TENDER NOTICE

(Comprehensive Annual Maintenance & Operation
of HVAC System

(4x275 TR Water cooled Daikin packaged Screw Type Water chiller
machines)

Indian Institute of Information Technology, Allahabad)



भारतीय सूचना प्रौद्योगिकी संस्थान, इलाहाबाद Indian Institute of Information Technology, Allahabad

An Institute of National Importance by Act of Parliament Deoghat, Jhalwa, Allahabad-211012 (U.P.) INDIA

Ph.: 0532-2922025, 2922067, Fax: 0532-2430006, Web: www.iiita.ac.in, E-mail: contact@iiita.ac.in

Ref. No.: IIIT-A/DR(S&P)/235/2016 Date: 18th May, 2016

Tender Notice

Sealed tenders are invited under two bid systems for the Comprehensive Annual Maintenance & Day to Day Operation of HVAC System (4x275TR Water cooled Daikin packaged Screw Type Water chiller machines) Installed at Indian Institute of Information Technology- Allahabad

The detailed specifications and terms & conditions are given in Annexure I, II, III & IV. The "Technical and Commercial Bids" in two separate sealed envelopes may be sent to the Deputy Registrar (S&P), IIIT-Allahabad upto 08/06/2016 at 12:00 Noon. Tender duly sealed may also be dropped in the tender box placed in the office of the Deputy Registrar (S&P). The technical bid received in prescribed proforma will be opened in the presence of the tenderer, or authorized representatives interested to be present, on 08/06/2016 at 04:00 P.M. The Financial bids of technically qualified tenders will only be opened after technical evaluation by the Technical Committee. The representatives should bring the authorization letter from their authorized signatory for attending the tender opening. The tender document may be obtained on payment of Rs.1500/- (One Thousand Five Hundred Only) as tender processing fee from the counter at Jhalwa Campus, Allahabad. It can also be downloaded from the Institute web site www.iiita.ac.in and be submitted along with Rs.1500/- of tender processing fee in form of DD.

(Dr. Seema Shah) Deputy Registrar (S&P)

Copy to:

Hon'ble Director for kind information.

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ELIGIBILITY CRITERIA:

- i) Prospective contractors shall have well experienced in similar type of works and only OEM or an authorized vender* by OEM registered with Central/State/PSU/Govt. Societies or worked with MNC's in multi Storied office complex/ well known organization.
- ii) Average Annual financial turnover during the last three years ending 31st March of the previous financial year, should be not less than Rs. 3.0crores.
- iii) Experience of having successfully completed similar works 10 Nos. for operation and maintenance during last 5 years ending last day of month.
- * Authorized vendor by OEM should submit the certificate of authorization. If the certificate is not attached the vendor will be disqualified.

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Annexure-I

Technical Bid

(On letter head of the Firm & in a separately sealed envelope)

PROFORMA FOR APPLICATION

1. Name of the firm:
2. Address of the firm:
3. Phone Number (With Code):
4. Proprietor's name:
6. Proprietor's Phone No. :
7. Details of the firm:-
(a)Date from which the firm is operating:
(b)Turnover of the firm during: -FY 2013-14 (Rs.)
(Please attach documentary evidence)
(c) PAN No. :
(d) TIN No. :
(e) Service Tax Registration No. (If any):

- 8. <u>Tender Processing Fee:</u> An amount of Rs. 1,500/- (Rs.O ne Thousand Five Hundred Only) of tender (non refundable) is to be paid cash or DD payable in favour of **Indian Institute of Information Technology Allahabad** payable at **Allahabad**.
- 9. E.M.D.: The tenders should be accompanied in a form of a **Demand Draft/FDR** in favour of **Indian Institute of Information Technology Allahabad** payable at **Allahabad** (Any bid without EMD will not be considered). EMD should be enclosed with the Technical Bid document in a separate envelop. The EMD will be returned to the unsuccessful bidders within 15 days and to the successful bidders after submission of full Security Deposit in the shape of FDR or Bank Guarantee.

Amount of EMD as below:

Sl. No	Description	EMD Amount	DD No./FDR Date
1.	Comprehensive Annual Maintenance contract & day to day operation for HVAC System (4x275TR Water cooled Diakin packaged Screw Type Water chiller machines) Installed at IIIT-A	Rs.1,00,000/-	

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Annexure-II

Financial Bid [On letter head of the Firm & in a separately sealed envelope]

Sl. No.			Section Committee and Committe		Section Committee and Committe		Service service in a mail of the service of the ser		Companies and the second and the state of the second and the secon		Companies and the second process of the second process of the second second second second second second second		Companies and the second process of the second seco		Companies and the second process of the second seco		And the control of th		Description of items		And the control of th		Qty.	Unit Rate	Amount (Rs.)						
Part - A	Charges for Comprehensive Annual Maintenance Contract for HVAC System (Water cooled Daikin packaged Screw Type Water chiller machines, capacity - 275 TR, Water inlet / outlet temperature - 12.22°C / 6.7°C, chilled water Circulation rate - 2508 LPM (nominal) and condenser water inlet / outlet temperature - 32.2°C / 36.4°C, Circulation rate - 3970 LPM (nominal), refrigerant 134a centrifugal type and R134a screw type & reciprocating type machine, make Daikin, Location - Basement of CC-III, Connected to 6th stories Building CC-III and Auditorium Building) Installed at Indian Institute of Information Technology- Allahabad Details list of equipment enclosed as Annexure -A	Sets	4.0																												
Part- B	Charges for day to day Operation of HVAC System for Daikin Make Central Air Conditioning System detailed in Part-A in two shifts.	YAZ		Monthly																											

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ANNEXURE -A

<u>List of equipments of HVAC System of Water Cooled 4 x 275TR of CC-III Building at IIITA</u>

Sl. No.	Description of Equipment	Unit	Quantity
1.	Water chiller machines Spec : Water cooled packaged Servey Torre Webs a little and in	Sets	4.0
a	Spec.: Water cooled packaged Screw Type Water chiller machines each having a capacity of 275 TR at chilled Water inlet / outlet temperature of 12.22°C / 6.7°C with chilled water circulation rate of 2508 LPM (nominal) and condenser water inlet / outlet temperature of 32.2°C / 36.4°C with circulation rate not less than 3970 LPM (nominal), suitable for operation on refrigerant 134a for centrifugal type and R134a for screw type & reciprocating type machine each comprising of the following complete as per specification and as required Multiple screw type compressor semi Hermetic / fully hermetic		
	complete with automatic capacity control ,safety switches, speed increasing gears, forced feed lubrication system – 1 No.		
b	Induction motor with class 'B' insulation, 415±10% volts, 50 Hz A.C. supply – 1 No.		
С	Solid state starter suitable for compressor motor, The starter enclosure will be NEMA 1 and will be of modular construction with complete access to all parts without disturbing the refrigerant circuit. Auxiliary 1-1/2 KVA transformer, Digital Elapsed Time Meter, Power fault Protection, Electrical lugs, 3-phase digital ammeter and digital voltmeter readout via control panel, KW Meter, KWh Meter- 1No		
d	Lubrication Device consisting of automatic electric oil pump, oil cooler, head tank, oil strainer, automatic pressure regulating valve, oil healer, oil heater thermal switch etc. as per specifications 1.0 Set		
е	Matching shell and tube water cooled condenser with marine water boxes of M.S. shell and integrally finned copper tubes -1 No.		
f	Matching shell and tube flooded type evaporator with marine water boxes for screw type units of M.S shell and integrally finned copper tubes with all accessories like Refrigerant piping fittings, valve and accessories to inter connect compressor, condenser, chiller and expansion valve. – 1 No.		
g	Microprocessor based control panel complete with accessories as per specifications & with Hard Wired Card for 5 PTS BMS Integration with all accessories like Refrigerant line accessories comprising of safety valves, angle valve, liquid line indications, liquid level control etc. – 1 Set.		
h	Dial Type pressure gauge – 4 Nos.		
i	Dial Type Thermometer – 4 Nos.		
2	Primary Chilled Water Pumps Spec.: Split casing chilled water Circulating pump set capable of delivering 2508 LPM of water against a head of 12 Meters. Each pump shall comprise of following as required as per specifications	Sets	4.0

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a	Split casing type pump – 1 No.		
b	HP, SPDP squirrel cage induction motor with class "F" insulation,	- 1	
D	1450 rpm synchronous speed, operating on 415 ±10% volt, 3		
	phases, 50 Hz A.C supply – 1 no		
С	Polystyrene (T.F quality) insulation of 50 mm thick duly clamped		
	between aluminum sheets of 0.5 mm thickness and properly		
	clamped to pump in two semicircular sections as per specifications.		
d	150 mm dia. Dial type pressure gauges – 2 Nos.		
u	Note: One set of pump as stand by		
3	Secondary Chilled water pumps		
	Spec.: Split casing chilled water circulating pump set, Head capable		
	of delivering 7740 and 2465 LPM of water against a head of 18		
	meters. Each nump shall comprise of following and if satisfy		
2	meters. Each pump shall comprise of following specifications		
a b	Split casing type pump – 1 No		
D	Suitable HP, SPDP squirrel edge induction motor with class "F"		
	insulation, 1500 rpm synchronous speed, operating on 415 ± 10%		
С	volts, 3 phases, 50 Hz A.C supply – 1 No with complete accessories.		
3A	150 mm dia. Dial type pressure gauges – 2 Nos. Computer Centre – III Building:		
a	Chilled water pump of capacity 7740 LPM (Suitable H.P)		2 2
a	18 M head (1 standby)	Nos.	2.0
3B	Auditorium Building:		
а	Chilled water pump of capacity 2465 IPM (Suitable H.P)		
а	at 18 M head (I stand by)	Nos.	2.0
4	Control panel with YFDs, 1 DPTs and PLC with duly	Cata	2.0
- 55	downloaded software for Secondary chilled water pump of	Sets.	2.0
	capacity 7740 IPM & 2465 LPM each		
5	Condenser water Pumps	Nos.	4.0
	Spec.: Monoblock/split casing condenser water circulating pump set	1,00	1.0
	capable of delivering 3970 LPI'-l of water against a head of 30		
	meters. Each pump shall comprise of following specifications.		
а	Split casing type pump – 1No.		
b	Suitable HP, SPDP squirrel cage induction motor		
	with class "F" insulation, 1500 rpm synchronous speed,		
	operating on' 415±10% volts, 3 phase, 50 Hz A.C supply – 1No.		
С	150 mm dia. Dial type pressure gauges - 2Nos.		
	Note: One set of pump shall be used as stand by.		
6	FRP Cooling Tower	Nos.	4.0
а	Spec.: FRP Cooling tower of 997920 Kcal/hr heat rejection capacity	1103.	4.0
	with FRP water basin, PVC fillings with integral louvers and drift		
	eliminators complete 330 TR capacity @ 28.4 Deg. C WB (Ambient)		
	Flow Rate: 4740 LP1'1, Cooling Tower 'IN' Temp. : 36.4°C, Cooling		
	Tower 'OUT. Temp.:32.2°C,		
7	Horizontal Type Air Handling Units		
	Spec.: Factory built, floor mounted horizontal type, chilled water		
	Double skin type AHU made of 25 mm thick panels consisting of G.I		
	casing of thickness 0.8 mm outside layer and 0.8 mm inside layer		
	with polyurethane foam (PUF) insulation of density synthetic type		
	to a substitution of delibity synthetic type		
	air pre miters, belt drive package with TEFC drive motor of 415		

and

steel drain nan thermometers and pressure gauges at inlet and		
outlet of the coil necessary vibration isolation arrangement at		
complete as per specifications and drawings of as follows:		
2000 dm with '1 Powe Coil Cooling 4 aget. Coil Area 1 1474		
(static Pressure = 40 MM)	Nos.	2.0
2000 of whith 'I Down Coil Cooling Coil A Colling		
Soud chill with 1 Rows Coll Cooling 6 Sqft. Coll Area, 2.2 KW motor	Nos.	2.0
4500 dill With .1 Rows Coil Cooling 9 Sqft. Coil Area, 2.2 KW motor	Nos.	2.0
10800 cm with 4 Rows Coil Cooling 22 Sqft. Coil Area, 5.5 KW	Nos.	1.0
motor (Sectional type AHU) (static Pressure = 40 MM).		
11200 cm with 4 Rows Coil Cooling 22 Sqft. Coil Area,	No.	1.0
5.5 KW motor (Sectional type AHU) (static Pressure = 40MM)		
12000 cm with 4 Rows Coil Cooling 24 Sqft. Coil Area,	No.	1.0
5.5 KW motor(Sectional type AHU)(static Pressure= 40MM)		
12800 cfm with 1 Rows Coil Cooling 26 Sqft. Coil Area,	No.	1.0
5.5 KW motor (Sectional type AHU) (static Pressure =40 MM)		
13600 cfm with 4 Rows Coil Cooling 27.2 Sqft. Call Area, 7.5 KW	No.	1.0
motor (Sectional type AHU) (static Pressure = 40 MM)		
14000 cfm with 4 Rows Coil Cooling 28 Sqft. Coil Area,7.5 KW	Nos.	3.0
motor (Sectional type AHU)(static Pressure = 40 MM)		
15000 cfm with 4 Rows Coil Cooling 30 Sqft, Coil Area,	Nos.	5.0
7.5 KW motor (Sectional type AHU) (static Pressure = 40 MM).		
16000 cfm with 4 Rows Coil Cooling 32 Sqft. Coil Area,	Nos.	4.0
7.S KW motor (Sectional type AHU) (static Pressure = 40 MM).		
19400 cfm with -I Rows Coil Cooling 38.8 Sqft. Coil Area, 9.3 KW	Nos.	3.0
motor (Sectional type AHU) (static Pressure = 40 MM).		
20000 'cfrn with 6 Rows Coil Cooling 40 Sqft. Coil Area,9.3 KW	Nos.	1.0
motor (Sectional type AHU) (static Pressure = 40MM)		
Unitary Type Air Handling Units		
(Ceiling suspended)		
Spec.: Factory built, ceiling suspended type, chilled water Double		
skin type AHU made of 25 mm thick panels $415 \pm 10\%$ volts, AC 3		
Phase system etc complete.		
4000 cfm with 4 Rows Coil Cooling 8 Sqft. Coil Area, 2.2 KW motor.	Nos.	5.0
(static Pressure = 40 MM)		
5000 cfm with 4 Rows Coil Cooling) 10 Sqft. Coil Area, 2.2 KW	Nos.	1.0
motor. (Static Pressure = 40 MM).		2.0
AHU's Controls/Dynamic Balancing Valves		
Complete controls panel for AHUs comprising of Electronic self		
balancing, pressure independent type dynamic balancing valve		
with integrated 2 way modulating control valves in a single body.		
Water flow rate 12-18 USGPM	Nos	4.0
	7.00	50000
		8.0
		2.0
	17.00	2.0
		6.0
Water flow rate 101-120 USGPM	Nos.	4.0
Modulating Thermostats	Nos.	36.0
	Spec.: Factory built, ceiling suspended type, chilled water Double skin type AHU made of 25 mm thick panels 415 ± 10% volts, AC 3 Phase system etc complete. 4000 cfm with 4 Rows Coil Cooling 8 Sqft. Coil Area, 2.2 KW motor. (static Pressure = 40 MM) 5000 cfm with 4 Rows Coil Cooling) 10 Sqft. Coil Area, 2.2 KW motor. (Static Pressure = 40 MM). AHU's Controls/Dynamic Balancing Valves Complete controls panel for AHUs comprising of Electronic, self balancing, pressure independent type dynamic balancing valve with integrated 2 way modulating control valves in a single body. Water flow rate 12-18 USGPM Water flow rate 24-30 USGPM Water flow rate 72-80 USGPM Water flow rate 81-100 USGPM	outlet of the coil, necessary vibration isolation arrangement etc. complete as per specifications - and drawings of as follows: 2000 dm with 'I Rows Coil Cooling 4 sqft. Coil Area, 1.1KW motor (static Pressure = 40 MM). 3000 cfm with 'I Rows Coil Cooling 6 Sqft. Coil Area, 2.2 KW motor (static Pressure = 40 MM). 4500 dill with 'I Rows Coil Cooling 9 Sqft. Coil Area, 2.2 KW motor (static Pressure = 40 I'11"1). 10800 cfm with 4 Rows Coil Cooling 22 Sqft. Coil Area, 5.5 KW motor (Sectional type AHU) (static Pressure = 40 MM). 11200 cfm with 4 Rows Coil Cooling 22 Sqft. Coil Area, 5.5 KW motor (Sectional type AHU) (static Pressure = 40 MM). 12000 cfm with 4 Rows Coil Cooling 24 Sqft. Coil Area, 5.5 KW motor (Sectional type AHU) (static Pressure = 40 MM) 12800 cfm with 1 Rows Coil Cooling 24 Sqft. Coil Area, 5.5 KW motor (Sectional type AHU) (static Pressure = 40 MM) 13600 cfm with 1 Rows Coil Cooling 27.2 Sqft. Coil Area, 7.5 KW motor (Sectional type AHU) (static Pressure = 40 MM) 13600 cfm with 4 Rows Coil Cooling 27.2 Sqft. Coil Area, 7.5 KW motor (Sectional type AHU) (static Pressure = 40 MM) 14000 cfm with 4 Rows Coil Cooling 30 Sqft, Coil Area, 7.5 KW motor (Sectional type AHU) (static Pressure = 40 MM) 15000 cfm with 4 Rows Coil Cooling 30 Sqft, Coil Area, 7.5 KW motor (Sectional type AHU) (static Pressure = 40 MM). 19400 cfm with 4 Rows Coil Cooling 32 Sqft. Coil Area, 9.3 KW motor (Sectional type AHU) (static Pressure = 40 MM). 19400 cfm with 4 Rows Coil Cooling 38 Sqft. Coil Area, 9.3 KW motor (Sectional type AHU) (static Pressure = 40 MM). 19400 cfm with 4 Rows Coil Cooling 38 Sqft. Coil Area, 9.3 KW motor (Sectional type AHU) (static Pressure = 40 MM). Nos. 6 Ceiling suspended) Spec: Factory built, ceiling suspended type, chilled water Double skin type AHU made of 25 mm thick panels 415 ± 10% volts, AC 3 Phase system etc complete. 4000 cfm with 4 Rows Coil Cooling 88 Sqft. Coil Area, 2.2 KW motor. (Static Pressure = 40 MM). HU's Controls/Dynamic Balancing Valves Complete controls pane

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	Fan coil unit consisting of 2 way motorized valve, room thermostats with ON/OFF switch, 3 speed selector switch		
а	600 CFM (1.5 TR) 3 row cooling coil	Nos.	48.0
b	800 CFM (2.0 TR) 3 row cooling coil	Nos.	12.0
С	1000 CFM (2.5 TR) 3 row cooling coil	Nos.	9.0
d	1200 CFM (3.0 TR) 3 row cooling coil	Nos.	6.0
11	Fan Coil Unit Controls		0.0
а	Water Flow Rate 3.6 USGPM	Nos.	48.0
b	Water Flow Rate 4.8 USGPM	Nos.	12.0
С	Water Flow Rate 6.0 USGPM	Nos.	9.0
d	Water Flow Rate 7.2 USGPM	Nos.	6.0
e.	Thermostats with 3 speed fan control	Nos.	75.0
12	Ventilation Equipment (Package Type Air Washer)		
а	15000 CFM, 40mm wg AC Plant Room	No.	1.0
13	Axial Flow Fans		
а	680 dia. 5,000 CFM @ 15 mm wg, AC Plant Room	Nos.	4.0
14	Inlines Fans		3 P.G. R.
a	600 Dia. (Toilet Exhaust) CFM: 4000	Nos.	4.0
b	450 Dia. (Toilet Exhaust) CFM: 2000 - 2550	Nos.	18.0
С	300 Dia, (Toilet Exhaust) CFM: 1500	Nos.	2.0
15	Lift Press Fans		
a	400CFM	Nos.	2.0
16	Water Softening Plant	Nos.	1.0

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Annexure-III

GENERAL TERMS AND CONDITIONS OF THE TENDER

- 1. Bid: The tenders are to be submitted in two part viz. "Technical Bid" and "Commercial Bid" in two separate sealed envelopes separately. The Technical & Financial bids are to be kept in a single envelope subscribing the name of Tender, date of opening on the top of the envelope. The commercial bid will be opened only after acceptance of "Technically Bid".
- 2. Based on the evaluation of the technical bid submitted by the tenderer, the Committee would shortlist, the tenderers. The short listed tenderers may be asked to make a presentation after opening of the technical bid before the committee if, required.
- 3. Price Basis: Rate should be quoted F.O.R. destination at IIIT-A, Deoghat, Jhalwa, Allahabad.
- 4. **Security Deposit**: The Person/Firm whose tender be accepted deduction of 10% of the total amount will be made against security deposit in the form of DD/ Bank Guarantee for warranty period from the nationalized bank to release the an advance payment.
- 5. The security deposit will be forfeited if the contractor fails to commence the work as per letter of Award.
- 6. **Payment:** Payment for the operation shall be made on monthly basis & Comprehensive Maintenance on quarterly basis within 15 days after acceptance and satisfactory report & recommendation of the AC Maintenance Committee/ Engineer in-charge.
- 7. **Exemption:** The institute is exempted from custom and excise duty in terms of notification No. 51/96-custom dated 23/07/96 and No. 10/97 -Central Excise dated 01/03/1997 and is an University established under M.H.R.D. Govt. of India. Certificate to this if, required shall be provided by the Institute.
- 8. The rates should be quoted in Indian rupees. Only unit prices are to be quoted both in digits and in words. In case of a discrepancy in the two, quoted rates in words will be taken as valid and final.
- 9. Taxes: The unit rates should be quoted exclusive of all taxes, duties, levies, freight, insurance etc., which may be given separately indicating the nature of taxes charged. Rates for additional/optional features should be quoted separately. This may be considered separately by the committee.
- 10. The Contractor will have to enter into agreement with IIIT-A within 7 days of Letter of acceptance. The agreement is to be executed on adequate stamp paper. Cost of stamp paper will be borne by the contractor.
- 11. Each tenderer should clearly specify that the tenderer agrees to abide by the conditions of this tender document on their printed letter head indicating here on Sales Tax Registration, FAX, Email, Telephone numbers
- 12. Quoted rate should be valid at least for 03 months.
- 13. In view of the wide publicity the details are also available on Institute website: www.iiita.ac.in, may be seen.

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- 14. The lowest quoted rate will not be the basis of claim to get the order.
- 15. The firm/company's black listed at any stage need not to apply.
- 16. All pages of the tender documents are to be signed and stamped by the tendering firm.
- 17. Director, Indian Institute of Information Technology, Allahabad reserves the right to reject or accept any tender.
- 18. Director, Indian Institute of Information Technology, Allahabad will be the sole arbitrator of all the dispute and his decision will be binding on both the parties.
- 19. Director, Indian Institute of Information Technology, Allahabad reserves the right to alter/modify any or all conditions of this tender notice.
- 20. Quotation should be addressed to Director Indian Institute of Information Technology, Allahabad.
- $21.\, \hbox{All disputes are subject to Jurisdiction of Allahabad}.$

For any query pertaining to this bid correspondence may be addressed to:

Dr. Seema Shah Deputy Registrar (S&P) IIIT-Allahabad, Jhalwa, Campus Phone: +91 0532-2922217

E-mail: info.purchase@iiita.ac.in

Deputy Registrar (S&P)

Certified that the information in the proforma is true. I/We agree to the contents of terms & condition of the quotation/tender.

Seal and Signature of the Proprietor/Authorized Representative

Annexure-IV

Technical Terms & Conditions

Scope of Work:

- Preventive maintenance (4 nos. Quarterly basis) The units to be serviced four times in the
 contract period. One of the services shall be rendered positively before the onset of
 summer season to ensure trouble free working of the units. The balance services shall be
 rendered during the summer season. All breakdown calls shall be attended during the
 contract period.
- 2. Air-conditioning plant shall be operated in 02 shifts on all working day or as required (peak hours/non peak hours). The plant also be operated before and after these hours/Holidays whenever required. Minimum one operator & one semi-skilled worker is required at site in each shift along with one Engineer cum supervisor in General Shift with one semi-skilled worker as per <u>Annexure-V</u>.
- 3. Air-conditioning plant shall be operated from 1^{st} march to 31^{st} Oct during the AMC period or depend upon time to time requirement.
- 4. The Prices quoted by the bidder shall deem to be inclusive of all the contractor's liabilities as per labour laws such as minimum wages, D.A, Bonus, P.F No., E.S.I Registration, Uniforms, Tools, Conveyance, Leave/Holidays workmen compensation etc. and nothing extra over and above the quoted rates shall be payable during occurrence of the contract.
- 5. The agency shall pay the salary to his employees deployed at site, not less than the minimum wages as declared from time to time by the statutory authorities without any liabilities of increase to IIIT-A during the tenure of the agreement.
- 6. Contractor shall submit bill along with the proof of having paid wages of previous month to all the work man to ensure the payment of the minimum wages as per notified by Government of India from time to time.
- 7. Yearly descaling work of the water cooled Condenser & Cooling Tower, cleaning/painting of the condenser water piping upto cooling tower, exterior covering of the cooling towers & water softening plant & their accessories to make the system healthy to be carried out by agency.
- 8. Repairing/overhauling of the components of the equipments including replacement of worn out parts when found necessary.
- 9. Topping of refrigerant required as a result of a leakage in the system arising out of fair wear and tear.
- 10. Descaling /cleaning of the chiller when found necessary.
- 11. Annual checking of compressor oil and replacement of the same if found necessary.
- 12. Checking condition and setting of panel controls, operating controls, safety controls, sensors to ensure optimum performance, reliability and replacement of the same if found necessary. Performance of all safety devices would be demonstrated before the AC Maintenance committee/Engineer in-charge if found necessary.
- 13. Checking of the electrical controls and components (switches, timer, relays and starters) in the chiller starter panel and replacement of the same if found necessary.
- Repairing /overhauling of the chilled and condenser water pumps, cooling tower motor and condenser fan motor, including replacement of worn out parts such as replacement of

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- defective bearings of motors, pumps and fans and rewinding of motors if required, alignment of all the pump motor should be upto the extent of zero degree & cross check with dial guage, if necessary.
- 15. Repairing/replacement of the cooling tower sprinkler hub assembly and PVC pipes etc. as when required.
- 16. Cleaning of cooling coil, cleaning/replacement of pre filters, defective pillow block bearings, shaft and blower etc if found defective.
- 17. Servicing of all electrical panels comprising of starters for cooling tower motor, primary/secondary pump motors, AHU motors etc including replacement of defective switch gear, contactors, relay, timers, indicator lamps, burnt out wires, connector strips & other electrical items. Wiring should be properly traced within the panel.
- 18. Top up of brine as required.
- 19. Repair /replacement of BMS Controls. BMS controlling to starts up air-conditioning machines should be properly synchronized. All the machines should be operative from the control console.
- 20. The Machines/Compressor/any other installed compressor in the HVAC shall be replaced, whenever failed.
- 21. The stock of all the mandatory spares along with all the necessary testing devices/equipments/ kits shall be available at site in IIIT-A with the employees deployed by you & submit a copy of it to AC maintenance Committee/Engineer in-charge. Keep minimum one set of spares like electronic cord, pla relay, control fuse, remote and PCB, programming card etc. of the Manufacturer make at site.
- 22. The entire HVAC system shall be checked for any leaks and same to be attended to during servicing.
- 23. Safety controls such as High/low pressure cut outs shall be tested for proper functioning during servicing in presence of the AC maintenance Committee/ Engineer in-charge and in case of any mal-functioning they shall be either repaired or replaced accordingly.
- 24. All air filters in the HVAC System shall be inspected and cleaned during servicing or as & when required.
- 25. Cooling Coil shall be inspected and cleaned if necessary during the servicing.
- 26. The blower motor shall be checked during servicing and defects noticed will be attended to.
- 27. The driver set on the blower section shall be inspected, belt tension adjusted and belts changed, if necessary during servicing.
- 28. Charging the salt in the water softening plant as per requirement & maintain the water hardness upto 100 ppm & submit the report to the AC Maintenance Committee/Engineer in-charge daily. Institute will provide the Salt & hardness testing kit.
- 29. Any defect in the control panel such as electrical items and control wiring in the air conditioners shall be attended to. All electrical controls and components are to be checked and repairing/replacement to be done if found necessary inclusive of electrical main switch/circuit breaker.
- 30. Condenser water pumps with motors shall be checked for satisfactory functioning during servicing. Any repairs to then if necessary will be carried out by you.
- 31. Repairing/leakages in copper piping to be carried out.

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- 32. Repairing of Duct and its accessories like grills, diffusers etc, thermal and acoustic insulation of all types shall be carried out if required.
- 33. All the fittings like pressure gauge, thermometer, thermostat, air purge valve, probe of suction & discharge line connection with the thermostat should be proper working condition, if not working shall be replaced. Synchronization of the Modulating motor in the all the AHU with the thermostat should be in the proper working.
- 34. The Contractor shall keep all the equipments in perfect working condition.
- 35. The service Engineer/Technician deployed by the contractor shall not tamper with any other installation of the Institute.
- 36. The surrounding areas will be kept neat & clean, cleaning agents such as soap, detergent, cotton waste etc. will be provided by the contractor.
- 37. The Contractor shall take all precautionary measures for the safety of the workers during performance of their duties at site and in case of any untoward incident, Institute shall not be liable to pay any compensation to any workmen and employee of the contractor.
- 38. Complaints lodged shall have to be attended within 24 hrs. In case the complaint is not cleared within 24 hrs, the contractor shall have to submit the proper justification for the delay and the time frame to clear the same, otherwise penalty @ Rs.10,000/- per day shall be imposed on contractor for each location separately and will be deducted from the AMC amount due to the contractor. The maximum penalty will be upto 10% of the total AMC amount depending upon the discretion of the competent authority after that the contract will stand withdrawn.
- 39. For monitoring the efficiency, the agency shall have to depute an Engineer at site and report to the AC Maintenance Committee/Engineer in-charge. Work report must be submitted and log book shall be maintained for each machine separately.
- 40. The AMC shall be valid for a period of one year.
- 41. The agency shall be bound to use only genuine spares of Manufacturer, whichever is applicable, which shall be got approved by the AC Maintenance Committee/Engineer-Incharge before installation.
- 42. The Institute will be entitled to terminate contract at any time. If performance is found unsatisfactory in the opinion of the institute and the decision of the Institute's Director will be final.
- 43. The contractor shall ensure to provide an alternative qualified manpower or replace with a standby in case any of the regular staff deployed is absent or on leave.
- 44. Contactor have to repair/replace the electrical fixtures (contactor, relay, timers, push button, indicators, connector strips) of the distribution panels of AHU's, BMS, Control Console, Primary & Secondary pump motors, Cooling tower, if found necessary.
- 45. In order to ensure the fulfillment of statutory obligations, contractors shall ensure that the payment of wages of the workmen of the contractor is made in first week of the month & submit the wages payment receipt along with the bills.
- 46. For the repairing of the leakage in the chilled water piping/insulation, if any digging work is required upto 3 meter length, contractor shall arrange the tools and tackles for the same at their own cost.
- 47. Performance and quality clause All the maintenance works shall be carried out in accordance with the manufacturer's specifications and instructions of the AC maintenance Committee/Engineer in charge. The contractor is responsible to maintain the log book and

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- produce it to the AC Maintenance Committee/Engineer In charge of the institute on daily basis. The brief of main activities to be carried out for operation, routine/special & preventive and comprehensive maintenance, as per <u>Annexure-VI</u>.
- 48. The contractor shall make good all the damages caused to machinery due to negligent operation and at the end of contract period he shall hand over plant and all equipment in the contract scope in good working condition.
- 49. Contractors should follow all safety norms and provide necessary safety equipment at their own cost. In case of any accident during the operation/maintenance of the equipment leading to injuries/damages to human beings equipment and/or loss of life, the contractor shall be fully responsible for setting all claims and indemnify the department against any claims arising out of such accidents. Consequently damages to other systems will however be recoverable from the contractor.
- 50. Tools and measuring instruments to be provided by the contactor.
- 51. Critical spare parts should be stored in advance for maintenance
- 52. In case the Institute is put to any financial loss directly or indirectly by any act of commission or omission on the part of the contractor and its workers, the institute shall have the right to impose penalty on the contractor or deduct such amount from its security deposit or bill.
- 53. During the handing over/taking over HVAC System from one agency to other agency, Institute depute an expert to complete check up of the HVAC System. The faults noted/identified by the expert in these machines shall be rectified by the agency under AMC before handover the system to other agency. If agency under AMC fails to rectify the faults, Institute will depute an external agency to carry out all these faults before taking over the Plant from the Agency under AMC & the expenditure incurred will be debited from the Agency final bills & security deposit before final settlement.
- 54. The maintenance contract does not cover damages to equipment/ auxiliaries because of unnatural climate condition. Consequential damages and losses of any nature whatsoever are not covered under the maintenance service scheme.
- Proposal BOQ only will be taken in to account for the purpose of evaluation. The bidders are required to declare the prices for the withdrawal of the deviations declared by them in the 'Deviation Schedules. Such prices declared by the bidders for the withdrawal of deviations in the deviation if any shall be added to the bid price to compensate for these deviations. In case prices for the withdrawal of deviations are not furnished by the bidder. The Owner shall convert such deviations in to a Rupee value and add to the bid price to compensate for these deviations. In determining the, Rupee value of the deviations, the owner will use parameters consistent with those specified in the specifications and documents and/or other information's necessary and available to the Owner. In case the bidder refuses to withdraw the deviations at the cost of withdrawal indicated by the bidder in the Deviation Schedules, the bid security of the bidder may be forfeited.

Bidders may note that deviations variations and additional conditions etc found elsewhere in the bid other than those stated in the Deviation Schedules, save those pertaining to any rebates, shall not be given effect to in evaluation and it will be assumed that the bidder complies to all the conditions of Bidding Documents. In case bidder refuses

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to withdraw, without any cost to the Owner, those deviations which the bidder did not state in the Deviation Schedules, the bid security of the bidder may be forfeited.

NOT COVERED IN THIS CONTRACT

- 1. Repairs/replacement of electrical main in coming switch/ circuit breaker, main incoming, cable, fuses and indicating lamps.
- 2. Repairs/Replacement of components of main electrical distribution board and distribution power and control cabling.
- 3. Repairs/Replacement of chilled water and condenser water valves and water piping, any kind of masonary/structural work.
- 4. Repair/replacement of AHU, ducting, duct insulation, cooling tower body and false ceiling.
- 5. Replacement of the equipment.
- 6. Replacement of fills of the cooling towers and sprinkler assembly & its related accessories.
- 7. Salt for charging the water softening plant & hardness testing kit.

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Annexure-V

Qualification & Experience of persons deployed at site

S1. No.	Manpower	Requirement	Qualification/Eligibility Criteria
1.	Supervisor	1	Diploma in the field of Air-conditioning/ Electrical/Mechanical Engineering with at least 5 year experience in the field of maintenance of central Air-Conditioning plants/System
2.	Operator	2	Should have passed ITI in the trade of Refrigeration & Air-conditioning/Electrical/Mechanical or equivalent with relevant experience at least 02 years.
3.	Semiskilled worker	3	Should have basic knowledge of Air-conditioning equipments

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Annexure-VI

- 1. Clean of makeup tank, filters and strainers.
- 2. Starting and stopping plants in the proper sequence
- 3. Cleaning of equipments and tightening of belts as and when required.
- 4. Maintenance of proper record of preventive maintenance
- 5. Maintaining of proper log sheet of running of plant
- 6. Recording of complains received and attending the same
- 7. Descaling/chemical cleaning of condenser tubes in a year or whenever required
- 8. Checking and setting of controls four times in a year
- 9. Replacement of oil and cleaning of filter
- 10. Topping of refrigerant whenever required
- 11. Replacing any defective controls in mechanical/electrical system whenever found defective
- 12. Rectification of leak if any and testing the system with nitrogen pressure and recommissioning after vacummization
- 13. Attending problem of any nature in compressors, motors, controls, condenser water pumps, chilled water pumps, water softener plant, water make up tanks and AHU's etc.
- 14. Painting of the cooling tower, softening plant, condenser water piping inside & outside the plant room.
- 15. Carrying out off season preventive maintenance once a year
- 16. Carrying out work of overhauling rewinding, replacement of bearings of pumps, motors AHU's etc whenever required
- 17. Greasing of pumps, motors, AHU's bearings
- 18. Descaling of valves and repairing of AHU's coils
- 19. Replacement of defective belts, bearings of AHU's whenever found defective
- 20. Replacement of defective ACB's switches, fuses, contactors, starters, indicating lamps, controls, wires and lugs.
- 21. Any works other than indicated above but required essentially for proper functioning of the equipments.

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FORM-1

Details of the similar works in Hand

(On the letter head of the firm)

SI.	Name of Description Of work	Description	Date of		Remarks
No.		Start	completion		
	-7-				

Sign and Seal of Contractor

FORM-2

<u>List of work related Equipment, Machinery and tools tackles etc</u> immediately available with the Bidder for use on this work.

(On the letter head of the firm)

Sl.No.	Description	Function/Purpose	Remarks

Sign and Seal of Contractor

FORM-3

Details of technical personnel with the bidder who will be deployed for this work

(On the letter head of the firm)

SI.	Name of person	Whether working in Field or in Office	Mode of employment & Experience	Period for which the person is working with the Bidder	Remarks

Sign and Seal of Contractor

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Proforma of Letter of Undertaking

(To be executed on non-judicial stamp paper of value Rs. 100/- & to be submitted by the tenderer along with the tender)

To,

The Director, Indian Institute of Information Technology Devghat Jhalwa, Jhalwa Campus Allahabad

Dear Sir,

- 1.0 11/* We have read & examined the following bid documents relating to

- 1.3 Special Conditions of Contract.
- 1.4 Drawing Nos. as mentioned in the BOQ and attached drawings.
- 1.5 Technical Specifications
- *I/ *We hereby submit our tender and undertake to keep our tender valid for a period of 90 days for the date of opening of tenders i.e. upto /.....
- *I/ *We hereby further undertake that during the said period *I/* We shall not vary / alter to revoke my / our tender during the validity period of tender.

This undertaking is in consideration of IIITA agreeing to open the tender, consider and evaluate the same for the purpose of award, in terms of provisions of tender documents. Should this tender be accepted, *I/ * We also agree to abide by the fulfill and comply with all the terms and conditions and provisions of the above mentioned tender documents.

Signature alongwith seal of the Company

Duly authorized to sign the tenderer on behalf of the contractor

Name:

Designation:

Witness:

Name of Co. (Block Letters)

Signature:

Date:

Date:

Postal Address:

Name & Address:

Telegraphic / Telex No:

^(*) Strike out whichever is not applicable

On

PERMANENT ACCOUNT NUMBER OF BIDDER

The bidder is advised to take his Permanent Account Number (PAN) from the Income Tax Department, if not taken so far, may please furnish the same. In case the application has been furnished and PAN not allotted so far, the declaration to this effect may also be furnished in the Bid in the following format:-

Our PAN is:		
		••
	Or	
We have applied for PAN to inco	ome Tax Deptt. on and the PAN is awaited	

Or

- Augustus - Participant (100)

We shall apply for PAN by

OBSERVANCE OF LABOUR LAWS AND CONTRACTORS LIABILITY

- 1. The contractor shall comply the provisions of all labour laws applicable and in particular comply with provision of the contract (Regulation and Abolition Act, Minimum Wages Act, Workman's Compensation Act. Etc.)
 - 2. Under the Provisions of any law or by an order of the Competent Authority/Court, in respect of this contract or labourer so supplied, the Management of IIIT-A shall have right to deduct such amount from the bills/security deposit or otherwise recover from the contractor. The contractor shall be responsible to reimburse such amount to IIIT-A on demand and without any demur, reservation, contest or protest.
 - 3. The contractor shall at all time indemnify the IIIT-A against all claims, damages or compensation under provisions of payment of wages act? 19J6, Minimum Wages Act, 1948, Employers Liability Act, 1938. The workman's compensation Act, 1923, industrial Dispute Act, 1946 and the Maternity Benefit Act, 1961 or any modifications there in or any other law relating thereto and rules made there under from time to time or as a consequence of any accident or injury to any workman or other persons in or about the works, whether in your employment or not save any except where such accident or injury has been resulted from any act of Corporation, his agents or servants & also against ail costs, charges & against all sum or sums which may with your consent be paid to compromise or compounds any such claim. Without limiting the obligations and liabilities as above provided you shall insure against all claims, damages or compensations payable under the workman's compensation Act, 1923 or any modification thereof or any other law relation thereto.
 - 4. The contractor shall prove to engineer-in-charge from time to time that contractor has taken out all the insurance policies referred to above and have paid the necessary premiums for keeping the policies alive.
 - 5. The aforesaid insurance policy/policies shall also show IIIT-A as assured beneficiary along with the contractor.
- 6. The aforesaid policy/policies shall provide that they shall not be cancelled till the in charge of the contractor has agreed to their cancellation.

DECLARATION (Regarding ownership and/or employment of IIIT-A Employees)

No: IIITA/DR(S&P)/AC/0&M/

/2016 dt: . .2016

To be filled in by the tenderer, signed and submitted along with tender papers. I/We hereby declare that I/we or Partners or Directors of our concern do not have any such person under my/or employment who has retired/resigned/ removed / dismissed from IIIT-A during the last two years.

I/We hereby declare that I/We or partners or Directors of our concern have the following under my/our employment who has/have retired/resigned/removed/dismissed from IIIT-A during the last two years.

SI.	Name of Person	Date of leaving	Reasons for leaving IIIT-A

I/We hereby declare that I/We or partners of directors are not related to any employees of IIIT-A OR

I/We hereby declare that the following persons employed in IIIT-A and any other IIIT-A Project/Station are related to me/us for partners or directors of our concern as per details indicated.

SI.	Name of Person	Designation and Name of project or Office of IIIT-A	Relationship

NOTE: The near relative shall include wife, husband, parents and Grand Parents, children and Grand Children, Brother And Sister, Uncles, Aunts and Cousins and their corresponding in-laws.

(SIGNATURE OF TENDERER)

NAME

WITNESS SIGNATURE:

NAME: PLACE:

DATE:

Note:

- 1. Please tick whatever is applicable and delete/cut whatever is not applicable
- 2. Please attach extra sheet if necessary

any

INSTRUCTIONS TO BIDDER

Bidder is requested to read carefully the following and comply:

- 1. These instructions are over and above the instructions contained in the enclosed set of tender documents.
- Bidder must fill the letter of Undertaking and Declaration Proforma complete in all respect.
- Bidder must quote their rates exclusive of all taxes and duties. Taxes applicable may be quoted separately giving full details in the Financial bid only.
- 4. Bidder must sign in each and every page of the enclosed tender documents and submit the same in sealed cover superscripting the NIT No. name of work, bid opening date and EMD particulars.
- 5. The EMD should be in a separate envelop and annexed with the tender with suitable superscripted on envelop.
- 6. In case of acceptance of the bid, the successful bidder/bidders must enter into a contract agreement on Non-Judicial Stamp Paper valuing Rs. 100/- within seven days from the issue of the Detailed Award Letter/ work order.
- Rates shall be quoted both in figures and in words in clear illegible writing. No overwriting is allowed. All scoring and cancellations should be countersigned in full by the tenderer. In case of illegibility the interpretation of the Engineer-in-charge/Tender Committee shall be final.
- Quoted rate should be valid at least for 03 months from the date of opening.
- All figures etc. must be in English Language only.
- 10. The lowest rate will not be the basis of claim to get the order.

July 1

- 11. The firms/companies that work black listed at any stage need not to apply.
- 12. Director, Indian Institute of Information Technology, Allahabad reserves the right to reject or accept any tender.
- 13. Director, Indian Institute of Information Technology, Allahabad will be the sole arbitrator of all the disputes and his decision will be binding on both the parties.
- 14. Director, Indian Institute of Information Technology, Allahabad reserves the right to alter/modify any or all conditions of this tender notice.
- 15. Completion period shall be 12 months from the date of award of work and can be extended as per need.
- Defect liability period minimum shall be 12 months.
- 17. Any conditional tender will not be accepted.
- 18. All disputes are subject to jurisdiction of Allahabad.
- 19. The tender should be submitted in two Bid system in a single envelope. Technical bid & financial bids in a separate envelope within a big envelope.
 - i) The eligibility criteria, document of PF & ESI Registration certificate, EMD and copy of Experience Certificate, work order etc. should be kept in separate envelope by mentioning the work in the technical bids.
 - ii) Financial bid should contain only bill of quantity as quoted.

Contractor Signature

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AGREEMENT

	etween Dy. Registrar (S&P), Indian Institute of Information
Technology, Allahabadpart and M/s	(herein referred to as Employer) of the
referred as the Contractor of the	other part).
	to call for tender for the hereto
contractor has submitted a Tend the contractor has been a	hereto er as per Annexure 'A' hereto and whereas the said Tender of accepted the total estimated contract value of Rs. by of letter of acceptance of Tender No
deviations from Tender Papers consideration of premises and t provided for herein below the executed and perform all works f strictly according to the various execution and perform to the s	inpleted with enclosures at the accepted rates and agreed as per annexure hereto. Now this agreement witness that the payment to be made by the Employer to the contractor contractor shall supply all equipments and materials and for which the said Tender of the contractor has been accepted provisions in Tender papers hereto and upon such supply satisfaction of the Employer, the employer shall pay to the accepted as per the said annexure and in terms of provisions
In witness whereof the partie and /or seals the day and years r	es have here unto set and subscribed their respective hands espectively mentioned against their respective signatures.
Signed and delivered	atby Sri
For and on behalf of M/s	
For and on behalf of M/sthe contractor within named in th	
For and on behalf of M/s	
For and on behalf of M/sthe contractor within named in th	(Authorized Signatory)
For and on behalf of M/sthe contractor within named in th Witness: 1. Signature Name in Block Capitals	(Authorized Signatory)
For and on behalf of M/s the contractor within named in th Witness: 1. Signature Name in Block Capitals Address 2. Signature Name in Block Capitals Address	(Authorized Signatory)

Dy. Registrar (S&P)

ONX.

Witness:

1.	Signature	
	Name in Block Letter	
	Address	
2.	Signature	
	Name in Block Letter	
	Address	