or Suitable power supply

I. Micro centrifuge Refrigerated

Number required: 1 (one)

Specifications:

General: Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance may be forwarded with all the details for verification.

Technical: Bench top, compact, Refrigerated

Temperature Setting: 0 to 40°C
Fast Pre cooling and should maintain +4°C at maximum speed
Up to 10 programs or more
Digital display showing rpm, RCF and time
Speed Up to 15000 rpm or more
Rotor for 24x1.5 to 2 ml tubes,
Adaptors for 0.5 ml and 0.2 ml tubes
Auto balancing in situation of minor imbalance

Electrical Requirements: 120V/60Hz and 230V/50 Hz or Suitable electrical supply

CE certified or equivalent
J. Vertical Autoclave

Number required: 1 (one)

Specifications:

General:

1. Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance is be forwarded with all the details for verification.

2. The bidder must give service details about the nearest service centre, and service engineers contact details including phone number and email id.

Technical:

1. Should have markings. Safety requirements with recommendations of safe operations from any reputed firm with ISO9001:2000 & CE Certification and this must be attached.

2. Should be fully automatic vertical autoclave, suitable for sterilization under working steam pressure (adjustable) from at least 15 to 22psi (pounds per square inch)

3. Design: should have following
   i. Triple walled construction, all the three walls are made of thick high grade stainless steel sheet of SS-304 grade.
   ii. Approximate inner dimensions 16” to 25” (diameter x depth).
   iii. Lid made of heavy gauge lid, die pressed stainless steel grade S.S.304 with pressure gauge, steam release valve, necessary Safety valves (An extra safety valve to be provided) with moulded joint less silicon rubber gasket.
   iv. With foot lifting arrangement to open lid
   v. Water level indicator
   vi. Drain valve facility
   vii. with all functional accessories
   viii. All internal joints must be argon arc welded, ground and polished to give crevice free internal surfaces.

4. Capacity: should be between 70 to 80 lit

5. Control Panel and switches: should have following
   i. Microprocessor based controller for time and temperature with LCD display are programmable by user.
ii. Class A Platinum or better sensor, enabling precise and accurate control
iii. Low water level alarm and cut off for safety of heater.
iv. Sensor open alarm and display
v. Fitted with automatic digital timer which start automatically when desired/set value of temperature/pressure is achieved. When the desired/set time is over the heater gets switched off automatically with alarm for the cycle end.

6. **Alarm**: should have low water level alarm and cut off / Sensor open alarm

7. **Accessories**: should be supplied with perforated carriers made up of SS 304 (3-4 Nos.)

8. **Power Supply**:
   i. should be able to work in 220/230 volts AC-50 Hz
   ii. Power plug should fit on Indian system of electrical supply.
   iii. Should have industrial grade energy efficient heater which utilizes less power.

9. **Manuals**: Operation, maintenance & part list with detailed specifications must be provided in original (no photocopy will be entertained).

10. **Onsite operational & maintenance Training** of the staff will be done on mutually agreed date.

11. **Warranty**: Instrument should have warranty for three years from the date of successful installation.

Charges for the AMC or CMC annually after the warranty must be mentioned separately in the price bid for another four years

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**K. BOD Microbiological Incubator**

**Number required**: 1 (one)

**Specifications**:

**General**:

1. Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance is be forwarded with all the details for verification.

**Technical**:

1. Should be certified by CE or UL and certificate in this regard must be attached.
2. Should be double walled body with inner chamber of Stainless Steel (SS-304 grade) and outer galvanized steel with non-corrosive epoxy powder coated.

3. Should have fully insulated dual wall door with magnetic rubber gasket and full length inner plexi-glass door.

4. Should be castor wheel mounted for easy movability and must be vibration free design.

5. Should have Capacity: 100-120L with an internal fan for uniform air circulation.

6. Should have inner chamber with 3-4 detachable shelves of stainless steel and inner illumination with sleek fluorescent tubes.

7. Should have temperature Control:
   i. Microprocessor based with digital display and controlled.
   ii. Settable range of temperature: 5°C to 50°C with an accuracy of ± 0.5°C
   iii. Uniformity: +/- 1.0°C throughout the chamber

8. Should have door alarm: Low/high temperature alarm

9. Should have microprocessor based controller for mains, heating and cooling with separate indicator lights.

10. Should have cooling: CFC free refrigeration

11. Safety: Over and under temperature cut off over current break.

12. Should be operable in power Supply of 210-240V/50-60 Hz and Power plug should fit on Indian system of electrical supply.

13. Voltage stabilizer of suitable capacity for the instrument must be supplied along with.

14. Manuals: Operation, maintenance & part list with detailed specifications must be provided in original (no photocopy will be entertained).

15. Onsite operational & maintenance Training of the staff will be done on mutually agreed date.

16. Warranty: Instrument should have warranty for three years from the date of successful installation.

17. Charges for the AMC or CMC annually after the warranty must be mentioned separately in the price bid for another four years.