Sealed Quotations are invited from manufacturers or their authorized dealers or any other competent and eligible firms duly super scribed on the terms & conditions mentioned below and submit the same in the office of the undersigned on or before **03-09-2016** during office hours.

**Name of Work:** Annual Contract for operation of HVAC System installed at New Emergency & Trauma Centre, OPD, Cath.Lab of Jawahar Lal Nehru Medical College & Hospital, Aligarh Muslim University, Aligarh.

The company shall provide the manpower required for annual operation of HVAC System

**Equipment Details:**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Description</th>
<th>Capacity</th>
<th>UOM</th>
<th>Units</th>
<th>Total</th>
<th>UOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Water Cooled Screw Chiller</td>
<td>160</td>
<td>TR</td>
<td>4</td>
<td>640</td>
<td>TR</td>
</tr>
<tr>
<td>2.</td>
<td>Induced Draft Cooling Tower</td>
<td>200</td>
<td>TR</td>
<td>4</td>
<td>800</td>
<td>TR</td>
</tr>
<tr>
<td>3.</td>
<td>Primary Chiller Water Pump</td>
<td>10</td>
<td>HP</td>
<td>4</td>
<td>40</td>
<td>HP</td>
</tr>
<tr>
<td>4.</td>
<td>Secondary Chiller Water Pump</td>
<td>20</td>
<td>HP</td>
<td>3</td>
<td>60</td>
<td>HP</td>
</tr>
<tr>
<td>5.</td>
<td>Condenser Water Pump</td>
<td>25</td>
<td>HP</td>
<td>3</td>
<td>75</td>
<td>HP</td>
</tr>
<tr>
<td>6.</td>
<td>VFD’s (along with Panel)</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7.</td>
<td>Floor Mounted AHU</td>
<td>-</td>
<td>-</td>
<td>29</td>
<td>-</td>
<td>-</td>
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<tr>
<td>8.</td>
<td>Ceiling Suspended AHU</td>
<td>-</td>
<td>-</td>
<td>24</td>
<td>-</td>
<td>-</td>
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<tr>
<td>9.</td>
<td>Heat Recovery Ventilator (HRV)</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>-</td>
<td>-</td>
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<tr>
<td>10.</td>
<td>Fan Coil Units</td>
<td>-</td>
<td>-</td>
<td>216</td>
<td>-</td>
<td>-</td>
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<tr>
<td>11.</td>
<td>Ventilation Fan</td>
<td>22500</td>
<td>CFM</td>
<td>1</td>
<td>22500</td>
<td>CFM</td>
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<tr>
<td>12.</td>
<td>Ventilation Fan</td>
<td>15000</td>
<td>CFM</td>
<td>1</td>
<td>15000</td>
<td>CFM</td>
</tr>
<tr>
<td>13.</td>
<td>Ductable Units</td>
<td>8500</td>
<td>CFM</td>
<td>1</td>
<td>8500</td>
<td>CFM</td>
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<td>14.</td>
<td>Ductable Units</td>
<td>8.5</td>
<td>TR</td>
<td>3</td>
<td>25.5</td>
<td>TR</td>
</tr>
</tbody>
</table>

**Scope of Work:**

The Service Provider shall provide a complete Operation to the HVAC system as described & detailed below:

- Daily checks and services include:
  1. Wherever applicable, operators shall register operating status of the system, condenser chilled water temperature and pressures at the inlet and outlet of heat exchangers, voltage and current on hourly basis during operating hours, in log sheets.
  2. Keeping all equipment externally cleaned.
  3. Checking water level and float valve operations in cooling tower make up water and expansion tank, check compressor oil level wherever applicable.
  4. Checking all the rotating machines for smoothness of drive, vibration and noise level.
  5. Checking and adjusting belt tension of all V belt drives, if required.
  6. Checking of starters for smooth operation.
Daily logging of operating parameters.

All bearings will be checked and lubricated if required.

Alignment of driven machine with driving machine will be checked and rectified if required.

Evaporator coils will be inspected and cleaned with compressed air or water if required, subject to availability of such medium for the purpose of cleaning at site.

Refrigeration piping & shaft seal wherever applicable will be inspected for signs of external leaks.

Checking gland leakages of the pump/valves.

Checking the functioning of Chiller unit/Air handling unit/Pumps/Cooling tower/Controls and all such equipment.

Descaling of condensers/chemical cleaning of evaporator coils/replacement of pre filters.

Replenishing refrigerant gas and compressor oil in the system arising out of system defect.

Checking of compressor for its proper working.

Annual pumping-down and restarting as and when required.

Checking of Microprocessor control panel, control boards, transducers of packaged chillers/condensing unit for their correctness and replace if necessary.

Replacing of parts due to normal wear and tear of above mentioned equipments.

Terms & Conditions:

1. The agreement shall commence from the date of execution of agreement and shall continue till twelve months unless it is curtailed or terminated by the authority owing to deficiency of service, Sub-standard quality of manpower deployed, breach of contract etc or change in requirements.

2. The agreement shall automatically expire on completion of twelve months of date of agreement unless extended further by the mutual consent of the Service Provider and the Authority.

3. The Service Provider shall not be allowed to transfer, assign, pledge or subcontract its rights and liabilities under this Agreement to any other agency or organization by whatever name be called at any circumstances.

4. As a guarantee towards due performance and compliance of the contract work, the successful service provider has to deposit performance security. The amount of performance security will depend on the nature of the goods, period of maintenance etc. It generally varies from 2.5 to 5% of the value of the equipment to be maintained.

5. The Service Provider will be bound by the details furnished by it to the Authority while submitting the tender or at subsequent stage if required. In case, any such document furnished is found to be false at any stage, it would be deemed to be a breach of terms of Agreement making it liable for legal action besides termination of the Agreement.

6. To assist in the analysis, evaluation and computation of the quotations/tenders, the Competent Authority, may ask tenderers individually for clarification of their quotations. The request for clarification and the response shall be in writing but no change in the price or substance of the bid offered shall be permitted.

7. After evaluation, the work shall be awarded normally to the Firm fulfilling all the conditions and who has quoted the lowest rate (inclusive for all categories) after complying with all the Acts / provisions stated / referred to for adherence in the tender. In case two or more firms are found to have quoted the same rates, the Chief Medical Superintendent, JNMCH shall decide about the firm to which the offer shall be granted based on the report on the past performance of the firm, and length of experience etc. Such decision by the authority shall be final.

8. J.N. Medical College Hospital, A.M.U., Aligarh reserves the right to accept or reject all bids/tenders without assigning any reasons. J.N. Medical College Hospital, A.M.U., Aligarh also reserves the right to reject any bid which in his opinion is non-responsive or violating any of conditions/specifications without any liability to any loss whatsoever it may cause to the bidder in the process.

9. The period of the contract may be extended for mutually agreed period after the successful/satisfactory completion of initial contract.

10. In case of non-compliance/non-performance of the services according to the terms of the contract, the Medical Superintendent, J.N. Medical College Hospital, A.M.U., Aligarh shall be at liberty to make suitable deductions from the bill without prejudice to its right under other provisions of the Contract.

11. Any violation of instruction/agreement or suppression of facts will attract cancellation of agreement without any reference.

12. In case of deficiencies in providing quality service, the authority of JNMCH will have the right to impose penalty as per decision of the Committee which shall be deducted from the monthly bill.

13. Maintenance/Repairing/Replacing during defect liability period of 01 Year is not included in contract.

[Signature]

J.N. Medical College Hospital
Aligarh