

Request for Tender (RFT)

Name of work. Providing Housekeeping, Event Management, Operation, Maintenance & Up keep of all the Internal and External services of PHE, HVAC, Firefighting, MEP, 33KVA substation, Audio Visual Equipment, including furnishings for IIT Madras Research Park for the year 2020-2023.



IITMadras Research Park.

No.1FA,First Floor, Kanagam road, Taramani Chennai – 600113.



IIT Madras Research Park.
No.1FA, First Floor, Kanagam road, Taramani Chennai – 600113.

NOTICE INVITING TENDER.

Tender No.IITMRP/OPER/1

dated 01-06-2020

The IIT Madras Research park Chennai 600113 invites item rate tenders for the following work from reputed contractors who have met the eligibility criteria as stipulated in the tender document. The eligibility criteria and other details are available in the tender document available in the website www.respark.iitm.ac.in. The last date of receipt of bids is 26-06-2020.

Name of work. Providing House keeping, Event Management, operation, maintenance & up keep of all the internal and External services of PHE, HVAC, Firefighting, MEP, 33KVA substation, Audio Visual Equipment, including furnishings for IIT Madras research park for the year 2020-2023.

Estimated cost of work: 20 Lakhs per Month.

Chief operating officer.
IITM Research Park.



DISCLAIMER

This document has been prepared by IIT Madras Research Park, Chennai – 600113 (IITMRP). The information is provided to prospective Bidders, who are interested to Bid for providing **House keeping, Event Management, operation, maintenance & up keep of all the internal and External services of PHE, HVAC, Firefighting, MEP, 33KVA substation, Audio Visual Equipment, including furnishings for IIT Madras research park for the year 2020-2023.**

Also the information is provided to bidder on the terms of conditions set out in this document and any other terms and conditions subject to which information is provided.

This document is not an agreement, is not an offer or invitation to any other party. The purpose of this document is to provide interested parties with information to assist the formulation of their bid. The information is not intended to be exhaustive. Bidders are required to make their own inquiries and respondents will be required to confirm in writing that they have done so and they do not rely solely on the information in this document.

The information is provided on the basis that it is non-binding on IITMRP, any of its authorities or agencies or any of their respective officers, employees, agents or advisors.

IITMRP reserves the right not to proceed with the project or to change the configuration of the project, to alter the timetable reflected in this document or to change the process or procedure to be applied.

While due care has been taken in the preparation of information contained herein and believe it to be accurate, neither IITMRP nor any of its authorities or agencies nor any of their respective officers, employees, agents or advisors gives any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it.

No reimbursement of cost of any type will be paid to persons or entities submitting their bid.

SECTION – I

NOTICE INVITING TENDERS.

1. Sealed Item rate Tenders are invited from reputed contractors for the following work:

Name of work: Providing House keeping, Event Management, operation, maintenance & up keep of all the internal and External services of PHE, HVAC, Firefighting, MEP, 33KVA substation, Audio Visual Equipment, including furnishings for IIT Madras research park for the year 2020-2023.

1.1 Tender Details:

Estimated cost put to tender	Rs.20,00,000 per month
Duration of services under this tender	36Months.
Pre bid meeting (Date, time and venue)	19-06-2020 1500 Hrs IITMRP OFFICE
Last date & Time of submission of Tender	26-06-2020 1500 Hrs
Address for submission of Bid	Chief Operating Officer IITMRP, No 1FA, First floor, Kanagam Road, Chennai - 600113

1.2. Applicants who fulfill the following minimum eligibility criteria, with the following “Factors to be considered” (indicated at B) shall be eligible to apply:

- i) The applicant(s) may be individual or firm.
- ii) The firm shall have minimum 3 years of experience.
- iii) The contractor shall have enlistment in the appropriate class commensurate to the value of work as prescribed by the concerned Registering Authorities of central/State/ public sector undertaking of state or central Governments/ central Government Autonomous Institutions.
- iv) The contractors who have successfully rendered similar services for a minimum period of 12 months with the minimum value of
 - a) one similar work costing not less than 80 % or
 - b) Two similar works costing not less than 60% or
 - c) Three similar works costing not less than 40%Of the estimated cost put to tender during last 7 years ending one month prior to the date of tender. Out of these works at least one work should have been done in Central Govt./state government/Central autonomous bodies/Central public sector undertaking..

B) Factors to be considered to assess similar nature of work.

The similar nature of work shall have the meaning for the works carried out in the following

1. General up keep of public buildings including rest rooms similar to Airport, corporate offices, Public buildings convention centers and like buildings..
2. Running and maintenance of services of Internal electrical installations, DG sets for backup power, Lifts, Substation yards, Sewage treatment Plants, water supply pumps of pneumatic system, water supply grid of self sustained campus, sewerage system. Fire fighting with wet riser, detection and alarm system, PA system, LAN, BMS. Solid waste management., street lights, and roads and pathways. HVAC with centralized chiller plants.

SECTION II

INSTRUCTION TO BIDDERS

1. VALIDITY OF THE TENDER

- 1.1. The Tender shall be valid for a period of 90 days from the date of opening of bid.
- 1.2. Extension of Tender validity, if any shall be decided by IITMRP.
- 1.3. Prior to the expiry of the original Tender, IITMRP may request bidders to extend the bid validity period for a specified additional period.

2. PERFORMANCE SECURITY:

The successful applicant shall furnish to IITMRP a security in the form of a **Bank Guarantee for an amount equivalent to THREE months accepted value of work per month of the Tender** from a scheduled Commercial bank based in India in the format given in Form-B, valid for a period of (36+4) 40 months from the date of start of work which includes, 4 months defect liability period. The Performance Security shall be furnished within the time limit specified.

The performance guarantee should be submitted immediately after issue of letter of award but not later than 10 days of issue of letter of award.

Failure of the successful applicant to submit the required Performance Security by due date, shall constitute sufficient grounds for the annulment of the award of contract.

3. POINTS TO BE NOTED

3.1. The bidder shall submit a power of attorney authorizing the signatory / (ies) to submit the tender / bid.

3.2. The authorized signatory of the bidder shall sign on each page of the tender / bid.

3.3. Cancellation or change of document such as power of attorney, partnership deed, constitution of firm etc which may have bearing on the tender/bid shall be communicated forthwith writing by the tenderer / bidder to IITMRP.

3.4 The tender documents can be downloaded from the website www.respark.iitm.ac.in.

3.5. Any change/modification in this tender document as submitted by the applicant shall be liable for rejection.

3.6. The application shall be submitted only as per the enclosed format(s). Self-attested documentary proof(s) in respect of the details furnished in the application form shall be submitted along with the application.

3.7. The evaluation of the applications submitted by the firms shall be undertaken based on details submitted by them strictly as per requirement of this tender document. It is therefore essential that all the details are submitted by the applicants accurately and specifically as per requirement of this tender. However, IITMRP reserves the right to ask any clarification from the applicants for details submitted if it is so desires during evaluation.

3.8. Experience should be in the name of the bidding company and not in subsidiary / associate company / Group Company etc.

3.9. Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves, before submitting their tenders, the form and nature of services to be rendered, the means of access to the site, the availability of space for storage of materials etc and in general obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer is deemed to have full knowledge of site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. Submission of a tender by a tenderer implies that the tenderer has read this notice and all other contract documents and has made himself aware of the conditions, 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 IITMRP and local conditions and other factors having a bearing on the execution of work.

3.10 The tender for the works shall remain open for acceptance for a period of ninety days from the date of opening of tender. Any tenderer who withdraws his tender before the said period or issue of acceptance, whichever is earlier or makes any modification in the terms and conditions of the tender which are not acceptable to IITMRP, shall not be allowed to participate in the future tenders of IITMRP.

4. TENDER DOCUMENTS

4.1. The applicant shall submit their offer in a sealed envelope duly super-scribed “Tender for **Providing House keeping, Event Management, operation, maintenance & up keep of all the internal and External services of PHE, HVAC, Firefighting, MEP, 33KVA substation, Audio Visual Equipment, including furnishings for IIT Madras research park for the year 2020-2023.**”

5. The Bid/ tender shall be submitted upto 1500 hrs on 26-05-2020. at the office of the IITMRP, No 1FA, First Floor, Kanagam Road, Chennai – 600113..

6. Tender/ Bid Evaluation

6.1. The technical bids shall be evaluated as per eligibility criteria and responsiveness to the bid documents. Based on the information supplied in the technical bid in respect of eligibility criteria, the firms shall be shortlisted and the price bid of the shortlisted forms shall only be opened.

The IITMRP, Chennai reserves the right to restrict the list of pre-qualified contractors to any number deemed suitable by it.

6.2. IITMRP does not bind themselves to accept the lowest bid and in such case the bidder(s) shall not have any claim on IITMRP. IITMRP reserves the rights to accept or reject any or all the bids in part or full, without assigning any reasons thereof.

6.3. The successful bidder shall be required to execute the contract agreement within 10 days of issue of letter of award, failing which the offer shall be treated as withdrawn.

7. IITMRP'S RIGHT TO ACCEPT ANY TENDER AND TO REJECT ANY OR ALL TENDERS:

IITMRP reserves the right to accept or reject any offer, and to annul the process and reject all offers, at any time prior to award of contract without thereby incurring any liability to the affected applicants. IITMRP has no obligation to inform the affected applicant(s) of the grounds for rejection of RFT.

8. **AWARD OF CONTRACT – criteria**

Subject to the requirement, IITMRP will award, the contract to the Contractor, whose bid is found responsive, complete and in accordance with the Tender document.

9. **NOTIFICATION OF AWARD:**

9.1. Prior to the expiry of period of validity/extended validity of the offer, as prescribed in this bid document and as subsequently extended by the bidder IITMRP will notify the successful applicant by Tele-fax or e-mail and confirm in writing by registered post / speed post / courier that his offer has been accepted.

9.2. The letter of award shall constitute a part of the contract.

10. **SIGNING OF AGREEMENT:**

IITMRP shall prepare the agreement in the Proforma (Form D) included in this Document, duly incorporating Notice inviting tender, all the documents including additional conditions, specifications and drawings, if any, forming the tender as issued at the time of invitation and acceptance thereof together with any correspondence there to and General Conditions of contract for CPWD works (Standard CPWD form 8) duly modified to suit the nature of work. Successful applicant will be required to execute the contract agreement within 10 days from the date of issue of the Letter of Award.

One copy of the agreement duly signed by IITMRP and the contractor through their authorized signatories will be supplied by IITMRP to the contractor.

Technical bid

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SECTION III
DATA SHEET.
(SCHEDULES)

SCHEDULE – ‘A’

The Bill of Quantities:- **vide page Nos. 1 to 27 (vol.II) as Price Bid**

SCHEDULE – ‘B’

Schedule of materials proposed to be issued to the tenderer

CONSUMABLES SHALL BE ISSUED FREE OF COST BY IITMRP .

SCHEDULE – ‘C’

Schedule of tools and plants proposed to be hired to the tenderer

NO TOOLS AND PLANTS SHALL BE HIRED TO THE CONTRATOR BY IITMRP

SCHEDULE – ‘D’

Extra schedules for specific requirements / documents for the work, if any.

1. No labour shall be permitted to stay in the campus

2. The activities should be restricted within the area earmarked around the proposed work.

SCHEDULE – ‘E’

Reference to General conditions of contract

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i) Estimated cost put to tender**Rs.20,00,000 per month**

iii) Performance Guarantee **THREE months accepted value of work of tender**

SCHEDULE – ‘F’

General Rules and Directions:

- Officer inviting tender C.O.O ,IITMRP
- Maximum percentage for quantity of items work

to be executed beyond which rates are to be See below determined in accordance with clause 12.2 and 12.3.

Definitions under clauses of general conditions of Contract.

2 (v). Engineer in charge Engineer/Consultant of IITMRP/Head- Infra.

2(viii) . Accepting authority C.O.O, IITMRP..

2 (x). Percentage on cost of material and labour to cover all overheads and profits. 15 %

2 (xi). Standard schedule of rates CPWD DSR 2012

2 (xii). Department IITMRP. Chennai.

9(ii) Standard CPWD contract form CPWD form 8 with modification and correction

Upto last date of receipt of tender.

Clause 1

- i) Time allowed for submission of performance bank Guarantee from the date of issue of acceptance letter 10 Days
- ii) Maximum allowable extension on i) above 10 days.

Clause 2

- Authority for fixing compensation under clause 2.C.O.OIITMRP . Chennai.

Clause 2a

- Whether clause 2a shall be applicable Not applicable
-

Clause 5

- Number of days from the date of issue of letter of acceptance for reckoning date of start 15 Days
 - Time allowed for execution of work 36 Months
 - Authority to give fair and reasonable C.O.OIITMRP. Chennai.
- Extension of work for completion of work

Clause 6

- Clause Applicable6-A.

Clause 7

- Gross work to be done together with net Payment / adjustment of advances for material collected, if any, since the last such payments for being eligible to interim payment.....Rs 5 Lakhs.

Clause 10 CA and 10C 10CA Not applicable, 10C Applicable.

Clause 10CC

Not applicable

Clause 11

Specification to be followed for execution of work

As per the manual and procedures applicable for the restaurants of THREE STAR hotel

Clause 12

- Deviation limit beyond which clauses 12.2 & 12.3 12.2 & 12.3 shall Apply.....100%

Clause 16

- Competent Authority for Deciding reduced rates.....Head Infrastructure, IITMRP.

SECTION – IV

PROJECT BRIEF AND SCOPE OF WORK .

A. **PROJECT BACKGROUND:**

IITMadras Research Park a Section 25 company established by the IITM, Chennai is operating from 1st Floor, Kanagam Road, Taramani, Chennai – 600 113. It operates as an interface between academia and industry for transfer of new technology by way of research findings. The campus houses various leading National and multinational companies R&D wings in addition to the Startups and IIT madras incubated companies numbering at present around 108 companies. The campus is a self sustaining campus with all internal and external services.

The research park is housed in 11.42 Acres of land with Two buildings named as (Phase -I) Eblockwith GF + 11 upper floors + 2 basements structure with a total plinth area of about 4.5 Lakhs Sq.Ft. The (phase-II) structure with height ranging from G+6 to G+9 consisting of block **A,B,C,D and a Multi level car parking** of G+ 6 stories with a total built up area of 7.08 Lakhs sq Ft and MLCP with 2.3 lakhs Sq.Ft thus houses 15.75 lakhs sq.ft built up area with self sustaining services of internal and external bulk services with all internal / external electrical supply, water supply and sanitary arrangements air-conditioning works (HVAC), Fire protection system, lifts, External façade works comprising of structural glazing, site development including Roads and paths, Architectural finishing, provision of pavement and drain, rain water harvesting arrangements, UPS, Solar PV, Solar hot water, IBMS, CCTV, Access control, Fire alarm, Water treatment plant, sewage treatment plants, R.O treatment, IT network with switches etc.

The block D and phase-I (E Block) are provided with a Basement.

As a sustaining facility to occupants a food court is functioning in Ground floor of Phase –II block D. It is housed in a carpet area of 18000 sq.ft with facilities to dine 800 persons in one sitting and has facilities to run 4 food courts and are presently functioning. In D block a state of Art Auditorium with 700 seat capacity and an Amphi Theatre with 200 seat capacity with state of art Audio visual for multi purpose Events.

A Creche and state of Art GYM is also functioning in Block D.

B. **Scope of Work:**

The scope of work will consist of the following main disciplines:

- a) Day to day Housekeeping to keep the place presentable and tidy of all the built up area common spaces including rest rooms (Except Areas exclusively occupied by a single client company). The operations to be carried out shall be as per standard check list applicable to a Three star Hotel.
- b) Day to day cleaning and keeping the all the external surrounding of the campus with out litters and debris including walk ways, roads and pavements.
- c) General operation and cleaning of sewer line and maintain without blockages and pumping wet well etc of sewerage system including Manholes, wet wells and pumping system.
- d) Operation and maintenance of pneumatic pumping system of water supply both Raw water system, and STP treated water system with pipeline Grid and pumps and other allied equipments.
- e) Day to day housekeeping of all the conference facilities including Auditorium, conference rooms and Theme lounges and coordinating the events of the allotted companies including, internal, space, attached rest rooms, furniture and fixture and audio visual system, public address system, displays etc.
- f) General operation and day to day and periodical maintenance of substation of 33KVA capacity and its main incoming Transformers, distribution transformers, panel Boards, switch gears, cables

including maintenance of records of energy meters and coordinating and carrying out regular mandatory tests.

- g) General operation and day to day and periodical maintenance of DG sets and its allied equipments, maintenance and operation of changeover and log up keeping and recording flow and energy meters coordinating for B,C checks and others statutory checks and custody and maintenance of POL inventory.
- h) General up keep and day to day maintenance and periodical maintenance and attendance of defects, of internal electrification and fittings including street lights in 24X7 basis.
- i) General operation and day to day and periodical maintenance of Fire fighting system with fire detectors and fire alarm, wet riser system, pumps, static sumps, sprinklers and its allied equipments and conducting Mock drills in getting assistance from trained professionals.
- j) General operation and day to day and periodical maintenance of access control and surveillance system consisting of CCTV and its cabling and recording system in 24x7 basis. allied equipments
- k) Management of solid waste by collecting and transporting and dumping in its designated yard for further processing.
- l) General operation and day to day and periodical maintenance of Sewage treatment Plant including supply of all consumables, and its all equipments and testing facility and conducting test for the effluentson 24x7 basis.
- m) General up keep, day to day and periodical maintenance of automatic control lifts including deployment of a Lift Mechanic at site.
- n) General up keep, day to day and periodical maintenance of HVAC system from the AHU to rooms side in the common areas (Except areas occupied by the allot tees) including deployment of A.C. mechanic and keeping record of temperature and BTU meter reading of various clients..
- o) General up keep and operation of chillers and monitoring the snags through BMS and keeping the system working as per protocol in 24x7 basis and also doing routine and periodical maintenance of chilled water grid, Raising mains energy valves and other controls like VFD etc up to the AHUs i.e high end of HVAC.
- p) Coordinating with concerned statutory Authorities and obtain license/ renewal of Licenses/approval etc.
- q) Establishing a service center (Help Desk) with suitable communication arrangement with soft ware package for registration of complaints and watch its removal with facility for escalation for delay and generate report of the daily, weekly, monthly status and submission to IITMRP and running the same with suitable man power on 24x7 basis.
- r) Payment of statutory bills in time.
- s) Liasoning with Government agencies and utility bodies not limited to TNEB, GCC, TNPCB, DFRS
- t) All statutory provisions of all applicable laws enacted from time to time to be complied with.
- u) Conducting the physical verification of assets inventories of IITMRP and submit the verification report once in a year.

All the operations shall be as per the standard check list applicable for public buildings such as Airport terminals, public convention centers etc.

The entire operation shall include the periodical preventive maintenance also.

During signing of Agreement the contractor shall produce the check list for the services every time, every day, weekly, Monthly, quarterly, Half Yearly and Annual operation and maintenance and on approval of IITMRP shall form part of the agreement.

The agreement will carry clause to impose penalty for the default of every item in the check list.

The scope includes deployment of administrative and professionals to supervise the entire operation consisting of minimum of following personal.

1. Property Manger with Qualification of minimum Engg. Degree with 15 Years experience.
2. Event Manger with 10 years experience.with a degree in catering /Hotel management.
3. Shift engineers minimum 3 Nos. with minimum 3 years experience.
4. A "C" certificate holders with adequate experience in managing substation with minimum 3 Years experience
5. Banquet manager with 6 Nos Lounge maids to man theme lounges.
6. Administrative staff to man Help desk.

SECTION – V

TERMS AND CONDITIONS

- 1.0 **BID OFFERS:** The bids shall be in the prescribed format as per this document. The applicant shall submit the bid in sealed envelope clearly specifying the Name of work mentioned on top of sealed envelope and submit the same on or before the last date and time mentioned.
- 2.0 **TECHNICAL BID:** Technical Bid shall contain general information and Profile of the Bidder as per Form T-I, Details of similar works in Form T-II (a & b). Details of experts associated with the bidder in Form T-III and Financial Data of bidders in Form T-IV Performance Reports by their clients in case of works completed or in progress in Form T-V and other documents confirming their fulfillment of the eligibility criteria. All the tender documents and supporting certificates shall be signed by the bidders as token of their correctness.
- 3.0 **FINANCIAL BID:** Financial Bid to be submitted by the bidder as per Documents of this bid. The Rate and Amount should be written both in figures and words and signed by the bidders. The rate quoted should be inclusive of all taxes including VAT/GST and services tax etc in vogue on the date of opening of bids and all incidental travelling expenses in execution of the work.
- 4.0 **ACCEPTANCE CRITERIA:** Technical bids shall be evaluated first, the financial bids of only those applicants shall be opened, whose technical bids are found responsive/acceptable as per eligibility criteria stated above. The financial bid shall be processed further for acceptance.
- 5.0 **LETTER OF AWARD (LOA):** A letter of award shall be issued in favour of bidder whose bid is accepted by the competent authority intimating the value of the bid accepted i.e. contract price with request to deposit performance guarantee as per Form –B.
- 6.0 **PERFORMANCE GUARANTEE:** Performance Guarantee @ THREE months of contract value per month of the contract price shall be deposited within 10 days of issue of the LOA. The Bank Guarantee shall be from any Nationalized Bank and shall be valid for a period of 40 (36+4) months from date of issue of letter of award (LOA) and the same shall be suitably extended till the end of defect liability period. Performance Guarantee deposited by the contractor against the work shall be released within one month of defect liability period.
- 7.0 **CONTRACT AGREEMENT:** Contract agreement on a stamp paper, of appropriate value, shall be signed between the IITMRP and the successful bidder as per the Form-D.
- 8.0 **DATE OF START (DOS):** Date of start of the work shall be reckoned from 10th day of Date of issue of LOA.
- 9.0 **COMPLETION PERIOD:**
The time allowed for this work shall be 36 Months.
- 10.0 **EXTENSION OF TIME & LIQUIDATED DAMAGES:**
 - 10.1 No extension of time for completion be considered owing to any variations made in the works by the orders of the IITMRP, unless IITMRP in consequences for such variations extends the time allowed to the contractor for the completion of the works, in which case IITMRP may extend the time of completion under this agreement for a proportionate period as the case may be, for the completion of the whole works.
 - 10.2 If the contractor requires extension of time, he / they shall intimate in writing to IITMRP, giving reasons for delay and justifications for extension in completion period. IITMRP after satisfying them self about the reasonableness of grounds, may grant extension of time as found to be justified and communicate the same in writing. The decision of IITMRP shall be final and binding. Whenever such extension of time is granted, it would

be without prejudice to the rights of IITMRP to recover the liquidated damages from the consultant. Any extension of time granted as stated above shall neither entitle the contractor to any claim for increase in their rates nor shall it release him from any of the obligations under the said agreement.

11.0 Liquidated Damages:

The work shall be carried out with all due diligence and as per the time schedule and quality specified above. In case of any delay/default of the contractor to adhere to the agreed time schedule/quality of service the IITMRP shall have right to recover the liquidated damages from the contractor at the rate specified in the Agreement. Decision of IITMRP shall be final and binding in this regard.

12.0 OTHER TERMS & CONDITIONS

- 12.1 The tender must be signed by the person / persons competent to sign as indicated in the document. Same stipulations will also apply in the case of Receipt for payments made on account of work when executed by a firm.
- 12.2 Any person who submits a tender shall fill up the form, stating at what rate he is willing to undertake each item of the work. Only one rate shall be given in words & figures for each item. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other condition of any sort including conditional rebates, will be summarily rejected. Tender shall have the name and number of the work to which they refer, written on the envelopes. Amount must be quoted in full rupees by ignoring fifty paise and below and considering more than fifty paise as rupee one.
- 12.3 The officer inviting tender or his duly authorized assistant will open the tenders in the presence of any intending tenderers or their authorized agents who may be present at the time and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the Earnest Money forwarded therewith shall thereupon be given to the tenderers. In the event of a tender being rejected, the Earnest Money forwarded with such unaccepted tender shall thereupon be returned to the tenderers remitting the same, without any interest.
- 12.4 The officer inviting tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender.
- 12.5 The tenderers shall sign a declaration under the Official Secret Act, 1923, for maintaining secrecy of the tender documents, drawings or other records connected with the work given to them.
- 12.6 In the tender Rate in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the tenderers shall, unless otherwise proved, be taken as correct. If the amount of an item is not worked out by the tenderer or it does not correspond with the rates written either in figures or in words, then the rates quoted by the tenderer in words shall be taken as correct. Where the rates quoted by the tenderer in figures and in words tally but the amount is not worked out correctly, the rates quoted by the tenderer, will, unless otherwise proved, be taken as correct and not the amount.
- 12.7 In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.

- 12.8 All rates shall be quoted on the tender form. The amount for each item should be worked out and the requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word 'Rs' should be written before the figure of 'Rupees' and the word ' P ' after the decimal figures, eg. ' Rs.2.15P' and in case of words, the word, "Rupees" should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only', it should invariably be up to two decimal places. While quoting each rate in schedule of tender, the word 'only' should be written closely following the rate and it should not be written in the next line.
- 12.9 The tenderer shall be required to deposit THREE months of the tendered value of work (as mentioned in the letter of acceptance) as performance guarantee in the form of irrevocable bank guarantee bond of any scheduled bank or State Bank of India in accordance with the form prescribed or in cash or in the form of Government Security or fixed deposit receipt, within 15 days of the issue of letter of acceptance.
- 12.10 On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated in writing to the Engineer-in-Charge.
- 12.11 GST, Sales tax (VAT), service tax, purchase tax, turnover tax, works contract tax or any other tax on material, labour and works in respect of this contract shall be payable by the contractor and IITMRP will not entertain any claim whatsoever in respect of the same.
- 12.12 The contractor shall give a list of officers and staff of IITM who are related to him.
- 12.13 The tender for the work shall not be witnessed by a contractor or contractor who himself /themselves has/have tendered for the same work. Failure to observe this condition would render tenders of the contractor tendering, as well as witnessing the tender, liable to summary rejection.
- 12.14 The contractor shall comply with the provisions of the Apprentices Act 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Engineer-in-charge may in his discretion, without prejudice to any other right or remedy available in law, cancel the contract. The contractor shall also be liable for any pecuniary liability on account of any violation by him of the provisions of the said Act.

13.0 ADDITIONAL CONDITIONS

- 13.1 Some restrictions may be imposed by the security staff etc., on the working and on movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on this account. Necessary entry passes have to be obtained for entry of labour and materials. Contractor should take advance action for obtaining such passes and no claim on this account shall be entertained.
- 13.2 A prospective Tenderer requiring any clarification on the Tender Document may notify the Infrastructure Division of IITMR Pat Chennai. The office will respond to any request for clarification which he receives earlier than 5 days prior to the deadline for submission of Tenders.
- 13.3 Before the deadline for submission of Tenders, the Tender Document may be modified by IITMRP by issue of Addenda. Any Addendum issued shall be part of the Tender Documents and shall be communicated by uploading in the web site. All the probable contractors are advised to check the www.respark.iitm.ac.in before submission of the tender on or before last date of receipt of tender.
- 13.4 The Tenderers shall submit offers, which comply strictly with the requirements of the Tender Document. Alternatives or any modification shall render the Tender invalid.

13.5 AUTHORITY TO SIGN

- 13.5.1 If the tenderer is an individual, he should sign above his full type written name and current address.
- 13.5.2 If the tenderer is a proprietary firm, the Proprietor should sign above his full type written name and the full name of his firm with its current address.
- 13.5.3 If the tenderer is a firm in partnership, the Documents should be signed by all the partners of the firm above their full type written names and current addresses. Alternatively the Documents should be signed by a Partner holding Power of Attorney for the firm and in this case a certified copy of the Power of Attorney should accompany the Documents. In both cases a certified copy of the Partnership Deed and current address of all the partners of the firms should be furnished.
- 13.5.4 If the tenderer is a limited Company, or a Corporation, the Documents shall be signed by a duly authorized person holding Power of Attorney for signing the Documents, accompanied by a copy of the Power of Attorney. The tenderer should also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.

13.6 Tenders must be received by the Employer at the following address not later than 3.00 PM of the receipt date mentioned. In the event of the specified date for the submission of the tender being declared as a holiday by the Employer, the Tenders will be received up to the appointed time on the next working day.

13.7 Address for Submission of Tender

The Chief Operating Officer, IIT Madras Research Park, No 1FA, First floor, Kanagam Road, Taramani, Chennai - 600113

The Employer may extend the deadline for submission of Tenders by issuing an amendment. Any Tender received after the deadline prescribed will be returned unopened to the Tenderer.

13.17 INSURANCE TO BE TAKEN BY THE TENDERER AND EMPLOYER TO BE INDEMNIFIED

13.17.1 Insurance of Works

The contractor shall effect contractor's all risk insurance policy (CAR policy) in the joint names of the Employer and the contractor, the name of the former being placed first in the policy, covering the following:

13.17.2 Third Party Insurance

Before commencing the execution of the Works, the contractor shall insure against the liability for any material or physical damage, loss or injury which may occur to any property or life including that of the Employer or to any person, including any employee of the Employer, by or arising out of the execution of the works or in the carrying out of the Contract. The sum insured will be for Rs.5.00 lakhs, Such insurance shall be effected with an insurer and in terms approved by the Employer. The contractor shall produce before the Engineer-in-charge the policy or policies of insurance and the receipts of payment of the current premiums. This third party insurance can either be included in the CAR policy or taken separately.

13.17.3 Workmen's Insurance

IITMRP shall not be liable for any payment in respect of any damages or compensation payable according to law in respect of or in consequence of any accident or injury or loss of life to any workman or other person in the employment of the contractor or any sub-contractor.

13.17.4 Recovery from the contractor

Without prejudice to the other rights of the Employer against the contractor in respect of such default, the Employer shall be entitled to deduct from any sums payable to the contractor the amount of any damages, compensation costs, charges and other expenses paid by the Employer and which are payable by the contractor under this clause.

13.17.5 Period of Policies

All the insurance covers mentioned above shall be kept alive during the complete period of the contract including maintenance period.

13.17.7 Remedy on Contractor's Failure to Insure

If the contractor fails to effect and keep in force the insurance referred to above, or any other insurance which he may be required to effect under the terms of the Contract, then and in any such case the Employer on advice of the Engineer-in-Charge may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any moneys due or which may become due to the contractor, or recover the same as debt due from the contractor.

13.17.8 Damage to Persons and Property – Employer to be Indemnified The contractor shall indemnify the Employer against all losses and claims in respect of injuries or damages to any person or material or

physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto, except any compensation or damages for or with respect to:

13.17.8.1 The permanent use or occupation of land by the works or any part thereof.

13.17.8.2 The right of the Employer to execute the works or any part thereof on, over, under, in or through any land.

13.17.8.3 Injuries or damage to persons or property resulting from any act or neglect of the employer, his agents, servants or other contractors, not being employed by the contractor or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents, such part of the compensations as may be just and equitable having regard to the extent of the responsibility of the Employer, his servant or agent or other contractor, for the damage or injury.

14.0 SPECIAL CONDITIONS

14.1 No labour camps shall be permitted inside the IITMRP Campus. Workers should be made to confine themselves to the work areas and should not wander in to the near by areas / buildings/ forests.

14.2 If night work is required to be carried out to fulfill the agreed turn around time, all arrangements shall be made by the Contractor, inclusive of lighting the area without any claim for extra rate. To the extent possible engaging women labour in the night shift should be avoided.

14.3 Child Labour is strictly prohibited.

14.4 Protection for Environment

14.4.1. No vegetation inside the campus should be damaged.

14.4.2 Drinking water requirement of the labour should be arranged by the contractor and they should be instructed not to misuse the facilities available in the various buildings.

14.4.3 All labour should be dressed properly attending to work. Wearing loose cloths like dhotis, Lungies is strictly prohibited..

14.4.4 No labour camps shall be permitted inside the IITMRP campus. Workers should be made to confine themselves to the work areas and should not wander in to the near by areas / buildings/ forests.

14.4.5 While transporting the materials along the road, spillage of material should be avoided. If any spillage occurs the same should be got cleaned immediately.

14.5. Safety at the Site

The contractor must appoint a full time qualified person as safety-in-charge for taking care of implementation of the safety system. The contractor shall submit the Project Safety Plan stating the methodology of implementation of systems to ensure the safe and environment friendly work place.

The Safety Plan must include the following:

14.5.1 Organisation Chart

Reporting relationship of the safety function in a flow chart

14.5.2 Safety Committee

Structure – Chairman, secretary and committee members – Roles & Responsibilities Applicable Statutory requirements, standards and codes related to safety and its adherence

**FORM OF RFT
(ON THE LETTER HEAD OF THE COMPANY)**

- Note: i. The Appendix forms part of the RFT
 ii. Applicant(s) are required to fill up all the blank spaces in this form of Tender and Appendix

To
 The Chief operating Officer,
 IIT Madras Research park,
 No 1FA, First Floor, Kanagam Road,
 Taramani, Chennai – 600113.

Having examined the Terms of Reference and the terms of the RFT for providing **House keeping, Event Management, operation, maintenance & up keep of all the internal and External services of PHE, HVAC, Firefighting, MEP, 33KVA substation, Audio Visual Equipment, including furnishings for IIT Madras research park for the year 2020-2023.**

we the undersigned offer to perform the work mentioned. As per the terms & conditions of the RFT document.

1. I/We undertake, if our offer is accepted, I / We shall commence the work immediately on receipt of Letter of Award and to complete the whole of the work comprised in the Contract within the **Time Schedules/quality mentioned therein** from the date of issue of the Letter of Award.

2. I / We have read and examined the notice inviting tender, schedules A, B, C, D, E & F, specifications applicable, drawings, Conditions of contract and other documents and rules referred to in the conditions of contract and all other contents in the tender documents for the work.

3. I / We hereby tender for the execution of the work specified for the IIT Madras Research Park No 1FA, First Floor, Kanagam Road, Taramani, Chennai. 600113, within the time specified in Schedule – 'F' and in accordance in all respects with the specifications, and instructions in writing referred to in General Rules and Directions and in Clause 11 of form 8 (General conditions of contract) and with such materials as are provided for, by, and in all respects in accordance with such conditions so far as applicable.

4. I/we hereby declare that I/we shall treat the tender documents, drawings and other records connected with the work as secret / confidential documents and shall not communicate the information derived there from to any person other than a person to whom I/we am / are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

5. If my / our offer is accepted, I/We will furnish a Bank Guarantee for Performance for the due performance of the contract @ THREE months of the contract amount.

6. I / We agree to abide by this offer for a minimum period of 90 days from the last date fixed for receiving the same and it shall remain binding upon us and offer may be accepted at any time before the expiry this period or any extended period mutually agreed to.

7. I / We declare and confirm that no agent, middleman or any intermediary has been, or will be engaged to provide any services, related to the award of this contract. I / We further confirm and declare that no agency commission or any payment, which may be construed as an agency, commission has been or will be paid and that the offer price does not include any such amount. I / We acknowledge the right of IITMRP that if it finds our declaration to the contrary, it can declare our offer to be non-compliant and if the contract has been awarded to us then declare the same as null and void.

8. If my / our offer is accepted I / We understand that I / we, am / are to be held solely responsible for the due performance of the contract.

Dated this.....day of2020

Signature.....

Name.....in the capacity of.....

Duly authorized to sign documents for and on behalf of.....

Address

Witness.....

Signature.....

Name

Address

Occupation

FORM – B

(FORM OF PERFORMANCE GUARANTEE (BANK GUARANTEE))

In consideration of the Indian Institute of technology Madras research park chennai 600113.(IITMRP) Chennai 600127. (hereinafter called "IITMRP") having offered to accept the terms and conditions of the proposed agreement between IITMRP.and (hereinafter called "the said Firm(s)") for the work..... (hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs. (Rupees..... only) as a security/guarantee from the consultant(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We, (hereinafter referred to as "the Bank") hereby undertake to pay to the IITMRP an amount not exceeding Rs. (Rupees..... Only) on demand by the IITMRP

2. We,(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the IITMRP stating that the amount claimed as required to meet the recoveries due or likely to be due from the said consultant(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs..... (Rupeesonly)

3. We, the said bank further undertake to pay the IITMRP any money so demanded notwithstanding any dispute or disputes raised by the consultant(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the consultant(s) shall have no claim against us for making such payment.

4. We, (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the IITMRP under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineerin- Charge on behalf of the IITMRP certified that the terms and conditions of the said agreement have been fully and properly carried out by the said consultant(s) and accordingly discharges this guarantee.

5. We, (indicate the name of the Bank) further agree with the IIDM that the IITMRP shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said consultant(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by IITMRP against the said Firm(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Consultant(s) or for any forbearance, act of omission on the part of the IITMRP or any indulgence by IITMRP to the said Firm(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Firm(s).

7. We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of IITMRP in writing.

8. This guarantee shall be valid up tounless extended on demand by the IITMRP. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.(Rupees) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated theday offor.....(indicate the name of the Bank)

CONTRACT AGREEMENT

This agreement is made at Chennai on thedays of2020 between IIT Madras research park chennai 600113.(IITMRP) (hereinafter called "IITMRP" which expression shall, unless repugnant to the context or meaning thereof be deemed to mean and include its successors, legal representatives and assigns) of the **First part.**

M/s.....a company incorporated under the companies Act 1956
having Head Office at

.....
(hereinafter called the "contractor" which expression unless repugnant to the context shall mean and include its successors-in-interest assigns etc) of the **Second Part.**

Whereas IITMRP is desirous that certain works should be executed for(Name of work..... hereinafter called the "The Project" and has accepted a Tender/bid submitted by the contractor for the execution and completion of such works as well as guarantee of such works and the remedying of defects therein.

NOW THIS AGREEMENT WITNESSTH as follows:

1. In this agreement words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to.

2. The following documents shall be deemed to form and be read and constructed a part of this agreement Viz.

- Standard General conditions of contract of CPWD Form 8 suitably modified for terms Inrespect of IITMRP as given in the following paragraphs.
- The provisions/stipulations as given this bid document including subsequent amendments/ corrigendum,
- Technical and Financial bids submitted by bidder,
- correspondence with successful bidder and LOA etc.

3. In consideration of the payment to be made by IITMRP to the contractor as hereinafter mentioned, the contractor hereby covenants with IITMRP to execute and complete the Project byand remedy any defects therein in conformity in all respects with the provisions of the contract.

4. IITMRP hereby covenants to pay the contractor in consideration of the execution and completion of the project and the remedying of defects therein, the total contract price of Rs.only) being the sum stated in the letter of Award (LOA) subject to such additions thereto or directions there from as may be made under the provisions of the contract at the times and in the manner prescribed by the contact.

5. OBLIGATION OF THE CONSULTANT

The consultant shall ensure full compliance with tax laws of India with regard to this contract and shall be solely responsible for the same.

IN WITNESS OF WEREOF the parties hereto have caused their respective common seals to be hereunto affixed / (or have hereunto set their respective hands and seals) the day and year first above written.

For and on behalf of the Contractor	For and on behalf of the IITMRP
Signature of the authorized official	Signature of the authorized official
Name of the Contractor Stamp/seal of the contractor	Name of the official Stamp / Seal
SIGNED, SEALED AND DELIVERED By the said	By the said
On behalf of the contractor	On behalf of the IITMRP
In the presence of: Witness _____ Name _____ Address _____	In the presence of: Witness _____ Name _____ Address _____

FORM – T -1**GENERAL INFORMATION – STRUCTURE & ORGANIZATION**

01.	Name & Address of the applicant	
02.	Telephone No. / Telex / Fax No.	
03.	Legal status of the applicant (attach copies of original document defining the legal status)	
	a) An Individual	
	b) A proprietary firm	
	c) A firm in partnership	
	d) A limited company or corporation	
04.	Contact person, Designation & Address including e-mail ID	
05.	Number of years in business	
06.	Particulars of registration with various departments	
07.	No of works completed with similar nature	
08.	State if In-house expertise available for all services / sub systems	

Note: All the relevant supporting documents duly sealed and signed by the consultant to be submitted with respect to the above details.

Signature of Applicant

FORM – T –II(a)**DETAILS OF PROJECTS OF SIMILAR NATURE COMPLETED**

Sl. No.	Name and Location of the project	Name and address of the client	Details of the project		Date of start of the project	Details of litigation/Arbitration cases pending /in progress with details	Date of completion of project		Details of Name, Address, Telephone Number of officer to whom reference may be made
			Built up area	Costt			Schedule	Actual	
1									
2									
3									
4									
5									

Note: All the relevant supporting documents duly sealed & signed by consultant to be submitted w.r.t above details.

FORM – T –II(b)

DETAILS OF PROJECTS IN HAND OR AWARDED

Sl. No.	Name and Location of the project	Name and address of the client	Details of the project		Date of start of the project	Upto date progress	Slow progress if any and reasons there of	Scheduled date of completion of project	Details of Name , Address Telephone Number of officer to whom reference may be made
			Built up area	Costt					
1									
2									
3									
4									
5									

Note: All the relevant supporting documents duly sealed & signed by consultant to be submitted w.r.t above details

FORM – T –III

DETAILS OF KEY TECHNICAL AND ADMINISTRATIVE PERSONNEL EMPLOYED BY THE FIRM /COMPANY							
Sl.No	Designation	Total numbers	Names	Qualification	Professional Experience	Length of continuous service with employer	Remarks
1	2	3	4	5	6	7	8

Note:

- A summary of the qualification and work experience of each key staff to be attached
- CVs to be submitted for all the experts personnel
- Additional information about technical personnel, if any, may be submitted on separate sheet.

FORM – T –IV

FINANCIAL INFORMATION

Details to be furnished duly supported by figures in Balance sheet/ Profit & loss account for the last Five years duly certified by a Chartered Accountant as submitted by the Applicant to the Income tax department.

SI No	Description	Yr 2015-16 (Rs In Lakhs)	Yr 2016-17 (Rs In Lakhs)	Yr2017-18 (Rs In Lakhs)	Yr2018-19 (Rs In Lakhs)	Yr. 2019-20 (Rs In Lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Gross Annual Turn Over					
2.	Profit/loss					

Attach self-attested copies of the audited financial statements of the last Five financial years.

II. Financial arrangement for carrying out the proposed work.

III. Income Tax PAN details

IV. Solvency certificate from Bankers of Applicant.

PERFORMANCE REPORT OF WORKS
(On clients Letter Head)

01.	Name of work / Project & Location	
02.	Agreement No.	
03.	Nature of work	
04.	Estimated Cost	
05.	Built up area (sqmtr)	
06.	Date of start	
07.	Date of completion	
	i) Stipulated date of completion	
	ii) Actual date of completion	
08.	Compensation levied for delayed completion	
	Amount of Reduced rate items	
09.	Performance Report:	
	a) Quality of services provided	Outstanding/Very Good / Good / Poor
	b) Financial soundness	Outstanding/Very Good / Good / Poor
	c) Technical Proficiency	Outstanding/Very Good / Good / Poor
	d) Resourcefulness	Outstanding/Very Good / Good / Poor
	e) General Behaviour	Outstanding/Very Good / Good / Poor

Dated : _____

Signature of authorized signatory
(with stamp)
Name

Designation.....

Contact No.....

Email ID.....

Note: The bidder / tenderer should sign all documents submitted by them in self-attestation.

Cost bid

Name of Work: Providing House keeping, Event Management, operation, maintenance & up keep of all the internal and External services of PHE, HVAC, Firefighting, MEP, 33KVA substation, Audio Visual Equipment, including furnishings for IIT Madras research park for the year 2020-2023.



IITMadras Research Park.

No.1FA,First Floor, Kanagam road, Taramani Chennai – 600113.

BILL OF QUANTITIES.

- A) Sub Head: **DAY TO DAY HOUSEKEEPING** to keep the place presentable and tidy of all the built up area common spaces including rest rooms (Except Areas exclusively occupied by single client Companies). The operations to be carried out shall be as per standard check list applicable to a Three star Hotel.

Total common area carpet area including parking and multi level car park. 7,43,332 sq.ft (APPROX)

The Total Number of common Rest rooms to be kept up to a standard of THREE star hotel Rating or common utility standard of AIRPORTS is 70 Nos. with 4nos urinals, 4Nos WCs and 4 Nos Wash Basins in each Rest Room.

The requirement of resources will be modified pro-rata on actual measurement of carpet area for which services to be provided.

HOUSEKEEPING (DAILY)**➤ OFFICE AREAS**

1. To clear the garbage from the dustbins at the workstation, meeting rooms and perimeter areas
2. To clean and disinfect the telephones.
3. To dust the furniture, clean the table top, chair legs, computers and brush the chair upholstery and other office equipment
4. Vacuum clean the carpets.
5. Clean the glass cabins, glass partitions and pantry areas.
6. Check for any housekeeping cleaning material left over after the completion of the cleaning.
7. Check for the proper arrangements of the chairs for each workstations
8. Spray the air freshener in the office area.
9. Cleaning of the cobwebs will be done on a daily basis as and when noticed
10. The office area would be dry & wet mopped before commencement of office hours.

➤ TOILETS

1. Scrubbing of toilets washbasins, urinals, water closets will be on a daily basis as per maintenance chart
2. Wall tiles in the toilets will be sponged and wiped with the sanitizer
3. Mirrors above the washbasins will be cleaned and maintained neat and a stain free at all times
4. Replenishing of the toilet consumables will be carried out as and when it is required with approval from IITMRP
5. Toilets will be maintained clean and free from any odor at any given time of the day.
6. Urinal cubes and toilet air freshener boxes will be replenished as and when required
7. Continuous periodic checks will be made by the concerned supervisor to ensure that the toilets are hygienically
8. Wall skirting will be cleaned on a daily basis as and when noticed.
9. Cleaning of cobwebs will be done on a daily basis as and when noticed.

➤ LIFTS, LIFT LOBBIES & COMMON AREAS

1. Lifts will be cleaned once a day thoroughly
2. Lift grooves will be vacuumed and the lift panels and the floor will be cleaned thoroughly
3. Periodic checks will be made to ensure that the lifts are maintained free from finger marks, any other stains and dust.
4. Continuous cleaning of the lift lobbies will be undertaken to ensure that it is maintained to the highest standards of cleanliness.
5. Lift lobby walls will be cleaned and maintained free of dust and streaks
6. Cleaning of the cobwebs will be done on a daily basis as and when noticed.
7. Cleaning of all corridors and passages
8. Cleaning the core –I atrium and the adjoining areas in the ground floor
9. Deep cleaning to be done in the conference rooms in the ground and first floor and auditorium.

➤ **FIRE EXIT STAIRS & MAIN STAIRS**

1. Fire exit stairs will be swept, mopped and dusted once in a day.
2. Wall skirting , windows ledges and window glass (from inside) will be cleaned on a daily basis
3. Handrails will be cleaned and dusted on a daily basis
4. Fire exit doors will be wiped and cleaned daily
5. Fire extinguishers will be dusted on a daily basis
6. Ensuring Fire exits routes are clear without staking of any material

➤ **SERVICE BUILDING & UTILITY ROOMS**

1. Service building will be cleaned once daily. Utility rooms like the AHU rooms, electrical rooms, generator rooms etc will be cleaned on a daily basis as per the schedule and in the presence of qualified personnel.

HOUSEKEEPING (WEEKLY)

➤ **OFFICE AREAS** – Apart from the daily work schedules the following work will be carried out on weekends and holidays

1. Scrubbing of the floor wherever it is not carpeted.
2. High level dusting of light fixtures, as grills, furniture.
3. Carpet spot cleaning wherever the carpet is stained.
4. Removal of wall marks.
5. Polishing of hand rails, fire hydrant hose nozzles
6. Vacuuming cleaning of the computer keyboards
7. Cleaning of the computers with the approved computer- cleaning chemical
8. Vacuum cleaning of the server rooms
9. Washing of the 3M mats.

➤ **Toilets**

1. Complete scrubbing of the floors, walls, water closets, urinals, wash basins and washbasins counters.
2. Sanitizing and cleaning off the water closet seats and lids.
3. High level dusting of the light fixtures and ac grills

4. Cleaning of the floor drain gratings

➤ **LIFTS & LIFT LOBBIES**

1. Cleaning of the lift ceilings.
2. Vacuuming of the lift grooves and polishing
3. Polishing of the lift panels and doors.
4. Cleaning of the lift lobby walls with the approved chemicals
5. Removal of wall marks from the painted surface
6. Scrubbing of the lift lobby and the floor corners.

➤ **FIRE EXIT & MAIN STAIRS**

1. Removal of cobwebs
2. Scrubbing of the floors including the corners and skirting
3. Polishing of the hand rails
4. Sponging of the fire exit doors
5. Removing wall marks from the painted surfaces
6. Cleaning of the window glass from inside

➤ **SERVICE BUILDING & UTILITY ROOMS(in the presence of qualified Personnel)**

1. Washing of the safely rubber mats in the electrical rooms
2. Dry dusting of the electrical panels
3. Removing of cobwebs
4. Moping of the floors
5. Wet dusting of the doors
6. Wiping the window glass from inside
7. Thorough dusting of the fixtures and fittings

For performing the above tasks the resource requirement may be given in the format as below.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
1.	a) Man power Designation 1. 2 3 4 5 b)Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted) 1. 2. 3. 4.			(CTC may be quoted for each designation)		
	TOTAL (A)					

BILL OF QUANTITIES.

- B) Sub Head : **DAY TO DAY CLEANING AND KEEPING ALL THE EXTERNAL SURROUNDING** of the campus without litters and debris including walk ways, roads and pavements

Total area to be maintained will be 1,20,000,sq.ft (APPROX)

The requirement of resources will be modified pro-rata on actual measurement of paved and road area for which services to be provided.

HOUSEKEEPING (DAILY)➤ **OUTER AREAS**

1. Ongoing cleaning will be undertaken to ensure that the premises are kept litter free
2. Oil stains will be removed up as soon as they are noticed.
3. Dusting will be an ongoing process in the outer areas to ensure that the gates, gate walls and the gate grills are kept clean and dust free.

Open parking will be cleaned and the cleaning process will continue the day long to ensure that there is no litter in the area

HOUSEKEEPING (WEEKLY)➤ **OUTER AREAS**

1. Dusting/washing of the wall mounted lamp shades
2. Thorough scrubbing of the oil/grease and their removal
3. Washing of the pedestal lamp shades
4. Scrubbing of the car parking areas (as per the schedule)
5. Washing of the 3M mats

For performing the above tasks the resource requirement may be given in the format as below.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
1.	a) Man power Designation 1. 2 3 b)Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted) 1. 2.			(CTC may be quoted for each designation)		

	TOTAL (B)					
--	------------------	--	--	--	--	--

C

BILL OF QUANTITIES.

C Sub Head: O&M OF SEWERAGE.

The campus is generating 1.00 MLD of sewage managed through the well provided sewerage system consisting of 40.Nos of main trunk sewer man holes and 600-Mtrs of trunk sewer and a wet well of 40 KL capacity with wet well pumps and collection sump and an STP of 360 KLD capacity. The time being the sewage is pumped from wet well to STP of IIT Madras and treated there and treated water is collected back in treated water collection well in the STP and from there pumped through pneumatic pumping system after chlorination and softening treatment to flushing, gardening. HVAC. Even though the STP of IITMRP is not in operation the same needs to be maintained by making trail run of equipments and cleaning and maintaining the valves and pumps etc.

Operation and maintenance every time

1. Pumping and regulating valves for wet well, treated STP water through pneumatic pumps, regulating pressure and checking online chemical dosages.

Every day

1. Checking the flow in the trunk man holes and grease traps removal, checking gulley chamber and grit chamber.
2. Removal of blockages if any and maintaining smooth sewage flow in the sewers
3. Testing STP treated water samples and making adjustments on the dosages of chemicals.

WEEKLY.

1. Cleaning of trunk sewer line by suitable cleaning mechanisms and removal of grits and debris silt etc..
2. Routine maintenance of all moving parts of the machineries involving STP. And test running of STP
In addition to the above cleaning of wet well, collection well for sludge etc at required intervals and coordinating with agencies and making the machineries and equipments up with least turn around time incase of breakdown.

For performing the above tasks the resource requirement may be given in the format as below.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
1.	a) Man power Designation 1. 2 3 b) Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted) 1. 2.			(CTC may be quoted for each designation)		

	TOTAL (C)					
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D

BILL OF QUANTITIES.

D. Sub Head : OPERATION AND MAINTENANCE OF WATER SUPPLY SYSTEM.

The campus is provided with two sets of pneumatic pumping system with twin plumping for raw water and STP treated water separately both in the main grid line and in side the building and in PHE shafts. All the pipes involved in the main Grid is with HDPE pipes 100mm dia and 150 mm dia and in inside building and raising mains are with CPVC lines.

The vendor shall employ necessary machineries for welding the HDPE system and all jointing kids of HDPE joints and skilled labour for the same.

Operation and maintenance every time

Pumping and regulating valves for raw water, treated STP water through pneumatic pumps, regulating pressure and checking online chemical dosages.

Every day

Checking the flow in the trunk main and observing the pressure gauges and maintaining the logs
 Checking all the furthest point outlets in all the blocks for discharge pressure and making adjustments if any at pumping stations.

Keeping regular watch for break down of main grid. Check and record all water leakage.

Plug all leakages occurring in urinals and maintain the sensor.

Collection of STP treated water, raw water samples at the outlets and testing and making adjustments on the dosages of chemicals.

Maintaining inventory management of water supply including tanker water purchased from outside vendors.

WEEKLY.

Checking all the valves for its correct working.

Lubricating and cleaning of all the moving parts in the machineries and pumps

In addition to the above cleaning of sump, disinfecting the main grid line at required intervals and coordinating with agencies and making the machineries and equipments up with least turn around time incase of breakdown.

For performing the above tasks the resource requirement may be given in the format as below.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
1.	a) Man power Designation 1. 2 3 b) Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted) 1. 2.			(CTC may be quoted for each designation)		

	TOTAL (D)					

E

BILL OF QUANTITIES.

E. Sub Head : FIRE FIGHTING SYSTEM.

General operation and day to day and periodical maintenance of Fire fighting system with fire detectors and fire alarm, wet riser system, pumps, static sumps, sprinklers and its allied equipments and conducting Mock drills in getting assistance from trained professionals

1. Operations and Maintenance of all Fire Fighting Systems
2. Cleaning of Fire Hydrant Pumps, Jockey Pumps and testing them regularly for readiness
3. Check the pump for underground water supply
4. Check and correct the Sprinklers, Pressure Gauges, Pressure Switches, etc
5. Check the External and Internal Fire Hydrant Pipes and record Pressure.
6. Maintain the Hose Pipe in good Condition
7. Maintaining and Cleaning of the Sump and water tanks as per schedule at separate cost.
8. Regularly check the Heat and smoke detectors and submit report on the same to the facility Manager at the site
9. Daily check and Maintaining log for availability of water in the Domestic water tank, Raw water, and soft water tank and co-ordination with AMC vendors
10. Conduct Fire fighting drills and conduct lecture on awareness to the occupants (Quarterly)
11. Conduct evacuation procedure to the occupants (Quarterly)
12. Conduct Preventive maintenance on all the equipment
13. Cleaning of all underground and overhead tanks on quarterly basis at additional cost
14. Checking fire extinguisher and keep fit to use on emergency
15. Maintaining the rain water harvesting system
16. Operation & Maintenance of Fire alarm system and coordinating with respective AMC agencies
17. Co ordination of operation and maintenance of PA system with respective AMC agencies
18. Maintaining history card for all equipments
19. Co ordination of operation and maintenance of Access control system with respective AMC agencies

20. Monitoring the function of BMS during the absence of BMS operator

For performing the above tasks the resource requirement may be given in the format as below.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
1.	<p>a) Man power Designation</p> <p>1. 2 3</p> <p>b) Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted)</p> <p>1. 2.</p>			(CTC may be quoted for each designation)		
	TOTAL (E)					

BILL OF QUANTITIES.

F. Sub Head : Event Management

Day to day housekeeping of all the conference facilities including New Auditorium with 700 Seats in D Block and Ambhi Theatre 200 seats in D block ,Auditorium 100 seats, conference rooms and Theme lounges and coordinating the events of the allotted companies including, internal, space, attached rest rooms, furniture and fixture and audio visual system, public address system, displays etc.

IITMRP provides facilities for conferences meetings, workshops demonstrations etc by providing infrastructure by means of 6 nos of conference rooms , 100 seats capacity Auditoriums, 6 Nos. Theme lounges.New Auditorium with 700 Seats in D Block and Amphi-Theatre 200 seats in D block , with the state of art Audio visuals for multi purpose Events

The bookings are done through a procedure and intimated to all concerned in IITMRP office.

The vendors shall make day to day house keeping of inside space of halls including its attached rest rooms, equipment, furniture etc.

Coordinate with event managers of respective allotted companies and provide all logistics required for them for smooth conduct of events and restoring the hall back to normalcy after the completion of the event and making ready the Halls for next events.

All the halls shall be controlled individually or in group by lounge maids and all the events shall be supervised by a qualified lounge Manager with professionally qualified lounge managers

The halls shall be checked with for working of PA system, projection facilities, etc. The vendor shall provide with necessary technicians for the operation and maintenance of PA system, projection system and necessary coordination shall be extended for pantry services during the meeting inside the halls and the lounge / dinner at designated places

All the PA system, Projection equipment are provided with IITMRP.

For performing the above task the resource requirement may be given in the format as below.

In addition to the above task the vendor has to provide a Conference booking help desk manned by an Executive with good front Office management caliber as a nodal agency for booking, interacting with event clients, making Invoice and realization of costs etc. The working of this Desk will be a single shift. This desk will also look after Parking token issue and collection of Parking Tokens etc. This desk shall be assisted by a Multi task Executive to help the Conference Help desk officer and also to Transmit Hard copy invoice to various clients .and other connected works.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
1.	<p>a) Man power Designation</p> <p>1. 2 3</p> <p>b) Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted)</p> <p>1. 2.</p> <p>d)Deployment of qualified Lounge Manager with minimum Qualification of Diploma in catering.</p>	1		(CTC may be quoted for each designation)		
	TOTAL (F)					

G

BILL OF QUANTITIES.

G. EXTERNAL GLASS FAÇADE CLEANING

The IITMRP buildings are provided with External facades with structural glass system of ten storied height. The vendor shall deploy a team of persons experienced in high rise building external cleaning work with necessary equipments and machineries such as GONDALAS etc for cleaning the entire facades at least three times in a year . The team shall continuously work throughout the year. The number of glass panels of size 2.1x1.00 Mtrs will be 1600 Numbers (Approx)

For performing the above tasks the resource requirement may be given in the format as below.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
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1.	a) Man power Designation 1. 2. 3. b) Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted) 1. 2.			(CTC may be quoted for each designation)		
	TOTAL (G)					

H

BILL OF QUANTITIES.

H. O&M OF 33 KVA SUBSTATION

The scope of work for maintenance contract of equipments at 33 KV Sub-station in IITMRP.

The following conditions are also covered in scope of work.

1. The under mentioned equipments are covered in scope of maintenance contract.
 - Transformers 1 No ONAN . of 800 kVA rating of 33KV/11Kv
 - 4 Nos Transformer of ONAN type 11 KV/425 V
 - SF6 breakers 33 KV & 11 KV
 - Current & Potential Transformers
 - Lightning Arrester
 - Isolators 33 KV and 11 KV
 - Relays & Control Panel.

- Rectifier
- AC & DC DBs
- OH Bus Bar, Jumper & Insulators.
- Battery charger 110 volts DC, 80 AH with batteries.

2. The installation shall be maintained in the existing original condition/position. The installation is running quite satisfactory at present. The contractor shall be solely responsible for maintenance and upkeep of the equipments in good conditions.

3. The supplying and topping up of transformer oil as and when required, filtration and centrifuging of oil once in a year changing of gasket as and when required and with required quantity of material for maintenance such as tools & instruments, CTC, cloth, sand paper, nut and bolts with washer (S.S.), petroleum jelly, lubricating oil greases, HRC fuses for control supply & indication lamps shall also be covered in scope of work.

4. The preventive maintenance schedule shall be prepared and submitted by the contractor in advance to JE concerned. The necessary shutdown may be taken with prior permission of the Institute.

5. Performa for weekly, quarterly & yearly checking should be filled up after doing preventive maintenance of equipments. The maintenance records shall be checked & verified by the competitive authority. (Weekly, quarterly, half yearly and yearly maintenance & repair chart / Performa shall be provided by department)

6. A suitable complete shutdown shall be given once in a year for preventive maintenance of the complete system. All the equipments should be thoroughly checked & maintained for proper functioning/operations of the equipment. All relays have to be checked and calibrated once a year.

7. All major structures, cable supports and steel frames shall be painted once in a year with approved colour.

8. Replacement of indicating lamp/ LED type lamp including supply of the same as and when found defective.

9. Cleaning of complete yard including painting of structure of complete yard along with fencing and screening of sand and screen concrete and spread the same once in a year and grass root removing four times in a year as required.

10. All the other repair works except given in the contract, will be carried out by the Institute on his own cost.

11. The payment against maintenance during the contact period shall be made against quarterly running bills of the accepted amount for AMC subject to satisfactory maintenance of the installation and submission of all formats such as weekly, monthly, quarterly & yearly as provided by the Institute duly filled and accepted by engineer in charge .

12. The adequate team of manpower shall be available at site as per quantum of the work. Also it is responsibility of the contractor to provide the manpower within 2-3 hours on call by any representative of the Institute in case of breakdown.

13. There shall be a penalty in case of short supply/fail to supply the man power at the time of maintenance/breakdown. A penalty of Rs.2000/- shall be liable on first occasion and the same shall be increased to Rs.4000/- for second occasion further on wards. In case the situation does not improve, the contract shall be rescinded.

14. Only the qualified and experienced staff for maintenance of 33KV/11KV/0.433KV equipments shall be engaged. The qualification & experience of technical staff shall be as under:-

Qualification and experience for the category of 1. Engineer with Degree with 4-5 years experience or diploma with 10-12 years experience. 2. Supervisor Having licence issued by the Director electrical safety with experience 5-7 years. 3. Mechanics/Wireman Having licence issued by the Director electrical safety with experience 10-12 years. 4. Unskilled Workman. As per site requirement.

15. A list of spares (which are usually used) for each equipment shall be submitted by the contractor to the dept. alongwith the rates and price list.

16. Taxes & Duties:

a) Being and individual works contract / maintenance contract, sales tax, excise duty, etc are not payable separately. Rates shall be quoted excluding the service tax, which will be reimburse as per actual after depositing of proof of submission to concerned department.

b) The quoted rates shall be inclusive of Trade Tax on works contract. The works contract tax shall be deducted from the bills of the contractor at the prescribed rates.

Schedule for Maintenance

1.	Transformers	weekly	<ol style="list-style-type: none"> 1. Clean the transformer with cotton rags. 2. Check that temperature rise is reasonable. 3. Check the oil level of transformer. 4. Check that air passages are free check colour of silica gel.
		Quarterly	<ol style="list-style-type: none"> 1.HT and LT Bushing: Examine for crakes and dirt deposits, clean or replace. 2. Oil in Transformer: Check for dielectric strength and water content. 3. Cooling fan bearings, motors and operating mechanism: Lubricate bearings, Examine contacts, check manual control and interlocks.
		Half yearly	<ol style="list-style-type: none"> 1. Oil cooler : Test for pressure, leakage 2. Oiling and greasing of operating mechanism etc
		yearly	<ol style="list-style-type: none"> 1. Oil in Transformer: Check for acidity and sludge, filter if required. 2. Gasket joints: Tighten the bolts evenly to avoid uneven pressure. 3. Cable boxes: Check for sealing arrangements for filling holes. Examine: compound for crakes. Replace the gasket if leaking. 4. Relay, Alarms, their circuits etc.: Examine relay and alarm contacts, their operation, fuse : etc, check relay accuracy etc. Clean the components and: replace contacts and fuses if necessary. 5. Earth resistance: Record the value of earth resistance of earth pits. 6. Silica gel: Replacement of silica gel and cup oil. 7. Buchholze relay magnetic oil gauge: Check its operation, control circuit and repair/replace
2	Out door type SF 6 Breaker and isolators	weekly	<ol style="list-style-type: none"> 1. Checking of Indicating lamps, gas pressure, earthing connection etc. 2. Cleaning of metallic enclosure.
		quarterly	<ol style="list-style-type: none"> 1. Checking of operation. 2. Checking of SF6 pressure checking. 3. Cleaning of polycons of breaker
		Half yearly	<ol style="list-style-type: none"> 1. Cleaning of contacts of isolators, and inserting petroleum jelly in contacts, 2. Oiling and greasing of operating mechanism etc
		Yearly	Checking of control circuits and its accessories i.e. aux contactors, coils, repair/ replace if required
3	Lightening	weekly	<ol style="list-style-type: none"> 1. Visual check, leakage current counter reading to be recorded.

	arresters		
		quarterly	Cleaning of external insulations
		Half yearly	checking and tightness of connections, checking earthing connections
		Yearly	Checking earthing connection up to earth pit and recording the earth pit value.
4	Overhead busbar	weekly	Visual checks for external damage of OH bus bar, connecting clamps, insulators etc.
		quarterly	Damaged clamps, insulators and nut bolts etc. shall be replaced
		Half yearly	Checking of over head structure earth connections and tighten them.
		Yearly	1 Sagging of over head bus bar if required including tightening of clamps. 2. Testing of earth pit value of structure earthing pits. 3. Cleaning of insulator string.
5	HT switch gear panel indoor type	weekly	1. Cleaning of panel externally. 2. Check for proper closing of panel so that no space should be left which may allow to enter the lizard or insects.
		quarterly	1. Checking of indicating lamps, Ammeter, voltmeter along with selector switches i/c replacement of defective ones. 2. Checking of Operation of breakers for trip/ close. 3. Cleaning of panel internally.
		Half yearly	1. Checking of interlocking. 2. Checking of control circuit and its accessories (I.E. aux contacts, connections, coils etc.) 3. Visual check of earth connections and tightening if reqd.
		Yearly	1. Checking, tightening and up keeping the insulation of main bus bar and cable connection. 2. Oil and greasing of operating mechanism. 3. Cleaning of contacts with CTC, indicating devices, voltmeter, a meter, selector switch etc. and replace if required. 4. Checking of CT and PT's etc. 5. Checking of SF 6 gas pressure switch operation. 6. Checking and recording of earth resistance value.
6	Relay and control panel	weekly	1. Cleaning of panels externally 2. Checking and replacement of indicating lamps if required. Quarterly
		quarterly	1. Cleaning of panel internally with vacuum cleaner. 2. Checking of Aux contractor. 3. Check all fuses and contracts replace / repair if required
		Half yearly	1. Checking of Earth connection of panels. 2. Check operation of auxiliary contractors. 3. Checking CTs & PTs connections.
		Yearly	1. Checking and tightening of all connections.

			<ul style="list-style-type: none"> 2. Checking and servicing of all contactors and relays, repair/replace if required. 3. Checking of earth resistance value. 4. Checking calibrating and repairing of all meters/relays. 5. To check contacts of fuses, repair / replace if required.
7	AC DB Panel	weekly	<ul style="list-style-type: none"> 1. Cleaning of panel externally 2. Visual check of panel meters. 3. Checking indicating lamps replace/ repair if required.
		quarterly	<ul style="list-style-type: none"> 1. Cleaning of the panel internally with vacuum cleaner. 2. Check of switch contacts 3. Checks all fuses and contacts replace / repair if required.
		Half yearly	<ul style="list-style-type: none"> 1. Checking of Earth connection of panels. 2. Checking and repairing of operating mechanism of SFU/ MCCB etc.
		Yearly	<ul style="list-style-type: none"> 1. To check of all switches, contacts, tighten the connection, cleaning of contacts and insert petroleum jelly. 2. Checking of earth resistance value.
8	Battery Charger	weekly	<ul style="list-style-type: none"> 1. Cleaning of battery charger and performing visual inspection for any abnormality. 2. Checking of batteries i.e. electrolyte levels, sulphation of contracts. 3. Checking indicating lamps, replace/ repair if required.
		quarterly	<ul style="list-style-type: none"> 1. To check Voltage of each battery and record. 2. To check operation of charger (Boost + float.)
		Half yearly	<ul style="list-style-type: none"> 1. To check value of specific gravity of electrolyte of each battery 2. To remove sulphation and insert petroleum jelly. 3. Connection tighten of battery charger
		Yearly	<ul style="list-style-type: none"> 1. Internally cleaning with vacuum cleaner. 2. Tightening of all connections. 3. Checking of the operation of all switches

For performing the above tasks the resource requirement may be given in the format as below.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
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1.	a) Man power Designation 1. 2. 3. b) Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted) 1. 2.			(CTC may be quoted for each designation)		
	TOTAL (H)					

BILL OF QUANTITIES

I. BACK UP POWER WITH D.G.

General operation and day to day and periodical maintenance of DG sets and its allied equipments, maintenance and operation of changeover and log up keeping and recording flow and energy meters coordinating for B,C checks and others statutory checks and custody and maintenance of POL inventory.

The total Numbers of DG sets to be maintained are 5 Nos Out of which 2 Nos are of 1500 KVA Kirloskar make and 3Nos Of 1010 KVA of LEYPOWER make and its connected accessories with automatic changeover and integration of all DG sets gadgets.

All the DG sets are integrated with Woodward Panel for Auto operation and synchronisation.

The Tenderer shall carryout the following works during Maintenance Contract period along with the servicing of the Diesel Generator sets:

1. General check up & preventive maintenance and to fill up preventive check up schedule for each machine.

a) Check lube oil level and conditioning of lube oil, top up/refill if required

b) The oil filters shall be replaced whenever oil is changed

c) The air filters shall be cleaned periodically with compressed air, check batteries and top up the distilled water if required

d) Check functioning of changing alternator

e) Engine safety viz., high water temperature gauge, oil pressure gauge, oil temperature gauge and high speed gauge shall be checked for their functions and repaired/replaced if required

f) Coolant level and conditioning of coolant shall be checked and refilled if required

g) Check fan and alternator drive belts and tightened if required

h) The governor shall be checked and tuned for proper functioning

i) Check for leaks if any and shall be rectified

j) Check reports shall be submitted every month/every breakdown calls

2. Supply & replacement of following parts during B Check Service at approved rate list of OEM (Every 300 Hrs. of engine operation / 6 months whichever is earlier) (i) Fuel Filter (ii) Lubricating Oil Filter (iii) By pass filter (iv) Coolant (v) Engine oil (vi) Air Filters (Refer clause 18 & 19 also).

3. Checking and servicing of engine for smooth running, its unusual sound and colour of smoke from exhaust and set it right in case of deviations.

4. Checking and repairing the leakage of fuel, lubricating oil and coolant.

5. Cleaning and changing of Air filters as per requirement.

6. Setting of Valves tappets whenever required.

7. Checking and repairing of Accessories drive, Turbo Charger and crankshaft endplay When ever required.

8. Checking of alignment and alignment of Engine and Alternator as per requirement

9. Checking of throttle control & its setting.

10. Checking of instrument on instrument panel including replacement as and when required.

11. Checking of rotating diodes assembly in brushless alternator including replacement as and when required.

12. Checking of wiring system and repairing / replacement as and when required.

13. Repair and Maintenance of Relays including contractors in control panel.

14. Checking of battery terminal and de-sulphation.

15. Diagnosis of faults in engine and Alternator and its rectification.

16 The firm should undertake to arrange genuine spares of the Diesel engine, alternator and AMF panel as and when required within two working days.

17. The engine shall be run on no load or at available load, and should be checked for any leakage and abnormal noise. If any such abnormality noticed shall be diagnosed and remedial action shall be taken

18. Inventory management shall be carried out for consumables for P.O.L.

Log shall be maintained for details like generation running hours, consumption of fuel efficiency load factor etc.

19. Regular energy meter reading shall be recorded and logical support shall be extended for raising the bills for the clients.

For performing the above tasks the resource requirement may be given in the format as below.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
1.	a) Man power Designation 1. 2 3 b) Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted) 1. 2.			(CTC may be quoted for each designation)		
	TOTAL (I)					

J

BILL OF QUANTITIES.

J. MAINTENANCE OF INTERNAL ELECTRICAL INSTALLATIONS.

General up keep and day to day maintenance and periodical maintenance and attendance of defects, of internal electrification and fittings including street lights in 24X7 basis.

1. Operate and Maintain **the** entire Electrical Panel from Energy input Point to Output Points (Both HT and LT)
2. Maintaining daily log on electrical parameters
3. Maintaining Daily log on electrical O & M
4. Maintaining of station batteries in good condition and keeping records on battery maintenance
5. Ensure all cable and wires are firm and proper in connection.
6. Ensure contacts in Breakers are clean and mechanical operation is smooth and firm.
7. Check all meters and protective relays as per the PM schedule.
8. Checking Light Fittings on daily basis, cleaning and replacing faulty lights and fixtures.
9. Maintain all earthing System / Earth pit to ensure earth continuity at all points in the system and carry out PM as per schedule to keep the value within the std. prescribed limit.
10. Trouble shoot any problem happening on HT & LT system as per S.L.A, to ensure continuous and effective functioning of all systems
11. Under take the preventive maintenance of Motors / Pumps
12. Check for all safety controls
13. Carry out Preventive Maintenance as per the Annual PM chart for all electrical equipments including Transformers, Switch gears, panels etc. and record the same.
14. Liaisoning with Government agencies (TNEB, CEIG etc...) in all respects.
15. As per the standard, arranging and keeping the installation ready with all statutory records for electrical inspections and coordinating the inspection and related matters.
16. Ensuring Electrical safety for the personnel and equipments and taking immediate action regarding any abnormality noticed to prevent any short circuit.
17. Conducting test checks periodically
18. Inspection of lightening arrester installation
19. Maintaining history card for all equipments
20. Maintaining the capacitor banks and keeping system power factor in good condition

For performing the above tasks the resource requirement may be given in the format as below.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
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1.	a) Man power Designation 1. 2. 3. b) Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted) 1. 2.			(CTC may be quoted for each designa tion		
	TOTAL (J)					

K

BILL OF QUANTITIES

K. GENERAL SERVICES.

- a) Taking Energy meter Readings for both electrical energy and HVAC BTU meters. In total around 300 meter s needs to be recoded in every month in the presence of clients and calculate Power cost calculation for raising Invoice to the clients every Month.
- b) Transmit Hard copies of Invoice to various clients through a Multi Tasking Executive and obtain Acknowledgement.
- c) Coordinating with concerned statutory Authorities and obtain license/ renewal of Licenses/approval etc.
- d) Establishing a service center (Help Desk) with suitable communication arrangement with soft ware package for registration of complaints and watch its removal with facility for escalation for delay and generate report of the daily, weekly, monthly status and submission to IITMRP and running the same with suitable man power on 24x7 basis.
- e) General operation and day to day and periodical maintenance of access control and surveillance system consisting of CCTV and its cabling and recording system in 24x7 basis. allied equipment.
- f) Conducting Physical verification of all assets including furniture etc once in a year and submit verification report in the prescribed Format.
- g) Management of Parking Token for the occupied clients for the use of Multi level car parking and other parking Slots. Total Number of parking slots will be 2000 Nos Two Wheelers and 1000 Numbers Four wheelers.

For performing the above task the resource requirement may be given in the format as below.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
1.	<p>a) Man power Designation 1. 2 3</p> <p>b) Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted) 1. 2.</p>			(CTC may be quoted for each designation)		
	TOTAL (K)					

L

BILL OF QUANTITIES

L. Solid Waste Management.

All the solid waste generated In the offices, common Areas , Rest Rooms etc collected in the dust bins at various floors shall be transported and collected in a common waste Yard and transport the same after segregating the waste for recycling etc out side the campus and disposing it at the corporation authorized yards etc complete.

The Rate may be quoted per load of waste transported out side the IITMRP campus . The capacity of vehicle and rate per load including segregation , loading Transporting and disposing of waste including Garden waste .

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
1.	<p>solid waste generated In the offices, common Areas , Rest Rooms etc collected in the dust bins at various floors shall be transported and collected in a common waste Yard and transport the same after segregating the waste for recycling etc out side the campus and disposing it at the corporation authorized yards etc complete.</p> <p>Utilising the closed truck of 10 tonnes capacity</p> <p>Utilising the closed truck of 5 tonnes capacity</p>	30 Load per Month	Per load			
	TOTAL (L)					

M

BILL OF QUANTITIES

M. HVAC OPERATION AND PERIODICAL MAINTENANCE OF CHILLERS, CHILLED WATER GRID, RAISING MAINS AND AHUS, VFDS, VAVS .

Chiller details

Three Nos 300 Tr Dunhum Bush chillers commissioned during 2010 in phase-I.

Has been working continuously even after commissioning Phase-II.

In phase –II 4 Nos 425 Tr Climaveneta chillers with 425 Tr thermal storage commissioned during 2016.

Both the systems are integrated in such a way that the operation is feasible for

- Operation of phase-I chiller alone or

- phase-II alone to cater for both phase-I&II Load or
- on standalone mode to cater the load of its own Phase.
- Operation phase-I &II chillers combinedly and cater for both phase-I&II Load.

These chillers are with all associated accessories of primary, secondary, condenser pumps with cooling towers. All these chillers are water cooled chillers.

Chilled water grid with NINE raising mains in Phase-II (A,B,C,D Blocks) and with SIX Nos raising mains in Phase-1 (E Block).

All the AHUS are provided with VFDs and VAVS and water balancing valves. Grid is provided with Ene3rgy valves and DPTs and connected to BMS for operation and control.

CHILLED WATER AHUs,CSUs.

The scope of work under Scheduled Preventive Maintenance for 'Chilled Water Air Handling Units' shall cover the following:

A) Attending to break-down calls as and when the same arise. All break-down calls will be responded within 4 hours of lodging of complaint. Break-down calls will be resolved within the following time frames:-

Minor Complaints such as repairs/replacement of electrical contactors, relays, sensors, belts, bearings, blower shaft, water leakages, shall be resolved within 12 hours of lodging of complaint.

In case of motor bearing failure or winding burnout, a replacement motor shall be provided within 6 hours of complaint. The original motor has to be repaired / replaced within 48 hours.

B) Carrying out at least 4 Routine Preventive Maintenance Service, spread out evenly over a period of one year.

A general scope of work under such Service shall include:

Works to be carried out monthly interval.

- 1 General cleaning filters
- 2 Check. Adequacy of flow and temperature of inlet and return water
- 3 Check the settings of VAV, VFDs, actuators connectivity of BTU meters with BMS.
- 4 General checking of working of motors, Fan belt noise level for Vibration etc.

Works to be carried out at Quarterly Interval.

- 1) Checking water inlet and outlet pressures and temperatures – Quarterly.
- 2) Checking for any abnormal noise or vibration – Quarterly.
- 3) Checking foundation bolts of all blowers and motors – Quarterly.
- 4) Carrying out balancing work on blower if there are abnormal vibrations due to imbalance – As required.
- 5) Cleaning of filters – Quarterly.
- 6) Cleaning of Y – Strainers, if the same is provided in the system – Fortnightly.
- 7) Closing and opening of butterfly valves to ensure that they do not rust / malfunction because of lack of operation – Quarterly.
- 8) Checking the position of balancing valve and ensuring the same is as per settings made during balancing work.
- 9) Checking the settings of dampers and ensuring the same is as per settings marked during balancing work.
- 10) Draining of complete water in the , CSUs, FCU, Cassette units, AHUs after closing the isolation valves and flushing once by opening the inlet valve – Yearly.

- 11) Checking for operation of 2way / 3 way valve by varying the set temperature in the thermostat.
 - 12) Checking for satisfactory operation of all components of the unit – Quarterly.
 - 13) Checking of current drawn by motors – Quarterly.
 - 14) Checking for operation of all safety provisions such as fan motor door interlock, tripping of AHU on fire signal, closing of fire dampers at AHU outlet/RA – Quarterly.
 - 15) Checking calibration of sensors by observing the resistance values – Half yearly.
 - 16) Calibration of all gauges - Yearly
 - 17) Cleaning of cooling coils - Quarterly. One of which will be a chemical cleaning.
 - 18) Cleaning of blower fan blades – Quarterly.
 - 19) Checking and adjusting fan motor belt tension - Quarterly.
- HALF YEARLY
- 20) Checking of fan pulley alignment – Half yearly.
- ANNUALLY
- 21) Checking of blower alignment using laser equipment - Yearly
 - 22) Lubricating of all parts as specified in the equipment manufacturer's manual – Quarterly.
 - 23) Checking of all electrical terminations for any loose connections - Quarterly.
 - 24) Cleaning of drain tray – Quarterly.
 - 25) Blowing air / nitrogen into drain pipe to remove any organic growth / blockages – Quarterly.
 - 26) Replacement of filters – yearly.
 - 27) Chemical Cleaning/ compressed air cleaning of coils for any obstructions and cleaning the Surface of coil.

Ahu details of Phase-I (E Block)

AHU	44 of 20TR
CSU	17 of 10 TR
Cassette Units	13 of 2 TR
TOTAL	74

The details of AHU in Blocks A,B,C,D in all floors is as below.

Phase 2 - Tonnage List														
Sl.No	Location	Tonnage												Total
		2	7.5	8	10	15	18	20	26	30	50	60	90	
1	SGRI				1			1		2		5	3	660
2	Ingevity					1								15
3	TCS				1					1		1		100
4	CII					2								30
5	D3		1		5	5								132.5
6	D3 Lounge		1											7.5
7	Food Court	2			6			1						84
8	B3		7		2	1								87.5
9	A3		3		7	3								137.5
10	A6		2		3	3								90
11	B6		4		3									60
12	BMS				1									10
13	Lounges A3, A6, C6		2		1									25
14	HTIC				1	1		1						45
15	EXIDE	2				2		1						54
16	Creche		1											7.5
17	Gym					1								15
18	TATA Steel					1								15
19	D3 demo room	1												2
20	C6 -Cube										1			50
22	D7 - New Auditorium	3		1			3		2	1				150
Total No of Units		8	21	1	31	20	3	4	2	4	1	6	3	1777.5

The chillers of the both Phase-I and Phase -II shall be operated depending upon the Load requirement for the chilled water supply to all the operating AHUS on 24x7 basis.

Day to day operation shall be monitored for snags through BMS and remove the snags in such a way the clients get Un interrupted cooling inside the office space. The turn around time shall be kept barest minimum and also the snag shall be identified before client report the same to Help Desk.

All Routine maintenance of all equipment for every time, daily, quarterly, half yearly, and Annual periodicity shall be carried out from chiller, chilled water Grid, raising Mains, AHUS, and all its associated accessories.

Check list shall be got approved from IITMRP and any default need to be compensated by way of fines of appropriate value.

For performing the above task the resource requirement may be given in the format as below.

All the consumables and spares shall be borne by IITMRP.

All the TOOLS and gadgets to carry out the above task shall be provided by the Vendor.

Item	Description	Qty.	unit	Rate in	Rate in words	Amount
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No.				Fig.	
1.	<p>a) Man power Designation</p> <p>1. 2 3</p> <p>b) Machineries (Individual machinery Name, type, rating may be given and the charges per month may be quoted)</p> <p>1. 2.</p>			(CTC may be quoted for each designation)	
	TOTAL (M)				

BILL OF QUANTITIES

N. Management & supervision.

O.

Sub Head : Providing management and supervision man power to oversee all the facility management operations as per the various subheads.

In order to have the proper management and coordination for the various services the following personal need to be deployed with the qualification and experience commensurate to the nature and volume of work. The minimum requirement is as below.

The CTC for the man power requirement may be quoted.

Item No.	Description	Qty.	unit	Rate in Fig.	Rate in words	Amount
1.	Property Manager. BE Mechanical or electrical with minimum 15 years experience in maintenance of MEP services and property management.	1	Each			
2	HVAC Manager With BE mechanical or electrical with 5 years experience in HVAC Operation and installation maintenance management.	1	Each			
	Shift Supervisor With BE mechanical -1No With BE electrical or electronics – 1No With BE Civil or Public Health – 1NO With BE electronics with NET work specialisation	4	Each			
4	Banquet Manager With minimum diploma in catering with 5 Years experience in Event management.	1	Each			
5	House keeping Executive With diploma of relevant discipline	1	each			
	TOTAL (N)					

ABSTRACT OF COST.

The vendors are requested to assess the man power and machinery requirements of all the above operations and quote item wise with rates of monthly salary, and monthly charges for machinery if any required. The rates shall be the CTC of employees including Variable DA as per minimum wages Act, employer's contribution of ESIC,EPF, Leave salary and other perks. The Detailed break up of CTC of each category shall be given.

The vendors will be paid every month the cost, on production of proof of having paid the man power at the rate quoted above. In addition, for the total of man power, charges on machinery, cost of consumables if any, the Overheads and profit at fixed percentage will be paid.

For the operation the consumables will be issued free of cost by IITMRP.

The monthly charges for the man power shall be CTC of the company including EPF, ESIC etc.

ABSTRACT

SUB HEAD	TOTAL AMOUNT	REMARKS IF ANY
A.DAY TO DAY HOUSEKEEPING		
B EXTERNAL AREA		
C O&M OF SEWERAGE		
D O&M WATER SUPPLY		
E. FIRE FIGHTING		
F. EVENT MANAGEMENT		
G. FAÇADE CLEANING		
H. O&M SUBSTATION		
I O&M DG SETS		
J . MAINTENANCE OF INTERNAL ELECTRICAL INSTALLATIONS		
K. GENERAL SERVICES		
L. SOLID WASTE MANAGEMENT		
M. HVAC OPERATION AND MAINTENANCE.		
N. MANAGEMENT & SUPERVISION		
TOTAL		
MANAGEMENT FEE as a percentage		
Taxes if any including GST		
GRAND TOTAL IN INR.		

The overheads and vendors profit (in Fig).....% (in words.....percent)

(Vendor to quote the percentage. If left blank it will be construed that the percentage quoted as ZERO)

The vendors may please note that the CTC quoted shall commensurate to the minimum wages Act provision. Any quote violating the same will summarily be rejected.

The vendors shall bear in mind the fact that in the Agreement clause exists for imposing of fine for default of the duties.

The Minimum wages Applicable will be that of Shops and Commercial Establishment. Any revision in Minimum wages act only the Basic alone will be considered for revision of Agreement rates .

Signature and address of the bidder.

**C.O.O
IIT Madras Research Park.**

END OF DOCUMENT.