Notice for calling Quotations

University Guest House, AMU, Aligarh.

Sealed quotations from companies and Authorized Dealers with experience of more than 3 years of executing large capacity contract of at least Rs. 10 lacs/50 tons and above, along with certificates and other documents with an earnest money of Rs. 30,000/- (refundable).

Dealers/Companies of reputed brand such as Daikin, Carrier, Hitachi, Blue Star etc. may submit quotations latest by 18th March, 2016 in the office of undersigned along with other documents and earnest money.

Member-In-Charge
University Guest Houses
# HVAC WORKS FOR NEW GUEST HOUSE, AMU, ALIGARH

## Notes:
1. All contractors are requested to submit the tender including cost of 3 years comprehensive warranty of air conditioning system. This is mandatory for all contractors.
2. The unit rate for all equipment or materials shall include cost in Rupees for equipment and materials including all taxes and duties and also includes forwarding, freight, insurance and transport into contractor's store at site, storage, installation, testing, balancing, commissioning and other works as required.
3. All contractors are requested to submit the cost of AMC after 3 years warranty period of air conditioning system.

## BILL OF QUANTITIES

**HVAC WORKS FOR NEW GUEST HOUSE, AMU, ALIGARH**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Description</th>
<th>Unit</th>
<th>Qty.</th>
<th>Rate (Rs.)</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part I</strong></td>
<td><strong>Supply of Air Conditioning Units</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SPLIT UNITS:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.0 DX Type Split Unit System</strong></td>
<td>Supply of ceiling suspended/wall mounted/ductable type split air-conditioning unit complete in all respects as required, comprising of following:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>Air cooled condensing unit consisting copper tube aluminium finned condenser coil, air cooled by suitable size low speed fan, all mounted in heavy gauge sheet steel enclosure with protective painting with first charge of refrigerant gas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td>Evaporating Unit consisting of copper tube aluminium finned high transfer cooling coil, refrigerant distributor and thermostatic expansion valve along with blower, filters and drain pan all in heavy gauge sheet steel metal enclosure with protective painting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.1 Ductable Split Unit System</strong></td>
<td></td>
<td>Nos.</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>8.5 TR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.2 Split Unit System (Hi-Wall Type)</strong></td>
<td></td>
<td>Nos.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>2.0 TR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL OF PART - I Including Tax**

**Part II** | **Installation, Testing and Commissioning of air conditioning System** | | | | |
| a) | Installation, testing and commissioning of insulated liquid and suction copper refrigerant piping of adequate size along with necessary fittings to interconnect the condensing unit and the evaporating unit. | | | | |
| b) | Providing and fixing M.S. structural support for condensing unit with vibration isolator pad in-between support and structure and vibration isolation suspender and pads for evaporating units. | | | | |
| c) | Complete electrical work for the above units including interconnecting cabling/wiring from the MCBs near the room units to outdoor units complete in all respects including earthings. | | | | |

**SPLIT UNITS:**

| **1.0 DX Type Split Unit System** | INSTALLATION, TESTING AND COMMISSIONING OF DUCTABLE/HI WALL SPLIT AIR CONDITIONING UNITS COMPLETE IN ALL RESPECTS COMPRISING OF FOLLOWING: | | | | |
| **1.1 Ductable Split Unit System** | | Nos. | 6 | | |
| a) | 8.5 TR | | | | |
| **1.3 Split Unit System (Hi-Wall Type)** | | No | 2 | | |
| a) | 2.0 TR | | | | |

**4.0 Refrigerant Piping**

Supply, Interconnecting refrigerant copper pipe work with (13mm thick) closed cell EPDM tubular rubber insulation between each set of indoor & outdoor units as per specifications, all piping shall be properly supported with saddle and clamps duly screwed on walls/roof along with necessary fittings which are required to complete the system as under

| a) | 8.5 TR | RM | 133 |
| b) | 2.0 TR | RM | 25 |

---

*Signature*

Member-In-Charge

University Guest House

A.M.U., Aligarh
5.0 Complete electrical work for the above units including Supplying and fixing interconnecting conduit, cabling/wiring from out door units to indoor units and to the wired remote fitted in the wall as specified in the drawing (Conduiting from Indoor units to remote switch already provided at site) PVC insulated flexible multicore copper cable for interconnecting indoor units and out doors units for power supply and earthing as required duly drawn in uPVC conduit medium duty of not less than 25 mm dia including accessories as required and supported on saddle and clamp on wall or roof duly screwed on rawl plugs as under and as specified by the manufacturer.
   a) 8.5 TR  
   b) 2.0 TR  
   RM 144  
   35

6.0 Providing and fixing M.S. structural support for condensing unit with vibration isolator pad in-between support and structure and vibration isolation suspender and pads for evaporating units for 8.5TR units  
   Set 6

7.0 Providing and fixing wall brackets factory made duly power coated with white paint for 2.0TR units  
   Set 2

8.0 Drain Piping
   Providing and fixing of uPVC drain pipe of minimum 15 Kg/cm² complete with 6 mm thick nitrile rubber insulation sleeve, fittings, supports, valves as per specifications & drawings.
   a) 25 mm  
   RM 160

9.0 Ducting
   Supplying, fabricating, installation, testing and commissioning of GI sheet metal ducting complete with supports, dampers, glands, duct covers, etc. as per specifications, and drawings etc as required.
   a) 24 Gauge  
   Sqm. 395
   b) 22 Gauge  
   Sqm. 85

12.0 Providing and fixing flexible double Convass Connection made out of Fire retardant cover cloth of approved quality and make.
   Set 6

13.0 Duct Acoustic Lining
   Supply, installation and testing of acoustic lining with in supply and return air ducts as per the specifications. All ducts shown cross hatched on the approved shop drawings shall be provided with acoustic lining of fibre glass as per the specifications.
   a) 25 mm thick  
   Sqm. 110

14.0 Duct Insulation (With EPDM Rubber)
   Supplying, installing, testing and commissioning of Thermal insulation of supply / return air ducts using following thickness cold insulation using closed cell (EPDM Rubber)
   a) 13mm Thick  
   Sqm. 480

15.0 S/R Air Grilles
   Supplying, fixing, testing & commissioning of aluminium supply air grille with volume control dampers and return air grille without volume control damper.
   a) Powder coated Aluminium Supply air grilles with volume control damper.  
   Sqm. 7.5
   b) Powder coated Aluminium Return air grilles without volume control damper.  
   Sqm. 8.5

16.0 Supply Air Diffuser
   Supplying, installing, testing and balancing of square supply air diffusers, air distribution grid for straightening the air flow through the collar. Powder Coated Aluminium square diffuser with volume control damper.
   Sqm. 5.5

17.0 Return Air Diffuser
   Supplying, installing, testing and balancing of square return air diffusers, air distribution grid for straightening the air flow through the collar. Powder Coated Aluminium square diffuser without volume control damper.
   Sqm. 9

18.0 Supply Fresh Air Louvers
   Supply, installation, testing and commissioning of Powder coated extruded aluminium construction air louvers with bird screen and volume damper.
   a) Supply, installation, testing and commissioning of GI Sheet of 24 SWG gravity Fresh air louvers with bird screen.  
   Sqm. 6

20.0 Volume Control Damper
   Supply, installation, testing and commissioning of GI volume control duct damper complete with neoprene rubber gaskets, nuts, bolts, screws linkages, flanges etc. as per specifications and drawings of the following size.
   Sqm. 5

TOTAL OF PART - II-Including Tax

TOTAL (PART - I + PART - II) Including All Taxes.