



TENDER DOCUMENT

For

Supply, Installation, Testing & Commissioning of Air-Conditioning Units at the Intensive Care units in Extension Block of NS Memorial Institute of Medical Sciences

(Tender No. 1422/2019-20/HVAC/ NSMIMS)

Start date for issue of tender documents	-	25/03/2020, 10.00 am onwards
Closing date for issue of tender documents	–	31/03/2020, upto 2.00 pm
Last date for submission of tender documents	-	31/03/2020, upto 3.00 pm
Date of opening of Technical bid	-	31/03/2020, 4.00 pm onwards
Date of opening of Financial bid	-	02/04/2020, 10.00 am onwards

SIGNATURE OF THE TENDERER

Bid document for “Supply, Installation, Testing & Commissioning of Air-Conditioning Units at the
Intensive Care units in Extension Block of NSMIMS

Sealed tenders are invited by the Secretary, NSMIMS, Kollam for Supply, Installation, Testing & Commissioning of Air-Conditioning Units at Intensive Care units in Extension Block of NSMIMS

1. Nature and Scope of work:

Nature and scope of the work is mentioned at Annexure-II of this bid document (enclosed herein).

2. Eligibility:

- i. Contractors who have sufficient experience of having successfully carried out similar works in Government Offices/Residential buildings/Office buildings/Pvt. buildings during the last three years are eligible to participate in the bidding.
- ii. The NSMIMS reserves the right to verify the proof of having experience and expertise of the bidder in executing similar works and the bidder has to produce the proof thereof.

3. Submission of bid:

The tender document can be obtained in person from the below mentioned address from 10.00 am to 5.00 pm on all working days:

N.S Memorial Institute of Medical Sciences, Palathara, Thattamala P.O Kollam 691020

Cost of the Tender document – Rs.2000/- to be payable by way of DD in favour of “KOLLAM DISTRICT CO OPERATIVE HOSPITAL SOCIETY Q 952” payable at Kollam

Alternatively, the tender document can be downloaded from the website www.nshospital.org

The downloaded tender document is to be submitted along with the tender fees of Rs.2000/- as mentioned above. The tenders submitted without the tender fees shall be rejected.

The bid along with the NSMIMS's terms and condition duly signed is to be submitted in a sealed envelope super scribing “Bid for Supply, Installation, Testing & Commissioning of Air-Conditioning Units at the Intensive Care units in Extension Block of NSMIMS.”

SIGNATURE OF THE TENDERER

The Tenderer should submit the following along with the bid

- i)
 - (1) List of similar works completed during the last three years in any Government organization or private company
 - (2) Copy of Registration of VAT and Service Tax
 - (3) Copy of PAN Number
 - (4) If the bid is from an authorized dealer/ distributor of any manufacturer, the dealer or distributor shall submit a valid proof for authorized dealership/ distributorship.
 - (5) Satisfactory completion certificate from the organization where the tenderer has successfully completed similar projects within last 3 years.
- (ii) Price Bid Form (Annexure-III) to be submitted by duly filling up the rates for each item of work indicated in the prescribed price bid form.
- (iii) Earnest Money Deposit (EMD) amount of Rs.50000/- by way of Demand Draft drawn in favour of Earnest Money Deposit (EMD) amount of Rs.50000/- by way of Demand Draft drawn in favour of "KOLLAM DISTRICT CO OPERATIVE HOSPITAL SOCIETY Q 952" payable at Kollam

Bid shall be submitted in a sealed cover super scribed "Supply, Installation, Testing & Commissioning of Air-Conditioning Units at Intensive Care units in Extension Block of NSMIMS and due date is upto 3.00 pm on 31/03/2020

This shall contain separately sealed envelopes super scribed as below:

- | | | |
|---------------|---|--|
| Envelope -I | - | EMD amount of Rs.50000/- by way of demand draft. |
| Envelope -II | - | TECHNO-COMMERCIAL PART |
| Envelope -III | - | PRICE PART |

- (i) Envelope -I of offer shall contain EMD as specified.
- (ii) Envelope -II of the offer shall contain all the pages of the bid document duly signed and stamped on each page, covering letter, bid form, documentary proof for eligibility, technical submissions, duly signed scope of work, deviations from the NSMIMS terms & conditions, if any and other details required forming part of the offer.
- (iii) Envelope -III of offer shall contain only the price schedule issued herewith, with all rates and amounts filled in and no conditions.

All the above three envelopes shall be enclosed in a single larger envelope super scribed as mentioned above.

The NSMIMS is not responsible for delay, loss or non- receipt of bids on time sent by post. Fax/Email/ Telegraphic offers shall not be accepted.

Last date for submission

- The last date for receipt of the bid at the our office is 31/03/2020, 3.00 P.M. The bid submitted beyond the above date and time shall not be considered for the bidding and shall be rejected out-rightly.
- The bid not submitted in the prescribed bid form shall be summarily rejected.

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Information to be furnished by the bidder along with their bid:

The bidders are requested to submit their bid form along with the following information (to be furnished in their letter head):

- i. Name of the Company :
- ii. Complete address of the Company :
- iii. Name of the authorized person :
- iv. Company's/Firm's Nature of business :
- v. Number of years of experience in similar works :

The bid submitted, without the prescribed EMD and/or the bid submitted without the NSMIMS's terms and conditions duly accepted, shall be summarily rejected. Similarly the bid submitted not in the prescribed bid forms of the NSMIMS, the bid document shall be summarily rejected. Any deviation from the NSMIMS terms & conditions shall be clearly brought in the bid.

Earnest Money Deposit (EMD):

- i. The bidder shall submit along with the bid an Earnest Money Deposit amount of Rs.50000/- in the form of Demand Draft from a nationalised Bank drawn in favour of "KOLLAM DISTRICT CO OPERATIVE HOSPITAL SOCIETY Q 952" payable at Kollam
- ii. No interest is payable on EMD amount by the NSMIMS. The EMD of unsuccessful bidders will be returned on finalization of successful bid and on placement of order to successful bidder.

OPENING OF BIDS

- i. Envelope-I & Envelope-II of Bids shall be opened at 4.00 P.M. on 31/03/2020 in the presence of attending Bidders/Authorized representatives at the Conference Hall, NSMIMS, Kollam
- ii. Envelope-III (Price part) of Techno Commercially qualified Bidders shall be opened at a later date with due information to them.

PLACE OF SUBMISSION

N.S Memorial Institute of Medical Sciences, Palathara, Thattamala P.O Kollam 691020.

Clarifications:

The bidders are requested to go through the 'Scope of Work' and 'Terms and conditions' of the bid before submitting their offer/bid. Any clarification, if required, may be obtained prior to filing of bid from the Office. No claim whatsoever on such account shall be entertained by the NSMIMS in any circumstances. The bidders shall physically inspect the work premises during working hours on working days and ensure the quantity and scope of the work before bidding.

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4. Variation of quantity :

- (i) The quantity (area) mentioned in the scope of work is approximate. The NSMIMS or any authorized person reserves the right at the time of award and executing of the contract to vary the quantity of the area specified in the scope of work without any change in the unit rate quoted and/or to cancel any work mentioned under the scope of work.
- (ii) The successful bidder to whom work is awarded shall be paid for the actual work completed and actual material utilised as per rate schedule furnished by the bidder.

5. Terms and conditions of Bid:

The terms and conditions of above bid are enclosed in the bid form, which is part and parcel of the bid document. The bidders should submit the bid form by duly accepting the NSMIMS's terms and conditions of the bid as stipulated in the bid form. The bid submitted without the acceptance of the NSMIMS's terms and conditions shall be summarily rejected.

6. No canvassing :

Canvassing in connection with the bids is prohibited and the bids submitted by the contractor who resort to canvassing are liable for rejection.

7. The NSMIMS reserves the right to accept or reject any or all bids in part or in total without assigning any reason whatsoever.

Enclosures:

- 1) Bid Form along with the NSMIMS's terms and conditions (Annexure-I) to be submitted by the bidders to the CGPDTM
- 2) Scope of Work (Annexure-II)- to be duly filled in and submitted by the bidders
- 3) Price Bid Form (Annexure-III) to be duly filled in and authenticated to be submitted by the bidders to the NSMIMS.

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Annexure-I BID FORM

(The bidders should submit their acceptance only in Bid Form for the acceptance of the NSMIMS's terms and conditions of Bid)

Name of the work: Supply, Installation, Testing & Commissioning of Air-Conditioning Units at the Intensive Care units in Extension Block of NSMIMS as per the scope of work attached.

NSMIMS's Terms and conditions of Bid:

1. Rate / Price

- i. The unit rate to be quoted shall be unit rate and shall remain firm without the price variation clause. The bidders should not claim for any price variation / escalation.
- ii. The bid submitted with a price variation/escalation clause will be treated as non-responsive and rejected.
- iii. Bid / rates quoted by the bidder shall remain valid for 120 days from the date of opening of tenders for the purpose of acceptance and award of work; validity beyond 120 days from the date of opening shall be by mutual consent. No price variation / cost escalation is accepted.
- iv. The rates quoted by the bidder should be inclusive of all the tax applicable, levies, excise duties, transit, insurance and freight and any other statutory levies etc.
- v. The Income Tax and any other taxes or charges as applicable will be deducted at source by the NSMIMS from the successful bidder while making the payment.
- vi. The price quoted by the bidder shall remain firm during the entire period of contract and shall not be subject to variation on any account.
- vii. The bidder should quote the rate as specified in the scope of work. The bids submitted other than in the specified scope of work at Annexure-II shall be summarily rejected.

2. Execution of work:

- i. **Time period of completion:** The successful bidder shall execute and complete the work as per specification/Scope of work mentioned in Annexure-II to the satisfaction of the Officer In-charge within a period of 6 weeks from the date of award of work.
- ii. The successful bidder to whom the work is awarded shall have to execute the work as per the work order AND the terms & conditions of this tender document.

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- iii. The NSMIMS is not responsible for the breakage/damage of any goods during the transit. In that case, it is the responsibility of the firm/contractor to whom the work has been awarded.
- iv. No extra cost shall be given for transportation; cost of labourers, insurance etc., as the rates quoted is all inclusive price.
- v. The contractor shall have to bring all the supporting materials for carrying out the above work.
- vi. The EMD will be released after a month from the date of submission of the performance guarantee.

3. Variation in quantity/ scope of work:

The quantity mentioned in the scope of work is approximate. The NSMIMS reserves the right at the time of award/execution of the contract to vary the quantity specified in the scope of work without any change in the unit rate. However, the payment will be made as per the actual material used and work done.

4. Security Deposit & Performance Guarantee

a) The Contractor shall submit a bank guarantee for 5% of the bill amount towards security deposit. The bank guarantee shall be from a nationalized bank and shall be valid for a period of 12 months and additionally 60 days from the date of completion of the work to the full satisfaction of the NSMIMS. The same shall be released by the NSMIMS after the expiry of the above period.

5. Liquidated damages

For delay in completion of work, the liquidated damage @ 1% of order value per week or part thereof subject to the maximum of 10% of the order value shall be deducted.

6. Extension of work completion time

Ordinarily no time extension shall be granted. However, under unforeseen site conditions, the contractor shall make proper representation to the office in-charge with reasons for the delay upon which the extension of completion time may be allowed by the office incharge.

7. Payment terms

A part payment upto 60% of the material value shall be paid upon receipt of the materials required for project at the site after due verification and authentication by the Officer Incharge against submission of the part bill by the contractor. Balance Payment shall be made against the final bill within 45 days from the date of completion of the works to the satisfaction of the NSMIMS/Officer In-charge in all respects and submission of completion certificate.

8. Completion Certificate

Within one month of the completion of the work the contractor shall furnish a certificate for such completion.

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9. Guarantee Period

Guarantee period for the air-conditioner units and other materials supplied should be 12 months from the date of completion of the installation and for the compressors should be 60 months from the date of completion of installation for poor workmanship, poor performance, and in case of deficiencies are found during guarantee period, the same shall be rectified or replaced free of cost by the Contractors at their own cost and risk.

10. Quality assurance:

The successful contractor should ensure the quality of material as per the requirement / discretion of the NSMIMS and quality standards as specified by Government agencies.

11. Right to accept or reject tender

- (i) The right of acceptance of tender will rest with the NSMIMS.
- (ii) The acceptance of the tender shall rest with the NSMIMS who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all of the tenders received without assigning any reason. Further, the NSMIMS reserves the right to accept the whole or any part of the tender and tenderer shall be bound to perform the same at the rates quoted. All the tenders in whom any of the prescribed conditions are not fulfilled or are incomplete in any respect shall be liable to be rejected.

12. Insurance

Contractor shall at his own expenses carry and maintain insurance with reputable Insurance Companies for : (i) Employees State Insurance Act, (ii) workmen's Compensation & Employer's Liability Insurance, (iii) Any other Insurance required under Law or Regulations or by Owner.

13. Safety Regulations

Contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions and shall comply with safety rules. The NSMIMS shall not be held responsible for any accidents that occur due to unsafe practice of the persons employed by the contractor to carry out the work.

14. Other Important conditions

Before submitting their bid proposals, bidders shall carefully examine the site of the work to familiarize themselves with the site conditions which exist regarding present work to be executed, materials to be matched, precautions required, working space available and other conditions necessary to the making of the intelligent bids.

All the above terms and conditions of the tender as mentioned above AND included in the tender document are duly accepted.

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SCOPE OF WORK

S. No	Description of Items	Unit	Qty
1	<p><u>AHUs:</u></p> <p>Supply, store, installation, testing & commissioning of Air Handling Units with thermal break profile with a minimum panel thickness of 40mm complete with chilled water cooling coil , Plug fan with VFD and its enclosure of IP 21 rating for indoor applications and IP 54 for outdoor applications, fan motor shall be of efficiency grade IE3, cleanable fabric filters of MERV 8 rating, fine filters MERV 13 rating (Both can be accommodated on a single frame) strip heaters of capacity in kW as mentioned below , condensate drain pan, coil piping connections, condensate drain connections, flexible duct connectors. The fan should deliver the design cfm at 50 Hz or lower. The electrical power wiring from the Isolator to the unit upto 3m shall be included in this scope. HVAC contractor should check the available ceiling spaces during the AHU selections/sizing, and shall strictly limit the AHU dimensions accordingly, as no changes whatsoever shall be acceptable. Hydronic and air balancing to be done as per the approved shop drawings at the time of commissioning. The AHUs should meet the sound levels of 55 dbA as back ground noise in rooms or in waiting areas. The system shall be complete in all respects of commissioning.</p>		
	EDGETECH, SYSTEM AIR, VTS,EUROCLIMA, CARRIER		
1.1	CEILING SUSPENDED TYPE		
1.1.1	7F-AHU-3.5 TR, 800 CFM, 8RD, 10mm ESP (ISOLATION ROOM)	Nos	1
1.1.2	7F-AHU-9 TR, 3600 CFM, 6RD, 12 mm ESP , 6kW strip heater, (SURGICAL ICU)	Nos	1
1.1.3	7F-AHU-7TR, 2800 CFM , 6RD, 15 mm ESP, 5kW strip heater (NEURO SURGERY ICU)	Nos	1
1.1.4	7F-AHU-2.5 TR ,600 CFM, 8RD, 10 mm ESP (ISOLATION ROOM)	Nos	1
1.1.5	7F-AHU-7TR, 2800 CFM ,6RD, 15 mm ESP, 5kW strip heater (NEURO TRAUMA ICU)	Nos	1
1.1.6	7F-AHU-8TR, 3200 CFM ,6RD, 15 mm ESP, 6kW strip heater(PAEDIATRIC ICU)	Nos	1
2	Supply, store, installation, testing & commissioning of MS structural work for AHU stacking / unit support. The system shall be complete in all respects for commissioning.	Kg	RO
3	Supply, store, installation, testing & commissioning of Inline Centrifugal Extract / Fresh air Fans shall be with direct driven circular section, suitable for ceiling suspension/mounting. The units shall be complete with flexible duct connections at inlet and outlet. The motor shall be IP 55 rated, protected by inbuilt thermal contact relay as protection against burn-out as specified and as indicated in the technical specifications and drawings for the following and the system shall be complete in all respects for commissioning.		
	OSTBERG, NUAIRE, NADI,SYSTEMAIR, JOHNSON CONTROLS,CRUGER		

3.1	1200 cfm ,60 mm ESP (For isolation rooms)	Nos	2
3.2	500 cfm, 20 mm ESP	Nos	1
3.3	300 cfm, 15 mm ESP	Nos	1
3.4	300cfm, 6 mm ESP	Nos	3
3.5	200 cfm, 6 mm ESP	Nos	3
4	Supply, store, installation, testing & commissioning of CHW pipework material . The piping should be complete with welded joints as metioned in the technical spec. including fittings, for venting and draining requirements, all supports including fittings at each expansion joint, test plugs, hangers, fixing all in line with the relevant specifications and drawings etc. The MS pipe will be of B class upto 150 mm and C class above 150 mm and as per the IS specifications 1239 and 3589 respectively. The thickness of B class pipes shall conform to IS 1239. For Class C pipes thickness of the pipes to be 6 mm. Necessary test points / provisions for fixing sensors for BMS integration to be provided .The system shall be complete in all respects for commissioning		
4.1	100mm Dia	R.m	RO
4.2	80 mm Dia (from the CHW raiser)	R.m	136
4.3	65mm Dia	R.m	RO
4.4	50mm Dia	R.m	10
4.5	40mm Dia	R.m	32
4.6	32mm Dia	R.m	24
4.7	25mm Dia	R.m	RO
4.8	20mm Dia	R.m	RO
5	Supply, store, installation, testing & commissioning of CHW pipe work insulation Closed Cell Elastomeric Rubber (Density 55-70 Kg/m3) of thickness 50 mm and suitably protected with glass cloth and 2 coats of vapor barrier. The system shall be complete in all respects for commissioning.		
	ARMACELL, K-FLEX, A-FLEX, Superion		
5.1	80 mm Dia	R.m	136
5.2	65mm Dia	R.m	RO
5.3	50mm Dia	R.m	10
5.4	40mm Dia	R.m	32
5.5	32mm Dia	R.m	24
5.6	25mm Dia	R.m	RO
6	Supply, store, installation, testing & commissioning of Isolation / Ball valves with extended stem and of diameters with Insulation as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning		
	ASTRAL, AJAY, AASHIRVAD		
6.1	32 mm Dia,	R.m	RO
6.2	25 mm Dia	R.m	46
7	Supply, store, installation, testing & commissioning of Isolation / Ball valves with extended stem and of diameters with Insulation as shown		

	and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning		
7.1	32 mm Dia	Nos	4
7.2	25 mm Dia	Nos	6
7.3	20 mm Dia	Nos	12
7.4	15 mm Dia	Nos	RO
8	Supply, store, installation, testing & commissioning of Isolation / butterfly valves with extended stem and of diameters with Insulation as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning		
	(KITZ, HONEYWELL, ADVANCE,AUDCO)		
8.1	80mm Dia	Nos	2
8.2	65mm Dia	Nos	RO
8.3	50mm Dia	Nos	2
8.4	40mm Dia	Nos	6
9	Supply, store, installation, testing & commissioning of Pressure Independent / Balancing cum flow control valves of diameters with Insulation as shown and as specified in the specifications and drawings. (For 20 mm consider on/off type and modulating for the remaining dia). All actuators shall be electromotoric and nonspring return type with BMS compatibility and 24V supply compatible.The system shall be complete in all respects for commissioning.		
	(DANFOSS,OVENTROP,BELLOREX,SIEMENS,BELIMO)		
9.1	80 mm Dia	Nos	RO
9.2	65mm Dia	Nos	RO
9.3	50mm Dia	Nos	1
9.4	40mm Dia	Nos	3
9.5	32mm Dia	Nos	2
9.6	25mm Dia	Nos	RO
9.7	20 mm dia	Nos	RO
10	Supply, store, installation, testing & commissioning of Manual Balancing Valves of suitable diameters with Insulation as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning.		
	(DANFOSS,OVENTROP,HONEYWELL,ADVANCE)		
10.1	80mm Dia	Nos	1
10.2	65 mm Dia	Nos	RO
10.3	50 mm Dia	Nos	RO
11	Supply, store, installation, testing & commissioning of Strainers of suitable diameters with Insulation as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning.		
	(HONEYWELL,SANT,EMERALD)		

11.1	50mm Dia	Nos	1
11.2	40mm Dia	Nos	3
11.3	32mm Dia	Nos	2
11.4	25mm Dia	Nos	RO
11.5	20 mm Dia	Nos	RO
11.6	15 mm Dia	Nos	RO
12	Supply, store, installation, testing & commissioning of Temperature Gauges on pipes of diameter as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning.		
12.1	50mm Dia	Nos	2
12.2	40mm Dia	Nos	6
12.3	32mm Dia	Nos	4
12.4	25mm Dia	Nos	RO
12.5	20 mm Dia	Nos	RO
12.6	15 mm Dia	Nos	RO
13	Supply, store, installation, testing & commissioning of Pressure Gauges on pipes of diameter as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning.		
13.1	50mm Dia	Nos	2
13.2	40mm Dia	Nos	6
13.3	32mm Dia	Nos	4
13.4	25mm Dia	Nos	RO
13.5	20 mm Dia	Nos	RO
13.6	15 mm Dia	Nos	RO
14	Supply, store, installation, testing & commissioning of Automatic Air release vents / Air Bottles on pipes of suitable diameters with Insulation as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning.		
14.1	100 mm Dia	Nos	RO
14.2	80 mm Dia	Nos	RO
14.3	65 mm Dia	Nos	RO
14.4	50mm Dia	Nos	1
14.5	40mm Dia	Nos	3
14.6	32mm Dia	Nos	2
14.7	25mm Dia	Nos	RO
14.8	20 mm Dia	Nos	RO
15	Supply, store, installation, testing & commissioning of Flanged flexible connectors / Union Couplings as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning.		
15.1	80 mm Dia	Nos	RO
15.2	65 mm Dia	Nos	RO
15.3	50mm Dia (Union Couplings)	Nos	RO

15.4	40mm Dia (Union Couplings)	Nos	RO
15.5	32mm Dia	Nos	RO
15.6	32mm Dia (Union Couplings)	Nos	RO
15.7	25mm Dia	Nos	RO
15.8	25mm Dia (Union Couplings)	Nos	RO
16	Supply, store, installation, testing & commissioning of GI duct work using 120 gsm GI sheets with all accessories, supports, jointing materials, flanges complete all inline with the DW 144 or SMACNA and in line with the specifications, drawings etc. Necessary test points / provisions for fixing sensors for BMS integration to be provided. The system shall be complete in all respects for commissioning.		
	JINDAL,TATA,SAIL		
16.1	Supply and Return ductwork complete (24 Gauge)	Sq.m	470
16.2	Supply and Return ductwork complete (22 Gauge)	Sq.m	98
16.3	Supply and Return ductwork complete (20 Gauge)	Sq.m	RO
16.4	Supply and Return ductwork complete (18 Gauge)	Sq.m	RO
17	Supply, store, installation, testing & commissioning of Aluminum duct work in Operation theatres of following Gauges as appropriate with all accessories, supports, jointing materials, flanges complete all inline with the DW 144 or SMACNA and in line with the specifications, drawings etc. The system shall be complete in all respects for commissioning.		
	JINDAL,TATA,SAIL		
17.1	Supply and Return ductwork complete (22 G)	Sq.m	RO
17.2	Supply and Return ductwork complete (20 G)	Sq.m	RO
17.3	Supply and Return ductwork complete (18 G)	Sq.m	RO
18	Supply, store, installation, testing & commissioning of Flexible duct work shall be provided for connections between duct work, plenum boxes of linear diffusers and as indicated in the drawings, complying with BS 476, dually insulated over all duct work. The system shall be complete in all respects for commissioning.		
18.1	300mm	R.m	RO
18.2	200mm	R.m	RO
18.3	150mm	R.m	RO
18.4	100mm	R.m	RO
19	Supply, store, installation, Testing and commissioning of Supply and return Duct insulation which is closed cell elastomeric nitrile foam rubber insulation class stuck to duct as per specifications. The thermal conductivity of the insulation material shall not exceed 0.035 W/m K at an average temperature of 30 degC. Density of nitrile rubber shall be 40-60 Kg/m ³ . The product shall have temperature range of -40 deg C to 105 deg C. The insulation material shall be fire rated for Class 0 and should have antimicrobial properties. Water vapor permeability shall not less than 0.024 per inch (2.48 x 10 ⁻¹⁴ Kg/m.s Pa) as per DIN 53122 part DIN 52615.The system shall be complete in all respects for commissioning. Required thicknesses as mentioned below		

	ARMACELL, K-FLEX, A-FLEX , Superlon		
19.1	Supply and Return ductwork complete running in Air-Conditioned space (Thickness-13 mm).	Sq.m	380
19.2	Supply and Return ductwork complete running in Non Air-Conditioned space.(Thickness-32mm). covered with 2 coats of vapor barrier	Sq.m	153
19.3	Supply and Return ductwork complete running in Plant rooms, External Roof and in Risers.(Thickness-25 mm) covered with aluminium sheets of 26 gauge.	Sq.m	35
20	Supply, store, installation, testing & commissioning of Acoustic Insulation for ducts and the return plenum using nitrile rubber, open cell foam, fibre free, minimum density of 140 kg/cu.m should have microban, as per ASTM G- 21, ASTM E-2180, thermal conductivity not exceeding 0.047 W/m.K at 20 C, conform to class 1 rating for flame spread in accordance to BS 476 part 7, to thickness of minimum of 10mm all inline with the specificatoin and to meet the design noise criteria. (ARMACELL, THERMOBREAK, K-FLEX, A-FLEX or equal). The system shall be complete in all respects for commissioning.		
	(ARMACELL, K-FLEX, A-FLEX ,Superlon)		
20.1	Acoustic liner 10mm	Sq.m	115
20.2	Acoustic liner 15mm	Sq.m	RO
21	Supply, store, installation, testing & commissioning of Under deck insulation 50 mm thick TF quality,24kg/m3 dense, EPS, Fixed by using rawl plugs GI washers etc. The system shall be complete in all respects for commissioning.	Sq.m	782
	(BEARDCEL,QUALITY THERMOPACK)		
22	Supply, store, installation, testing & commissioning of Grilles, Diffusers with plenums and Dampers as specified below. The system shall be complete in all respects for commissioning.		
	(COSMOS,SYSTEMAIR, ENTECH ADP)		
22.1	4 Way Supply Air Square Diffusers with opposed blade dampers	Sq.m	11
22.2	4 Way Return Air Square Diffusers	Sq.m	11
22.3	Supply Linear Bar Grill	Sq.m	10
22.4	Return Linear Bar Grill	Sq.m	RO
22.5	Exhaust air grill	Sq.m	0.5
23	Supply, store, installation, testing & commissioning of Volume Control dampers in accordance with DW 144 / Supply, store, installation, testing & commissioning of Volume Control dampers in accordance with DW 144 / 154 on ductwork air distribution and extract systems to regulate airflow and balancing the air systems to adequately balance whether or not, these are indicated on the drawings. The system shall be complete in all respects for commissioning.		
	(COSMOS,SYSTEMAIR)		
23.1	GI volume control damper	Sq.m	2
23.2	Aluminium volume control damper.	Sq.m	RO

24	Supply, store, installation, testing & commissioning of Fire dampers quick release fusible link, louver type, constructed out of 18 Gauge galvanized steel casing etc., in accordance with BS 476, DW 144, DW 151, DW 154 as appropriate and have Fire resistance rating equal to the Fire barrier it penetrates all inline with the specifications relevant statutory authority regulations on all Fire rated walls, Barriers, Floors whether indicated on the HVAC drawings or not.	Sq.m	RO
	(COSMOS, SYSTEMAIR, GREENHECK)		
25	Supply, store, installation, testing & commissioning of factory fabricated sound attenuators as per specification and drawings.	Cu. m	RO
26	Supply, store, installation, testing & commissioning of powder coated Louvers at all air intake locations and extract locations. The system shall be complete in all respects for commissioning.	Sq. m	2.5
27	Supply, store, installation, testing & commissioning of inline HEPA filters as required for isolation room exhaust as per the schedules, specifications and drawings, in line with the room air quality requirements. The system shall be complete in all respects for commissioning. (For isolation room exhaust)	Sq. m	2.5
	(AMENSCO,AAF,IMPEC,SPECTRUM)		
28	Supply, store, installation, testing & commissioning of Digital Thermostats with BMS compatibility for indoor units. The system shall be complete in all respects for commissioning.	Nos	6
	(BELIMO,JOHNSON CONTROLS, HONEYWELL)		
28.1	Supply, installation and commissioning of all necessary accessories for control cabling and control cabling between thermostat and PICV/ (All wiring shall be in Flexible PVC and rigid conduit).The system shall be complete in all respect for commissioning.	R.m	64
29	Supply, store, installation, testing & commissioning of Humidistat for indoor units. The system shall be complete No 4 0 - - in all respects for commissioning.	Nos	4
	(HONEYWELL, ANERGY, JOHNSON CONTROLS)		
29.1	Supply, installation and commissioning of all necessary accessories like contactors and relays for control cabling and control cabling between strip heaters and humidistat. (The same to be installed in the electrical starters supplied by the Electrical Contractor) (All wiring shall be in Flexible PVC and rigid conduit).The system shall be complete in all respect for commissioning.	R.m	60
30	Supply, store, installation, testing & commissioning of Differential pressure transmitters (devices, cabling, instrumentation) with 0.1 Pa resolution and will work in the range 0 to 35 Pa minimum . The rates of monitor and all other related accessories should be considered along with this line item and can not be charged separately. The system shall be complete in all respects for commissioning. For isolation rooms)	Nos.	2

	(HONEYWELL, JOHNSON CONTROLS,SIEMENS)		
31	Supply, store, installation, testing & commissioning of Portable dehumidifiers of extraction capacity 35 l/day. The system shall be complete in all respects for commissioning.	Nos	RO
	(NOVITA, BRY AIR, WHITEWESTING HOUSE)		

The contractor who is quoting the tender shall get themselves well versed with the site condition. The scope of work includes masonry work, fabrication, fixing and painting. The contractor should be well versed with all the activity and should have specialized team of workers for the same.

Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of constitution already existing (so far as in practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at own cost all materials, tools and plants, facilities for workers and all other services required for the execution of the work unless otherwise specifically provided for in the contract documents. Submission of tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specification of the work to be done and of conditions and rates at which stores, tools and plants etc. if any will be issued to him by the NSMIMS and local conditions and other factors having a bearing on the execution of the work. The tenderer must also study the neighbourhood, rules and regulations for building as well as the area where it is situated.

In case of items not covered by the above specification the work should be carried out as per the direction of Officer-in-charge.

Approval of the Officer-in-Charge shall be taken well in advance for the materials to be used in the work by the contractor.

All repairs and patch work shall be neatly carried out to match with the original finish and to the entire satisfaction of Officer-in-Charge.

The contractor has to make his own arrangement for stores and watch and ward and no extra claim for this will be entertained. The contractor has to make his own arrangement at his own cost for all the general and special T & P.

SIGNATURE OF THE TENDERER

Annexure – III PRICE BID

S. No	Description of Items	Unit	Qty	Rate	Amount
1	<p>AHUs:</p> <p>Supply, store, installation, testing & commissioning of Air Handling Units with thermal break profile with a minimum panel thickness of 40mm complete with chilled water cooling coil , Plug fan with VFD and its enclosure of IP 21 rating for indoor applications and IP 54 for outdoor applications, fan motor shall be of efficiency grade IE3, cleanable fabric filters of MERV 8 rating, fine filters MERV 13 rating (Both can be accommodated on a single frame) strip heaters of capacity in kW as mentioned below , condensate drain pan, coil piping connections, condensate drain connections, flexible duct connectors. The fan should deliver the design cfm at 50 Hz or lower. The electrical power wiring from the Isolator to the unit upto 3m shall be included in this scope. HVAC contractor should check the available ceiling spaces during the AHU selections/sizing, and shall strictly limit the AHU dimensions accordingly, as no changes whatsoever shall be acceptable. Hydronic and air balancing to be done as per the approved shop drawings at the time of commissioning. The AHUs should meet the sound levels of 55 dbA as back ground noise in rooms or in waiting areas. The system shall be complete in all respects of commissioning.</p>				
	EDGETECH, SYSTEM AIR, VTS,EUROCLIMA, CARRIER				
1.1	CEILING SUSPENDED TYPE				
1.1.1	7F-AHU-3.5 TR, 800 CFM, 8RD, 10mm ESP (ISOLATION ROOM)	Nos	1		
1.1.2	7F-AHU-9 TR, 3600 CFM, 6RD, 12 mm ESP , 6kW strip heater, (SURGICAL ICU)	Nos	1		
1.1.3	7F-AHU-7TR, 2800 CFM , 6RD, 15 mm ESP, 5kW strip heater (NEURO SURGERY ICU)	Nos	1		
1.1.4	7F-AHU-2.5 TR ,600 CFM, 8RD, 10 mm ESP (ISOLATION ROOM)	Nos	1		
1.1.5	7F-AHU-7TR, 2800 CFM ,6RD, 15 mm ESP, 5kW strip heater (NEURO TRAUMA ICU)	Nos	1		
1.1.6	7F-AHU-8TR, 3200 CFM ,6RD, 15 mm ESP, 6kW strip heater(PAEDIATRIC ICU)	Nos	1		
2	Supply, store, installation, testing & commissioning of MS structural work for AHU stacking / unit support. The system shall be complete in all respects for commissioning.	Kg	RO		
3	Supply, store, installation, testing & commissioning of Inline Centrifugal Extract / Fresh air Fans shall be with direct driven circular section, suitable for ceiling suspension/mounting. The units shall be complete with flexible duct connections at inlet and outlet. The motor shall be IP 55 rated, protected by inbuilt thermal contact relay as protection against burn-out as specified and as indicated in the technical specifications and drawings for the following and the system shall be complete in all respects for				

	commissioning.				
	OSTBERG, NUAIRE, NADI,SYSTEMAIR, JOHNSON CONTROLS,CRUGER				
3.1	1200 cfm ,60 mm ESP (For isolation rooms)	Nos	2		
3.2	500 cfm, 20 mm ESP	Nos	1		
3.3	300 cfm, 15 mm ESP	Nos	1		
3.4	300cfm, 6 mm ESP	Nos	3		
3.5	200 cfm, 6 mm ESP	Nos	3		
4	Supply, store, installation, testing & commissioning of CHW pipework material . The piping should be complete with welded joints as metioned in the technical spec. including fittings, for venting and draining requirements, all supports including fittings at each expansion joint, test plugs, hangers, fixing all in line with the relevant specifications and drawings etc. The MS pipe will be of B class upto 150 mm and C class above 150 mm and as per the IS specifications 1239 and 3589 respectively. The thickness of B class pipes shall conform to IS 1239. For Class C pipes thickness of the pipes to be 6 mm. Necessary test points / provisions for fixing sensors for BMS integration to be provided .The system shall be complete in all respects for commissioning				
4.1	100mm Dia	R.m	RO		
4.2	80 mm Dia (from the CHW raiser)	R.m	136		
4.3	65mm Dia	R.m	RO		
4.4	50mm Dia	R.m	10		
4.5	40mm Dia	R.m	32		
4.6	32mm Dia	R.m	24		
4.7	25mm Dia	R.m	RO		
4.8	20mm Dia	R.m	RO		
5	Supply, store, installation, testing & commissioning of CHW pipe work insulation Closed Cell Elastomeric Rubber (Density 55-70 Kg/m3) of thickness 50 mm and suitably protected with glass cloth and 2 coats of vapor barrier. The system shall be complete in all respects for commissioning.				
	ARMACELL, K-FLEX, A-FLEX, Superion				
5.1	80 mm Dia	R.m	136		
5.2	65mm Dia	R.m	RO		
5.3	50mm Dia	R.m	10		
5.4	40mm Dia	R.m	32		
5.5	32mm Dia	R.m	24		
5.6	25mm Dia	R.m	RO		
6	Supply, store, installation, testing & commissioning of Isolation / Ball valves with extended stem and of diameters with Insulation as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning				
	ASTRAL, AJAY, AASHIRVAD				
6.1	32 mm Dia,	R.m	RO		
6.2	25 mm Dia	R.m	46		
7	Supply, store, installation, testing & commissioning of Isolation / Ball valves with extended stem and of diameters with Insulation as shown and as specified in the specifications and drawings. The system shall be				

	complete in all respects for commissioning				
7.1	32 mm Dia	Nos	4		
7.2	25 mm Dia	Nos	6		
7.3	20 mm Dia	Nos	12		
7.4	15 mm Dia	Nos	RO		
8	Supply, store, installation, testing & commissioning of Isolation / butterfly valves with extended stem and of diameters with Insulation as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning				
	(KITZ, HONEYWELL, ADVANCE,AUDCO)				
8.1	80mm Dia	Nos	2		
8.2	65mm Dia	Nos	RO		
8.3	50mm Dia	Nos	2		
8.4	40mm Dia	Nos	6		
9	Supply, store, installation, testing & commissioning of Pressure Independent / Balancing cum flow control valves of diameters with Insulation as shown and as specified in the specifications and drawings. (For 20 mm consider on/off type and modulating for the remaining dia). All actuators shall be electromotoric and nonspring return type with BMS compatibility and 24V supply compatible.The system shall be complete in all respects for commissioning.				
	(DANFOSS,OVENTROP,BELLOREX,SIEMENS,BELIMO)				
9.1	80 mm Dia	Nos	RO		
9.2	65mm Dia	Nos	RO		
9.3	50mm Dia	Nos	1		
9.4	40mm Dia	Nos	3		
9.5	32mm Dia	Nos	2		
9.6	25mm Dia	Nos	RO		
9.7	20 mm dia	Nos	RO		
10	Supply, store, installation, testing & commissioning of Manual Balancing Valves of suitable diameters with Insulation as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning.				
	(DANFOSS,OVENTROP,HONEYWELL,ADVANCE)				
10.1	80mm Dia	Nos	1		
10.2	65 mm Dia	Nos	RO		
10.3	50 mm Dia	Nos	RO		
11	Supply, store, installation, testing & commissioning of Strainers of suitable diameters with Insulation as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning.				
	(HONEYWELL,SANT,EMERALD)				
11.1	50mm Dia	Nos	1		
11.2	40mm Dia	Nos	3		
11.3	32mm Dia	Nos	2		
11.4	25mm Dia	Nos	RO		
11.5	20 mm Dia	Nos	RO		
11.6	15 mm Dia	Nos	RO		
12	Supply, store, installation, testing & commissioning of Temperature Gauges on pipes of diameter as shown and as				

	specified in the specifications and drawings. The system shall be complete in all respects for commissioning.				
12.1	50mm Dia	Nos	2		
12.2	40mm Dia	Nos	6		
12.3	32mm Dia	Nos	4		
12.4	25mm Dia	Nos	RO		
12.5	20 mm Dia	Nos	RO		
12.6	15 mm Dia	Nos	RO		
13	Supply, store, installation, testing & commissioning of Pressure Gauges on pipes of diameter as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning.				
13.1	50mm Dia	Nos	2		
13.2	40mm Dia	Nos	6		
13.3	32mm Dia	Nos	4		
13.4	25mm Dia	Nos	RO		
13.5	20 mm Dia	Nos	RO		
13.6	15 mm Dia	Nos	RO		
14	Supply, store, installation, testing & commissioning of Automatic Air release vents / Air Bottles on pipes of suitable diameters with Insulation as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning.				
14.1	100 mm Dia	Nos	RO		
14.2	80 mm Dia	Nos	RO		
14.3	65 mm Dia	Nos	RO		
14.4	50mm Dia	Nos	1		
14.5	40mm Dia	Nos	3		
14.6	32mm Dia	Nos	2		
14.7	25mm Dia	Nos	RO		
14.8	20 mm Dia	Nos	RO		
15	Supply, store, installation, testing & commissioning of Flanged flexible connectors / Union Couplings as shown and as specified in the specifications and drawings. The system shall be complete in all respects for commissioning.				
15.1	80 mm Dia	Nos	RO		
15.2	65 mm Dia	Nos	RO		
15.3	50mm Dia (Union Couplings)	Nos	RO		
15.4	40mm Dia (Union Couplings)	Nos	RO		
15.5	32mm Dia	Nos	RO		
15.6	32mm Dia (Union Couplings)	Nos	RO		
15.7	25mm Dia	Nos	RO		
15.8	25mm Dia (Union Couplings)	Nos	RO		
16	Supply, store, installation, testing & commissioning of GI duct work using 120 gsm GI sheets with all accessories, supports, jointing materials, flanges complete all inline with the DW 144 or SMACNA and in line with the specifications, drawings etc. Necessary test points / provisions for fixing sensors for BMS integration to be provided. The system shall be complete in all respects for commissioning.				
	JINDAL,TATA,SAIL				
16.1	Supply and Return ductwork complete (24 Gauge)	Sq.m	470		
16.2	Supply and Return ductwork complete (22 Gauge)	Sq.m	98		
16.3	Supply and Return ductwork complete (20 Gauge)	Sq.m	RO		

16.4	Supply and Return ductwork complete (18 Gauge)	Sq.m	RO		
17	Supply, store, installation, testing & commissioning of Aluminum duct work in Operation theatres of following Gauges as appropriate with all accessories, supports, jointing materials, flanges complete all inline with the DW 144 or SMACNA and in line with the specifications, drawings etc. The system shall be complete in all respects for commissioning.				
	JINDAL,TATA,SAIL				
17.1	Supply and Return ductwork complete (22 G)	Sq.m	RO		
17.2	Supply and Return ductwork complete (20 G)	Sq.m	RO		
17.3	Supply and Return ductwork complete (18 G)	Sq.m	RO		
18	Supply, store, installation, testing & commissioning of Flexible duct work shall be provided for connections between duct work, plenum boxes of linear diffusers and as indicated in the drawings, complying with BS 476, dually insulated over all duct work. The system shall be complete in all respects for commissioning.				
18.1	300mm	R.m	RO		
18.2	200mm	R.m	RO		
18.3	150mm	R.m	RO		
18.4	100mm	R.m	RO		
19	Supply, store, installation, Testing and commissioning of Supply and return Duct insulation which is closed cell elastomeric nitrile foam rubber insulation class stuck to duct as per specifications. The thermal conductivity of the insulation material shall not exceed 0.035 W/m K at an average temperature of of 30 degC. Density of nitrile rubber shall be 40-60 Kg/m ³ . The product shall have temperature range of -40 deg C to 105 deg C. The insulation material shall be fire rated for Class O and should have antimicrobial properties. Water vapor permeability shall not less then 0.024 per inch (2.48 x 10 ⁻¹⁴ Kg/m.s Pa) as per DIN 53122 part DIN 52615.The system shall be complete in all respects for commissioning. Required thicknesses as mentioned below				
	ARMACELL, K-FLEX, A-FLEX , Superlon				
19.1	Supply and Return ductwork complete running in Air-Conditioned space (Thickness-13 mm).	Sq.m	380		
19.2	Supply and Return ductwork complete running in Non Air-Conditioned space.(Thickness-32mm). covered with 2 coats of vapor barrier	Sq.m	153		
19.3	Supply and Return ductwork complete running in Plant rooms, External Roof and in Risers.(Thickness-25 mm) covered with aluminium sheets of 26 gauge.	Sq.m	35		
20	Supply, store, installation, testing & commissioning of Acoustic Insulation for ducts and the return plenum using nitrile rubber, open cell foam, fibre free, minimum density of 140 kg/cu.m should have microban, as per ASTM G- 21, ASTM E-2180, thermal conductivity not exceeding 0.047 W/m.K at 20 C, conform to class 1 rating for flame spread in accordance to BS 476 part 7, to thickness of minimum of 10mm all inline with the specificatoin and to meet the design noise criteria. (ARMACELL, THERMOBREAK, K-FLEX, A-FLEX or equal). The system shall be complete in all				

	respects for commissioning.				
	(ARMACELL, K-FLEX, A-FLEX, Superlon)				
20.1	Acoustic liner 10mm	Sq.m	115		
20.2	Acoustic liner 15mm	Sq.m	RO		
21	Supply, store, installation, testing & commissioning of Under deck insulation 50 mm thick TF quality, 24kg/m ³ dense, EPS, Fixed by using rawl plugs GI washers etc. The system shall be complete in all respects for commissioning.	Sq.m	782		
	(BEARDECEL, QUALITY THERMOPACK)				
22	Supply, store, installation, testing & commissioning of Grilles, Diffusers with plenums and Dampers as specified below. The system shall be complete in all respects for commissioning.				
	(COSMOS, SYSTEMAIR, ENTECH ADP)				
22.1	4 Way Supply Air Square Diffusers with opposed blade dampers	Sq.m	11		
22.2	4 Way Return Air Square Diffusers	Sq.m	11		
22.3	Supply Linear Bar Grill	Sq.m	10		
22.4	Return Linear Bar Grill	Sq.m	RO		
22.5	Exhaust air grill	Sq.m	0.5		
23	Supply, store, installation, testing & commissioning of Volume Control dampers in accordance with DW 144 / Supply, store, installation, testing & commissioning of Volume Control dampers in accordance with DW 144 / 154 on ductwork air distribution and extract systems to regulate airflow and balancing the air systems to adequately balance whether or not, these are indicated on the drawings. The system shall be complete in all respects for commissioning.				
	(COSMOS, SYSTEMAIR)				
23.1	GI volume control damper	Sq.m	2		
23.2	Aluminium volume control damper.	Sq.m	RO		
24	Supply, store, installation, testing & commissioning of Fire dampers quick release fusible link, louver type, constructed out of 18 Gauge galvanized steel casing etc., in accordance with BS 476, DW 144, DW 151, DW 154 as appropriate and have Fire resistance rating equal to the Fire barrier it penetrates all inline with the specifications relevant statutory authority regulations on all Fire rated walls, Barriers, Floors whether indicated on the HVAC drawings or not.	Sq.m	RO		
	(COSMOS, SYSTEMAIR, GREENHECK)				
25	Supply, store, installation, testing & commissioning of factory fabricated sound attenuators as per specification and drawings.	Cu. m	RO		
26	Supply, store, installation, testing & commissioning of powder coated Louvers at all air intake locations and extract locations. The system shall be complete in all respects for commissioning.	Sq. m	2.5		
27	Supply, store, installation, testing & commissioning of inline HEPA filters as required for isolation room exhaust as per the schedules, specifications and drawings, in line with the	Sq. m	2.5		

	room air quality requirements. The system shall be complete in all respects for commissioning. (For isolation room exhaust)				
	(AMENSCO,AAF,IMPEC,SPECTRUM)				
28	Supply, store, installation, testing & commissioning of Digital Thermostats with BMS compatibility for indoor units. The system shall be complete in all respects for commissioning.	Nos	6		
	(BELIMO,JOHNSON CONTROLS, HONEYWELL)				
28.1	Supply, installation and commissioning of all necessary accessories for control cabling and control cabling between thermostat and PICV/ (All wiring shall be in Flexible PVC and rigid conduit).The system shall be complete in all respect for commissioning.	R.m	64		
29	Supply, store, installation, testing & commissioning of Humidistat for indoor units. The system shall be complete No 4 0 - - in all respects for commissioning.	Nos	4		
	(HONEYWELL, ANERGY, JOHNSON CONTROLS)				
29.1	Supply , installation and commissioning of all necessary accessories like contactors and relays for control cabling and control cabling between strip heaters and humidistat. (The same to be installed in the electrical starters supplied by the Electrical Contractor) (All wiring shall be in Flexible PVC and rigid conduit).The system shall be complete in all respect for commissioning.	R.m	60		
30	Supply, store, installation, testing & commissioning of Differential pressure transmitters (devices, cabling, instrumentation) with 0.1 Pa resolution and will work in the range 0 to 35 Pa minimum . The rates of monitor and all other related accessories should be considered along with this line item and can not be charged separately. The system shall be complete in all respects for commissioning. For isolation rooms)	Nos.	2		
	(HONEYWELL, JOHNSON CONTROLS,SIEMENS)				
31	Supply, store, installation, testing & commissioning of Portable dehumidifiers of extraction capacity 35 l/day. The system shall be complete in all respects for commissioning.	Nos	RO		
	(NOVITA, BRY AIR, WHITEWESTING HOUSE)				
	TOTAL				

(Taxes and other duties shall be levied as per Govt., norms) The price quoted above shall be inclusive of all taxes and duties)

SIGNATURE OF THE TENDERER

SEVENTH FLOOR - ICU'S PLAN



