



भारतीय प्रबंध संस्थान, लखनऊ नोएडा परिसर
INDIAN INSTITUTE OF MANAGEMENT LUCKNOW NOIDA CAMPUS
Plot no. B-1, Sector -62 Institutional Area, Noida-201307, U.P
Tel: 0120-6678532, 8426, | Fax: 0120-6678506 Website :- www.iiml.ac.in
Email id purchase_iimlnc@iiml.ac.in

Enquiry No.: - IIML/PURCHASE/CAMC-STP/2022/23

Date: - 21/12/2022

NOTICE INVITING E-TENDER

NOTICE INVITING E-TENDER for upgradation and comprehensive AMC including Operation and Maintenance of Water Supply Pump Sets, Sewage Treatment Plant (STP capacity of 120 KLD) with all associated items for a period of five (5) years as under: -

- (A)** Upgradation of STP capacity of 120 KLD
- (B)** Repair/Overhauling of Pump House
- (C)** Operation and Maintenance of Water Supply Pump Sets, Sewage Treatment Plant with all associated items

IMPORTANT DATES

NIT Enquiry No.	IIML/PURCHASE/CAMC-STP/2022/23
Date of Issue of NIT	21/12/2022
Pre-bid Meeting	28/12/2022 at 11:30 am. at IIML-NC
Last date and time of Bid submission	11/01/2023 till 3.00 pm
EMD	Rs. 2,00,000/- submitted through NEFT
Period of Contract	5 years (1+4) from the date of issue of LOI
Total Estimated Cost	Rs. 96,76,000/- (Approx.)
Starting of work	Within 15 days of the Date of LOI /Work Order
Note: The Institute reserve the right to change/revise the date of opening the tender. In such a case, the information will be displayed on the institute's website.	

NIT No. – IIML/PURCHASE/CAMC-STP/2022/23 dated- 21/12/2022. A free view NIT is available on Govt. E-Procurement portal i.e. <https://eprocure.gov.in>. Interested vendors/agencies are requested to sign-in (new user sign-in only with DSC) online to obtain user-ID and password using Digital Signature. The tender document comprises of technical and financial bid may be downloaded on acceptance of terms and conditions. The technical and financial bid duly filled may be uploaded on E-Portal of Govt. site i.e. <http://eprocure.gov.in> using Digital Signature before the last date and time of submission as mentioned above. The credentials as listed below shall be uploaded on line.

GUIDELINES FOR BIDDERS

1. Indian Institute of Management, Lucknow, an autonomous body, set-up by the Ministry of Human Resource Development, Government of India having its office at IIML Noida Campus, Institutional Area B-1, Sector-62, Noida – 201307, Uttar Pradesh (India) invites offers in prescribed BOQ from reputed vendors/agencies with the specified specifications in prescribed Performa.
2. Institute invites the quotations in two bid system (Technical and Financial) for procuring the following services
 - A. Upgradation of STP capacity of 120 KLD
 - B. Repair/Overhauling of Pump House
 - C. Operation and Maintenance of Water Supply Pump Sets, Sewage Treatment Plant with all associated items
3. Bidder/Tenderer who has downloaded the tender from the Govt. site shall not tamper/modify the tender form including downloaded price bid template in any manner. In case if the same is found to be tampered/modified in any manner, tender will be completely rejected and EMD would be forfeited.
4. Intending bidders/tenderers are advised to visit website eprocure.gov.in regularly till closing date of submission of tender for any Corrigendum/Addendum/Amendment.
5. The details of terms and conditions are being given at page (Technical Part –Annexure - 1) and (Financial Part of Point No 2 (A) & (B) – Annexure '2').
6. Complete tender document is available on website <https://eprocure.gov.in> which can be downloaded. Beside this tender document is also available on the Institute website: www.iiml.ac.in. The Tender which are uploaded by the bidders/tenderers without required supported documents as per tender notice, shall be rejected. The bidder incorporating additional Term & conditions are also liable to be rejected. Without submission of EMD/inadequate EMD shall be summarily rejected.
7. Earnest Money Deposit of **Rs 2, 00,000/-** (Rupees Two Lacs only) should be deposited (before the last date) in the below account details.
 - **Payee Name: INDIAN INSTITUTE OF MANAGEMENT LUCKNOW-NOIDA CAMPUS**
 - **Banker Name: AXIS BANL LTD.**
 - **Account Number: 022010100356060**
 - **IFSC Code: UTIB0000022**Scanned Copy of receipt of the deposited as EMD should be uploaded on www.eprocure.gov.in.
8. Copy of EMD receipt should be uploaded along with on website eprocure.gov.in. **A registered firm under the NSIC/MSME scheme is exempted from submission of Earnest money Deposit (EMD) on submission of valid attested documentary proof.**
9. The firm registered with NSIC/MSME should attach VALID document regarding exemption of EMD. Further in that case the firm may be exempted only from depositing only EMD but in case of awarding the contract/order the registered firm has to deposit 10 % Performance Security deposit of the total contract value.

10. Intending tenderers are advised to visit website eprocure.gov.in regularly till closing date of submission of tender for any Corrigendum/Addendum/Amendment.
11. All filled bids are to be uploaded on the above site on or before 3:00 PM by 11/01/2023 Manual submission of bids shall not be accepted.
12. On behalf of the Director of the Indian Institute of Management Lucknow, you are hereby invited to quote your rates for 05 years (1+1+1+1+1) on the 'BOQ (Bill of Quantity)' for the above subject works as per details given below.
13. Technical offers shall be opened first, if the tenderer fail to submit the EMD than their technical offer will not be Opened/Evaluated. The technical offers will be evaluated by the selection committee based on technical evaluation criteria of this document.
14. Financial offer shall be opened only for those tenders who are technically qualified as per evaluation criteria of this tender document.
15. The dates for opening financial offer will be communicated to the tenderers and tenderers are requested to be present at the time of opening the tenders. Authority letter is must if any person other than who has signed the tender document attends such event.
16. Each page of the tender document must have signed by the authorized signatory of the tenderer.
17. Original tender document duly signed and filled up should be uploaded.
18. The tender not accompanied by complete document or duly filled in all respect shall be rejected.
19. The authorized person while filling the tender document must attest all erasures, cuttings and alterations made. Over-writing of figures is not permitted.
20. Successful tenderers must visit the site and see the means of access to the site and specifications and acquaint themselves fully about the works to be carried out and all other factors governing the works before quoting his rate.
21. Tenderer has to submit Performance Security deposit 10% of total contract value within 10 days after issue of LOI with minimum validity of three years plus 60 days in form of DD/FDR /BG from Nationalized Bank. EMD of unsuccessful tenderer shall be returned after finalization of contract. EMD of successful tenderer shall be returned only after deposit of Performance Security deposit. Performance Security deposit will be release after successful completion of work. No interest shall be paid on amount.
22. Initially contract will be awarded for one year. After satisfactory completion of one year, the contract may be extended for five years with mutual consent of the Institute and the contractor. However, both the Institute and the contractor shall have the right to end the contract by serving notice to the other party, three months in advance. Also if the contractor is found to be grossly negligent or inadequate in execution of the work, the Institute shall have full right to notify the contractor of the gross defects and to terminate the contract at any time during the contract period without any prior notice.

23. The rate quoted by the tenderer shall be the total sum of material & labour at the IIM Lucknow Noida campus, Excluding of GST. GST will be paid extra as applicable.
24. If any discrepancy / misprint is noticed / specification or BOQ, it should be clarified from the Institute before quoting the rate.
25. Following procedures shall be adopted in case of difference in quoted rates in figures and words and extensions:
 - i. Where there is difference between rates in figures and the rates, quoted in words shall be considered as correct.
 - ii. Where the amount of an item is not worked out or it does not correspond to the rate either in figure or in words, the rates quoted in words shall be considered as correct and necessary extension made.
 - iii. Where the rate quoted by the tenderer in figures and in words tally, but the amount is not worked out correctly, the rates quoted by the tenderer shall be considered as correct and amount shall be corrected accordingly.
26. The Indian Institute of Management, Lucknow do not bind themselves to accept the lowest or any other tender and reserve the right to accept or reject any or all the tenders either in full or in part without assigning any reason.
27. The tender shall be opened & evaluated by the tender committee and the successful tenderer shall be informed.
28. If any of the document submitted by the tenderer is found fake, even after the acceptance of tender, the contract will be terminated for which the concerned tenderer will itself be responsible and no compensation, etc., will be paid by the IIM, Lucknow.
29. The Director, Indian Institute of Management, Lucknow has reserves the right to reject one or all the tenders without assigning any reason. No claim, whatsoever, shall be entertained on this account.
30. Tenderer are required to execute the agreement in accordance with the approved Proforma on non-judicial Rs. 100 stamp paper of appropriate value within 30 days from the date of receipt of this Letter of Intent. The cost of non-judicial stamp paper is to be borne by tenderer.
31. Tenderer can avail relaxation given as per Govt. norms for NSIC/MSME registered firm.
32. Successful tenderer uploaded document can be verified with the original at the time of LOI / Agreement.
33. Tender term & condition also includes GCC which is uploaded on IIML website and also be the part of this contract and its terms and conditions shall be biding to both IIML and the successful Tenderer. So please read it properly.
34. Last date and time for submission of the tender are 11 January 2023 by 3:00 PM.

To,

Head Administration

Indian Institute of Management Lucknow Noida Campus

B-1, Sector- 62, Noida– 201307 (U.P.)



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Notice Inviting Tender for Repair and Upgradation work of STP (120 KLD) and Water Pump House along with Comprehensive AMC of Operation and Maintenance of STP and Water Supply Pump Sets with all associated items for a period of (1+1+1+1+1) i.e five (5) years. Only those bidders, whose technical bids are complete in all respects, will be considered for evaluation. Financial Bids of only those bidders will be opened whose technical bids qualify as per evaluation criteria prescribed by the Institute. Complete E-Tender document is being available on website eprocure.gov.in. The E-Tender document can also be downloaded from the Institute website: www.iiml.ac.in.

ELIGIBILITY CRITERIA

1. The Firm must have GST registration.
2. The Firm must have minimum work experience of **10** (Ten) years in the line of Comprehensive Annual Services and Maintenance Contract of Operation and Maintenance of Water Supply Pump Sets, Sewage Treatment Plant with all associated items.
3. Out of Ten years' experience the firm must have at least **05 years'** experience in Govt. Organization/Semi Govt. /State Govt. IITs, IIMs, State/Central University in providing Comprehensive Annual Services and Maintenance Contract. Total experience will be evaluated/counted as on 31st December 2020. Upload a copy of Work Orders and Work Completion Reports.
4. Annual IT Return of last Three financial years (2018-19, 2019-2020, 2021-2022) duly audited by Chartered Accountant should submitted in support.
5. The Firm/Agency/Organization (Contractor) should have minimum annual turnover of around Rs. 2.0 cr. /- in last the three financial years.
6. The Firm must have an Office in Delhi & NCR Region.
7. A Certificate/Undertaking on the letterhead of the Company to the effect that the bidder has not been blacklisted anywhere in India by any organization. A self-certification to this effect is required to be enclosed.

SELECTION METHOD

Only those bidders, who meets the above mentioned eligibility criteria (as on 31st December 2022) and qualify the Technical Bid in all respects would be considered as technically qualified bidders. Bidders are requested to fill and their rates as per the Financial Bids, BOQ. Financial Bids will be opened only of the Technically Qualified bidder. Incase two or more firms are quoting

same basic rate will be finally evaluated on the basis for highest average annual turnover of last 03 years (2018-19, 2019-2020, 2021-2022) feedback by clients.

SCOPE OF WORK FOR “OPERATION AND MAINTENANCE OF 120 KLD STP BASED ON SAFE TECHNOLOGY FOR SMOOTH AND EFFICIENT WORKING AND SUBSEQUENT OPERATION AND MAINTENANCE

- i. Replacement / supply / fixing of lateral and header type SS Air grid in equalization tank, chlorine contact tank, sludge holding tank, for supply of designed air to keep suspended solids in suspension/Homogenous colorless state and avoid septic condition (once in a year or as and when required under intimation to the Officer In-charge, IIMLNC.
- ii. Servicing / repairs (if required) of sewage pumps (pumping from equalization to reactor) with connected piping, valves and accessories (quarterly or as and when required under intimation to the Officer In-charge, IIMLNC.
- iii. Servicing / repairs (if required) air blowers with all connected piping and accessories (quarterly or as and when required under intimation to the Officer In-charge, IIMLNC.
- iv. STP Piping: Repairing of SS/MS pipes including replacement as required, including all accessories, valves as required (once in a year or as and when required under intimation to the Officer In-charge, IIMLNC.
- v. Electrical panel and connected cabling / termination / switch gear / contactors etc. complete servicing/ repairs/ replacement of components if any of the electrical panel and systems. .(complete servicing to be carried out on monthly basis and replacement of the components as and when required)
- vi. Soft water discharge line:GI pipe: 250 meters (as and when required under intimation to the Officer In-charge, IIMLNC.
- vii. Treated water discharge line: GI pipe: 50 meters (as and when required under intimation to the Officer In-charge, IIMLNC.
- viii. Cleaning and desalting of all tanks of STP (once in a year or as and when required under intimation to the Officer In-charge, IIMLNC.
- ix. Conduit cable trays for all cables outside as required (once in a year or as and when required under intimation to the Officer In-charge, IIMLNC.
- x. Painting: of the pump house walls / ceiling / electrical panels / all piping / accessories / motors as required (once in a year or as and when required under intimation to the Officer In-charge, IIMLNC.
- xi. Cleaning of the outdoor premises of STP and painting of fencing (once in a year or as and when required under intimation to the Officer In-charge, IIMLNC.
- xii. Culture of biomass / mlss (seeding) submitting samples and obtaining period reports as per requirement of CPCB / UPPCB (quarterly or as and when required under intimation to the Officer In-charge, IIMLNC.
- xiii. Any left out items for the proper functioning of the STP (once in a year or as and when required under intimation to the Officer In-charge, IIMLNC.
- xiv.Cleaning of STP lines (on every three months) and get it verified by the Officer In-charge, IIMLNC.
- xv.Retainer consultancy as to the satisfactory operation of the installed projects inclusive of the chemicals/consumables for STP.
- xvi.Provision of trained personnel at site of work by agency for Monitoring & Running of the installed plant.
- xvii.Maintenance of log books as per norms and standards.
- xviii. Preventive maintenance like oiling/Greasing/Chemical preparation/Cleaning of Filters etc.
- xix.Cleaning of collection tank or main drain connected to STP.
- xx.Pipes into the equalization tank and at the outlet of the plant.
- xxi. Final discharge of treated effluent.
- xxii. Unloading and safe custody of equipment's at site
- xxiii.The agency has to ensure that the STP is designed for the sewage treatment only, so agency has to check and make sure that the agriculture waste/ kitchen waste or other contamination like storm water should not be mix with sewage.

SCOPE OF WORK FOR “OPERATION AND MAINTENANCE OF WATER SUPPLY PUMP SETS WITH ALL ASSOCIATED ITEMS”

- a. The scope of work shall cover daily operation and all routine, breakdown / preventive and special maintenance works as required from time to time for Operation and maintenance of Water Supply Pump Sets with all associated items with material supplied at contractors / bidders cost allied services. Inspection to be carried out and verified by the Officer In-charge, IIMLNC
- b. All the equipment's/installations shall always be kept in good and trouble-free operating condition and get it verified by the Officer In-charge, IIMLNC.
- c. All the required record for break – down / repairs and maintenance etc., shall be maintained in the form of history books and logbooks (on daily basis) and get it verified by the Officer In-charge, IIMLNC.
- d. Watch and ward of all materials, machineries and system etc., till end of contract shall be the sole responsibility of the agency and pilferage etc, shall be entirely to his account.
- e. Any damage to machinery/system incurred due to negligence or due to mal- operation by operators is the sole responsibility of agency to make the system in good condition within certain specified period up to satisfaction Level. Inspection to be carried out and verified by the Officer In-charge, IIMLNC
- f. The following scope of work is only indicative and agency is strongly advised to use his own judgment in evaluating the quantum of work involved in operation and maintenance of equipment's covered
- g. To operate and maintain Operation and maintenance of Water Pump House System 24 hours round the clock i.e., 3 shifts and log book to be maintained on daily basis. Inspection can be carried out any time by the Officer In-charge, IIMLNC
- h. To check and replace, if necessary the performance of all operational safety cutouts. This activity has to be done at least once in three months and if required earlier too (log book to be maintained)
- i. Replacement of bearings and rewinding of electrical motors in all and other parts of machineries in all the pump sets under this contract (log book to be maintained indicating period of replacement of bearings and rewinding of electrical motors). Inspection to be carried out and verified by the Officer In-charge, IIMLNC.
- j. To attend to the repairs of mechanical equipment's such as compressor, pump sets of bore wells, mono block pump sets and motor drives, valves, leakage due to damage of pipeline etc., including minor and major overhauling (servicing log book & equipment history card to be maintained).
- k. To lubricant motor / pumps bearing as maintenance routine (quarterly and log book to be maintained) and also inform Plumbing Supervisor. Inspection to be carried out and verified by the Officer In-charge, IIMLNC
- l. To clean all machineries daily (log book to be maintained).
- m. To paint the equipment's as and when required or once in year as per direction to take care of all first aid eventualities (service book to be maintained). Inspection to be carried out and verified by the Officer In-charge, IIMLNC.
- n. Checking of water quality and Cleaning of water tanks in every two months. Inspection to be carried out and verified by the Officer In-charge, IIMLNC

Scope of work and charges include Comprehensive Operation and maintenance complete including the repair and maintenance , cost of manpower, consumables (materials) required for running the STP Plant and Pump House including monthly testing of the quality of influent and effluent from external agency & taking corrective measures as required for satisfactory operation of STP including cleaning of sewer lines, Gully Traps and the internal & external & manholes of the campus as and when required shall be at the cost and the responsibility of the Agency/Contractor/Service Provider. STP/Pump House/Submersible pump-Complete servicing of all pumps, motors, switch boards, valves, etc. including painting of all pumps,

motors, pipes (in side pump House), switch panel and complete pump and panel include Replacement of broken switch handle, ensuring working of all measuring instruments, indicating lamps etc.

ANNEXURE – I

OPERATION AND MAINTENANCE SCHEDULE OF WATER PUMP HOUSE SYSTEM / SEWAGE TREATMENT PLANT

a) DAILY ROUTINE

- 1) Check the pump assembly for vibration, noise and water leakage.
- 2) Cleaning of all equipment's.
- 3) Backwash of sand filters if pressure difference reaches.
- 4) Check water tanks water level.
- 5) Distribution of water to all the residential/ non-residential office complexes
- 6) Ensure that water level in all the water tanks is appropriate.
- 7) Water supply system to be looked after in 24 hours/ 3 shifts in a day.
- 8) Maintaining Logbook/Service Book. Inspection to be carried out and verified by the Officer In-charge, IIMLNC

b) WEEKLY ROUTINE

- 1) Carryout daily routine.
- 2) Check operation ability of system valves and repair if found defective.
- 3) Any other maintenance routine not specified in Annexure – I.

c) MONTHLY ROUTINE

- 1) Tight foundation bolts of all installations.
- 2) Any other maintenance routine not specified in Annexure – I.

d) ANNUAL ROUTINE

- 1) Painting of pipe lines and pump assemblies and water tank doors including ventilation etc.
- 2) Carryout water analysis with all parameters twice in year
- 3) Replacement of filter media and strainer provided on the bed plate
- 4) Replacement of ion exchange resin and strainer provided on the bed plate
- 5) Any other maintenance routine not specified in Annexure – I
- 6) Maintaining Logbook/Service Book get it verified by the Plumbing Supervisor

ANNEXURE – II**MINIMUM MANPOWER SUGGESTED TO BE DEPLOYED AND THEIR MINIMUM QUALIFICATION**

S No.	Description of Manpower	Duty Timings	Manpower suggested to be deployed	Minimum Qualification and Experience
1.	Water Supply	05.00 to 13.00 13.00 to 21.00 21.00 to 05.00	Three (1 Skilled) (2 Semi-skilled)	ITI or Matriculate with minimum 05 years' working experience of Water Supply operation and log books maintaining.
2.	STP	09.00 to 18.00	Two (1 Skilled) (1 Semi-skilled)	ITI in relevant field with minimum 05 years' working experience of STP operation.

Place:
Date:

(Signature of the Contractor or His authorized signatory)
(Name with Official Seal/Stamp)

GENERAL TERMS & CONDITIONS OF CONTRACT

Validity Period of Bid: - Bid shall remain valid for 120 days (One Hundred & Twenty Days) after the date of bid opening. The bid valid for a shorter period shall be rejected by the IIMLNC as non-responsive. In exceptional circumstances, the IIMLNC may request the consent of the bidder for an extension to the period of bid validity. A bidder accepting the request and granting extension will not be permitted to modify his bid.

Place of Operation and Maintenance: - Indian Institute of Management Lucknow- Noida Campus, Institutional Area, Plot No. B-1, Sector -62, Noida – 201307 (UP).

Period of Contract: - Total duration of contract will be four years. The period of contract will commence with effect from the date mentioned in the work order/contract agreement and shall remain valid initially for a period of one year which may be extended further three (1+1+1) years on satisfactory working conditions and mutual terms & conditions agreed upon).

Performance Security: - The successful bidder's EMD will be discharged upon the bidder's submission of the performance Security. The Contractor shall deposit 10% of the annual work value along with the acceptance of contractor as security in the form of Bank Guarantee in favor of Indian Institute of Management Lucknow Noida Campus and this will be refunded after the contract has been terminated or ended. In case of deficiency in service specifically pointed out by the Institute to the contractor, appropriate penalty will be levied by Director, IIML and will be adjusted against future bills and /or security deposit. The validity of the BG should be beyond 60 days of contract period.

Payment Terms

- a) Generally, payment shall be made on Monthly basis. However, in case of delay in any particular month due to valid reason, the contractor should ensure the payment to the workers every month.
- b) The agency will have to enclose the copies of PF, ESI, and Challan as a receipt related to the deputed employees of previous months for releasing the payment of current month.

Disclaimer Clause: - IIM Lucknow has the discretion and right at any stage to cancel/add or amend the information, terms, conditions procedure and protocol set out in this Tender Document and the bidder has no claims against such right. The Institute has unfettered right hereunder to terminate the arrangements at any time without assigning any reason whatsoever.

Penalty: - Any breakdown or troubleshooting that need service or repair shall be attended and rectified within 12 hours from the time of information or else the same shall be got done from other agency and bill will be adjusted from your monthly bill.

Consumables: - Being Comprehensive Annual Operation and Maintenance Contract, the agency will have to procure all the required material, component and spare parts for keeping the installations in good working condition. The rates quoted shall be inclusive of the spare parts if any required to be changed. As part of repairs and maintenance only, genuine and original parts shall be used for repairs and maintenance. Log book and complaint books all stationary like registers, sheets, markers, pens, pencils, pens, cleaning cloth and grease etc. will be supplied by agency and no extra payment towards for these shall be made. Log book Performa must be approved by the Head Administration/Sr. Administrative Officer, IIMLNC.

Right to Black List: - IIMLNC reserves the right to blacklist a bidder for a suitable period in case he fails to honors his bid without sufficient grounds.

Pre-Bid Inspection/Survey: - The bidder may inspect the conditions & performances and maintenance of Water Supply/STP Pump Sets with all associated items to be taken over by the agency for operation and maintenance in the existing condition and if any initial repairs or replacement of any parts or modifications of any nature is required in the existing equipment's & system, the same shall be carried out by the agency within the quoted rates. The rates may be assessed accordingly.

IIMLNC will provide free water and electricity during repair and maintenance work at IIMLNC at one point. The agency has to make its own arrangements for installation of power and water from that point as per its requirement.

Schedule and Period of Operation: - Operation and Maintenance of water supply pump sets, sewage treatment plant with all associated items shall be operated as per the schedule given in the Annexure-I.

Deployment of Staff

- I. The agency should be well experienced in the field of operation and maintenance of Water Supply Pump Sets, Sewage treatment plant with all associated items shall deploy experienced and qualified manpower for operation and maintenance of Water Supply Pump Sets, Sewage treatment plant with all associated items as specified in Annexure-II.
- II. The man power for water pump house is for 24 hours round the clock. The agency shall provide the required number of skilled and unskilled labor for satisfactory operation, routine and special maintenance of the equipment's as given in the **Annexure - III**.
- III. A qualified engineer/ technician of the agency shall visit on monthly basis/or in the event of any emergency, and inspect for operational maintenance of Water Supply Pump Sets, sewage treatment plant with all associated items. Check the inputs and rectify the issues and further to submit the report to the Officer In-charge, IIMLNC. Along with report the Engineer shall be submitted monthly bills and verify the staff attendance sheet.
- IV. The agency shall inform the name of the experienced and qualified person (Engineer) who will visit the site for attending the operation and maintenance of Water Supply Pump Sets, Sewage treatment plant with all associated items.
- V. The agency shall be fully responsible for any kind of accidents/ miss- happening to their staff as well as machineries while attending the complaints or at work shall be payable by the agency.
- VI. Any extra payment of any nature if required, at any time for attending any repair/break down shall be deployed by the agency at its own cost for which nothing extra shall be payable.
- VII. Any unjustified delay in repair of equipment's shall be treated as breach of contract and suitable penalty shall be imposed which may be recovered from the monthly bill.
- VIII. Down period shall not be more than four hours for minor breakdowns and twelve hours for major breakdown subject to force majeure clause beyond the control of the agency. In case of any abnormal delay on the part of the agency beyond the specified time, penalties as follows shall be imposed and recovered from the monthly bills. Minor breakdown – Rs. 500/- (Rupees Five Hundred only) per day of delay subject to maximum of Rs. 5000/- (Rupees Five Thousand only) per fault. Major breakdown – Rs.

1000/- (Rupees One Thousand only) per day of delay subject to Maximum of Rs. 10000/- (Rupees Ten Thousand only) per fault.

- IX. The staff of the agency has to be disciplined, courteous and maintain good behaviour at site with IIMLNC authorities. Any person found indiscipline, discourteous or misbehaving shall have to be replaced with immediate effect. No labour below the age of 18 (Eighteen) years shall be employed at IIML Noida Campus, Institutional Area B-1, Sector-62, Noida – 201307, Uttar Pradesh.
- X. If the work is not as per satisfaction level, IIMLNC may hire other agency at the risk and cost of working under contract, as deemed appropriate by IIMLNC. However, the agency shall continue the performance of the contract to the extent not terminated.
- XI. The agency shall submit a true statement by first week of every month along with duty roster, about no. of workers employed by him, their working hours, and wages paid to workers (Receipts of Payments made to the authorized agencies ESI & PF) or any other related information asked by to the Officer-In-Charge, IIMLNC.
- XII. All the employees will have to be covered under insurance against any personal accident by the agency/ contractor. IIMLNC will not be liable for payment of any compensation on that account. Manpower deployment is strictly prohibited who all associated with any other works in the campus. The agency should issue uniform & identity card to all its employees within 15 days from the date of signing the contract failing which suitable penalty may be imposed by competent authority up to Rs. 2000/- per day.

Labour Law: - The agency shall abide by all the rules and regulations related to Central Govt. labour laws, accident, workman compensation act, workmen insurance, ESI, PF, Bonus etc. This will be the sole responsibility of the agency. IIMLNC will not be a party at any stage in any of the disputes relating to the above. In case, any liability arises due to non-conformance by the agency, under no circumstances IIMLNC will be liable for the same.

General Line :- Whenever under this contract any sum of money is recoverable, the sum of money is recoverable from and payable by the agency, the IIMLNC shall be entitled to recover the appropriate amount of money; in part or in whole the security deposit of the agency, if a security deposit / performance guarantee is taken from the agency, in the event of the security deposit being insufficient or if no security has been taken from the agency, the balance or the total sum recoverable, as may be. The amount may be deducted from current bill due to the agency or which at any time thereafter may become due the cover the full amount recoverable, the agency shall pay the IIMLNC on demand the remaining balance due.

Sub -Contracting: - The bidder cannot assign or transfer and sub-contract its interest/ obligations/ awarded work under the contract without prior written permission of the IIMLNC.

Termination of Contract: - IIMLNC reserves the right to terminate the contract with an advance notice of three months without assigning any reason. The contract can also be terminated at the request of agency, with an advance notice of three months falling which, the agency is liable to pay liquidated damages @ 10% of tendered value besides forfeiture of security deposit.

Resolution of Dispute: - If any dispute arises between the parties hereto in connection with the validity, interpretation, implementation breach of any provision of the contract or regarding a question, including the questions as to whether the termination if the contract by one party hereto has been

legitimate, both parties hereto shall endeavor to settle such disputes amicably. The attempt to bring an amicable settlement is considered to have failed as soon as one of the parties hereto, after, reasonable – attempts which shall continue for not less than 30 days, gives 15-day notice thereof to the other party in writing. The arbitration proceeding shall be governed by the Arbitration and Conciliation Act of 1996 as amended from time to time.

Arbitration:- In the event of any dispute arising between IIMLNC and the agency in any matter covered by this contract or arising directly or indirectly there from or connected or concerned with the said contract, the matter shall be referred to the Director, IIML who may himself act as sole arbitrator or may name as sole arbitrator an officer of IIML notwithstanding the fact that such officer has been directly or indirectly associated with this contract and the provisions of the Indian Arbitration Act shall apply to such arbitration. It is clearly understood that only courts of Law in Lucknow (UP) shall have Jurisdiction for Arbitration.

I/We have read & and accepted the terms and conditions of the tender document.

Place :
Date :

(Signature of the Contractor or His authorized signatory)
(Name with Official Seal/Stamp)

Technical Bid

Enquiry No.: - IIML/PURCHASE/CAMC-STP/2022/23

Date: - 21/12/2022

ANNEXURE- "IV"

Sr. No.	PARTICULARS	DETAILS TO BE FILLED BY THE ORGANISATION/FIRM/AGENCY
1.	Name of the Organization/Firm /Agency	
2.	Address of the Organization/Firm/ Agency	
3.	Name of the Managing Director/ Director/ Owner/Proprietor (who signs the tender document). E-mail address Phone No/Mobile No.	
4.	GST No. of the Organization/Firm/ Agency. Attach a photocopy as documentary evidence.	
5.	PAN No of the Organization/ Firm/ Agency. Attach a photocopy as documentary evidence.	
6.	Earnest Money Deposit of Rs. 2,00,000/- (Rupees Two Lacs only) in favor of Indian Institute of Management Lucknow Noida Campus, payable at Noida./ NSIC/MSME	
7	Attach a copy of ITR of last three years (2019-20, 2020-21, and 2021-22).	
9	Total Work Experience in relevant area (in months)	
10.	Does the Firm have minimum work experience of 10 (Ten) years in the line of Comprehensive Annual Services and Maintenance Contract of Operation and Maintenance of Water Supply Pump Sets, Sewage Treatment Plant with all associated items? (Please Attach Details)	
11.	Out of Ten years' experience does the firm have at least 05 years' experience	

	in Govt. Organization/Semi Govt./State Govt. IITs,IIMs,State/Central University in providing Comprehensive Annual Services and Maintenance Contract? Total experience will be evaluated/counted as on 31 st December 2022. Upload a copy of Work Orders and Work Completion Reports	
12.	Important Clients/Firms to whom such services have been rendered/ are being rendered by the Organization/ Agency/ Firm (Attach a list of clients).	
13	Non Black Listing Certificate (Self declaration) on company letter head. Attach Certificate as documentary evidence as per Annexure-IV.	

I/We have read & and accepted the terms and conditions of the tender document.

Place :
Date :

(Signature of the Contractor or His authorized signatory)
(Name with Official Seal/Stamp)

ANNEXURE- “V”

UNDERTAKING

The Director
Indian Institute of Management Lucknow
Noida Campus
Plot B-1, Institutional Area,
Sector -62 Noida UP 201307.

Enquiry No.: - IIML/PURCHASE/CAMC-STP/2022/23 Dated: - 21/12/2022

Dear Sir,

This is to notify you that our Firm/Company/Organization-----
----- intends to submit a proposal for providing Comprehensive AMC of Operation and Maintenance of Water Supply Pump Sets, Sewage Treatment Plant with all associated items for a period of four (4) years at IIM Lucknow Noida Campus B-1, Institutional Area, Sector-62 Noida UP 201307.

I/We have examined the terms & conditions of tender & specification including the Water Supply Pump Sets, Sewage Treatment Plant with all associated items and related Machinery.

I/We undertake, if our bid is accepted, I/we execute the Comprehensive AMC of Operation and Maintenance of Water Supply Pump Sets, Sewage Treatment Plant with all associated items in conformity with the terms & conditions & specifications of this Tender document.

I/we declare that our Firm/Company/Organization does not involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this assignment. I/We are not blacklisted by any Central/State Government/agency of Central/State Government of India or any other country in the world/ Public Sector Undertaking/ any Regulatory Authorities in India or any other country in the world for any kind of fraudulent activities.

Date:

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

FINANCIAL BID - BOQ

Enquiry No.: - IIML/PURCHASE/CAMC-STP/2022/23

Date: - 21/12/2022

ANNEXURE- "VI"

Notice Inviting Tender for providing Comprehensive AMC of Operation and Maintenance of Water Supply Pump Sets, Sewage Treatment Plant with all associated items for a period of four (4) years at IIM Lucknow Noida Campus B-1, Institutional Area, Sector-62 Noida UP 201307.

Please quote annual rate. GST will be extra as applicable.

(A) Repair and Upgradation of STP

S. No.	Description	Qty.	Unit	Rate	Amount
A	SUPPLY INSTALLATION, TESTING & COMMISSIONING FOR REPAIRING, OVERHAULING & UPGRADATION OF EXISTING STP STRUCTURE				
1	Agitation Grid for Equalization Tank <ul style="list-style-type: none"> • 40mm SS 304 pipe with 2 Branches • Should have suitable welded socket for holding air diffuser • Should have suitable air control valve to control air 	01	No.		
2	Agitation Grid for Sludge Holding Tank <ul style="list-style-type: none"> • 40mm SS 304 pipe with 2 Branches • Should have suitable welded socket for holding air diffuser • Should have suitable air control valve to control air 	01	No.		
3	Air Diffuser <ul style="list-style-type: none"> • Type-Disc • Diameter-125MM (MOC-EPDM/Silicon) 	20	No.		
4	Replacement of Filter Media for Dual Media Filter <ul style="list-style-type: none"> • Filter Media consist of gravels, pebbles. Sand etc. 	01	LOT		
5	Replacement of Filter Media for Activated Carbon Filter <ul style="list-style-type: none"> • Filter Media consist of gravels, pebbles. Sand and activated carbon etc. 	01	LOT		
6	Replacement of Resin of Softener Plant (Thermax /Ionexchange /Equi) <ul style="list-style-type: none"> • Resin Na 225 	500	Liters		

7	Brine Tank with Agitator for Preparation of salt solution for Charging (Agitator MOC-SS304) <ul style="list-style-type: none"> • Capacity of Tank-200 Liters • Tank MOC-PP • Thicknees-15MM • Fitted with reputed make gear box, motor and agitator etc. 	01	No.		
8	VFD Panel for Air Blower (Schnider/Siemas/ Equi)	01	No.		
9	Electrical Cabling	01	Lot		
10	Pipe Line Fitting	01	Lot		
B	ELECTRO-MECHANICAL UNITS REQUIRED FOR UP GRADITION OF STP 120 KLD TREATING CAPACITY				
1	Supply Installation, testing & commissioning of Anoxic Tank <ul style="list-style-type: none"> • Size- 2.50 M ϕx4.75M Height • MOC-PP+FRP • Thickness-5mm+4mm 	01	Nos.		
2	Supply Installation, testing & commissioning of agitator for Anoxic Tank <ul style="list-style-type: none"> • Agitator Type- Paddle • Agitator MOC-SS304 • Gearbox- Power built/Ultravario/Reputed • Motor-ABB/Kilkoskar/Equi 	01	No.		
3	Supply Installation, testing & commissioning of internal recirculation pump for Anoxic Tank (CI/Kirloskar/Equi.) <ul style="list-style-type: none"> • Make- Kiloskar/Equi 	02	Nos.		

	<ul style="list-style-type: none"> Model-SP05M <p>(total two =One Working + One Standby)</p>				
4	<p>Supply Installation, testing & commissioning of Moving Bed Bio Reactor (MBBR Tank, Reputed make)</p> <ul style="list-style-type: none"> Type- MBBR- Moving Bed Bio Reactor Size- 1.70 M ϕx4.5M Height MOC-MS+FRP Thickness-5mm+3mm With Suitable Steel reinforcement for strengthening of Tank Suitable epoxy paint from outside surface after giving Sand blasting treatment 	2	Nos.		
5	<p>Supply Installation, testing & commissioning of Moving Bed Bio Reactor Media (MM Aqua/ Cooldek/Equi.)</p> <ul style="list-style-type: none"> Type- MBBR- Moving Bed Bio Reactor MOC-PP Size-25MM ϕx30MM 	14	M ³		
6	<p>Supply Installation, testing & commissioning Aeration Grid Moving Bed Bio Reactor Media (Reputed Make)</p> <ul style="list-style-type: none"> Size-65MM ϕ MOC-SS 304 Dip Portion & Other is in MS+EP 	2	Nos		
7	<p>Fine Bubble Air Diffuser for MBBR Tank (Reputed Make)</p> <ul style="list-style-type: none"> Size- 80MMϕx600mm 	24	Nos.		

	•MOC-EPDM/Silicon				
8	Supply Installation, testing & commissioning of Air blower for aeration at MBBR Tank •Capacity- 150 CMH •Pressure- 0.55 kg/cm2 •Motor HP\RPM-7.50/1440 •Drive-V-Belt •Should be fitted with pressure gauge, safety valve & silencer etc. (total two =One Working + One Standby)	2	Nos		
9	Supply Installation, testing & commissioning of Tube Settler (Secondary Clarifier) (Reputed Make) •MOC- 2.5Mx2.8Mx4.50M Height •Thickness -5mm+3mm •Should have suitable inlet •launder 300mmx 2200mm and out let launch, throughout the all four faces.	01	No.		
10	Supply Installation, testing & commissioning of Tube Settler Media (MM Aqua/ Cooldek/Equi.) •Size-55mmx124mm •Thicknees-1.2MM •MOC-PVC	7.2	M ³		
11	Supply Installation, testing & commissioning of MS Fabricated Platform, railing, ladder etc for walkway. •Weight- 4000 Kgs	4000	Kgs.		

	<ul style="list-style-type: none"> •With suitable sand blasting & epoxy paint with epoxy premier. 				
12	<p>Supply Installation, testing & commissioning of Multi Grade Filter (MS+FRP /Reputed Make)</p> <ul style="list-style-type: none"> •Size-800 Diameter x2500Height •Thickness – 6mm+3mm •MOC- MS+FRP •Should be fitted with suitable valves & pipe line network. •Should be fitted with air vent valve pipe and pressure gauge •Should be fitted with suitable filter media like sand/ anthracite. 	1	No.		
13	<p>Supply Installation, testing & commissioning of Adsorption Vessel</p> <ul style="list-style-type: none"> •Size-800 Diameter x2500Height •Thickness – 6mm+3mm •MOC- MS+FRP •Should be fitted with suitable valves & pipe line network. •Should be fitted with air vent valve pipe and pressure gauge •Should be fitted with suitable filter media activated carbon 	1	No.		
14	<p>Supply Installation, testing & commissioning of Softening Plant</p> <ul style="list-style-type: none"> •Size-800 Diameter x1500Height •Thickness – 6mm+3mm •MOC- MS+FRP 	1	No.		

	<ul style="list-style-type: none"> •Should be fitted with suitable valves & pipe line network. •Should be fitted with air vent valve pipe and pressure gauge •Should be fitted with suitable filter media Ion exchange resin. 				
15	<p>Supply Installation, testing & commissioning of submersible Pump for effluent transfer from equalization tank to Anoxic Tank</p> <ul style="list-style-type: none"> • Model- Suitable • Make- Kirlosker /Toshio/Lube/Equi • Flow- 8 m3/Hr • Head- 10 Mtrs • Motor HP/RPM- 1.0/2900 <p>MOC-C.I. with SS 304 Impeller (One Working + One Stand by)</p>	2	Nos.		
16	<p>Supply Installation, testing & commissioning of submersible Pump for effluent transfer from Sump to equalization tank</p> <ul style="list-style-type: none"> •Model- Suitable •Make- Kirlosker /Toshio/Lube/Equi •Flow- 24 m3/Hr •Head- 8 Mtrs •Motor HP/RPM- 2.0/2900 •MOC-C.I. with SS 304 Impeller <p>(One Working + One Stand by)</p>	2	Nos.		
17	<p>Supply Installation, testing & commissioning of Pump Pump for filtration</p> <ul style="list-style-type: none"> • Model- KDS 155++ • Make- Kirloskar/Toshio • Flow- 8.0 m3/Hr • Head- 30 M • Motor HP/ RPM 1.50/2900 	2	Nos.		

	Type- Mono Block (One Working + One Stand by)				
18	Supply Installation, testing & commissioning of Pump Pump for Softening Plant <ul style="list-style-type: none"> • Model- KDS 155++ • Make- Kirloskar/Toshio • Flow- 8.0 m3/Hr • Head- 30 M • Motor HP/ RPM 1.50/2900 • Type- Mono Block 	2	Nos.		
19	Supply Installation, testing & commissioning of Pump for Sludge Recirculation <ul style="list-style-type: none"> • Model- SP 0M • Make- Kirlosker/Toshio • Flow- 4 m3/Hr • Head- 10 Mtrs • Motor HP/RPM- 0.50/2900 MOC-C.I. (One Working + One Stand by)	2	Nos.		
20	Supply Installation, testing & commissioning of Pipe line <ul style="list-style-type: none"> •Make- Jindal /Prince/Supreme/Equi •As required to completed the internal pipe line network •Inflow of ratio effluent & out flow of treated effluent shall be in your scope. 	1	LOT		
21	Supply Installation, testing & commissioning of Valve for Pipe line <ul style="list-style-type: none"> •Make - Prince/Supreme/Equi •As required to completed the systems 	1	LOT		
22	Supply Installation, testing & commissioning of Fitting of Pipe Line <ul style="list-style-type: none"> •Make- Prince/Supreme/Equi 	1	LOT		

	•As required to complete the system.				
23	<p>Supply Installation, testing & commissioning of MCC PANEL (STP)</p> <p>•Panel consist of incoming MCCB with ammeter and selector switch, CT's voltmeter with selector switch, indicating lamps & outgoing starter shall be with fuse switch units, DOL starter including bi-metal relay control, OFF push button, with energy meter</p> <ul style="list-style-type: none"> • 3HP- 1 No • 2HP-2 Nos • 1HP-2 Nos • 0.5HP-2 Nos • 7.5HP-2 Nos • 1.5 HP_2 Nos 	1	No.		
24	Supply Installation, testing & commissioning of Cable Tray & Cable Connections	1	lot		
25	<p>Supply Installation, testing & commissioning of Dosing Tank with metering pump for disinfection treatment</p> <p>Tank- PP</p> <p>Capacity-600MMx600MMx600mm</p> <p>Thicknees-10MM</p> <p>Pump-6 LPH</p> <p>Make- Edose/Idose</p>	1	lot		
26	<p>Supply Installation, testing & commissioning of Flow Meter at Inlet & Outlet (Federal/Manas/UPC/Equi)</p> <ul style="list-style-type: none"> • Electromagnetic Type • Size-40MM 	2	Nos.		
27	Supply Installation, testing & commissioning of PH Meter & Indicator (Aster/Digital/Equi.)	1	No.		

28	<p>Supply Installation, testing & commissioning of PVC Storage Tank for feeding into UF & Treated UF Tank (Sintex/Equi.)</p> <ul style="list-style-type: none"> • Capacity-10 KL • MOC-PVC 	3	Nos.		
29	<p>Supply Installation, testing & commissioning of Mechanical Fine Screen at STP inlet with the invert level 7 feet deep install in a sump (Micro/HEECPL/Sai Enviro/Reputed /Equi.)</p> <ul style="list-style-type: none"> •Pore Size-1mm-2mm •Screw fitted with suitable brushing arrangement to clean screen •Flow-15 M³/Hour Peak Flow 	1	No.		
30	<p>Supply Installation, testing & commissioning of Batch Type Sludge (Micro/Sai Enviro/Reputed /Equi)</p> <ul style="list-style-type: none"> •Input Moisture : 80% •Ouput Moisture :10% •Capacity : 50 kg. wet sludge /batch •Drying time :2- 3 Hrs. •Size :Dia 500 X 800 Lg. •MOC of body and impeller :SS 304 •Power of Heater: 3 KW X 4 No. = 12 KW •Drive motor : 1 HP /1440 RPM •Gear Box : Helical 	1	No.		
31	<p>Supply Installation, testing & commissioning of Sludge Dewatering Machine, Type-Volute, Flow-1.5M³/Hour</p>				

**Sludge Slurry Feed Pump SP0.5M
Kirlosker Make From Sump To
Dewatering Machine**

Type of Sludge-

- Primary Clarifier Sludge
- Biological Sludge
- Sludge Concentration-10 gram/L

Flow-1.5 M³/Hr

- % of Solids at Inlet 1 %
- Solid at outlet 18-20%
- Quantity One

Dimensions

- Suitable
- Total Power 0.50 HP
- Noise Level Less than 65 dB
- Vibration Level < 50 Microns
- Feed Pressure at Inlet Machine does not require any pressure.
- Power Supply 400 V /50 Hz 3 phase.

Polyelectrolyte Dosing Systems

- Dosing pump 200 LPH
- Tank- 500 ltr (MOC-PP, Thickness-15mm)
- Agitator (MOC-SS304)
- Make-ABB

THICKNING CUM COMPACTION CYLINDER

- Diameter /Length Dia.210mm/1495 mm long
- **Material Nylon in thickening zone and SS-304 in pressure zone**
- Inclination 150 from Horizontal
- Quantity One

SCREW MOTOR

Quantity One

FLOCCULATION TANK

- suitable
- Quantity One
- MOC SS- 304
- Inlet Ply pressure 0.1 kg

	<ul style="list-style-type: none"> • Poly Consumption 2.5 to 3.0 Kg / Ton of Dry Solids • Concentration of PolySolution-0.1% <p><u>FLOCCULATION TANK AGITATION</u></p> <p><u>MOTOR</u></p> <ul style="list-style-type: none"> • Model TEFC/ SCR induction motor, insulation Class F • Make- Kirloskar/ Crompton / Bharat Bijlee / Rotomotive/Siemens • Power/ Speed 0.25 HP / 1440 RPM • Quantity One • Operation Controlled by VFD <p><u>NOZZELS</u></p> <ul style="list-style-type: none"> • Inlet 65 NB / Flange as per Table D • Sludge Return 125 NB / Flange as per Table D • Filtrate 125 NB / Flange as per Table D • Drain -Flow Control Tank 25 NB • Drain - Flocculation Tank 40 NB • Poly Dosing 15 NB <p><u>SCREW GEAR BOX</u></p> <ul style="list-style-type: none"> • Make -Power Build / Rotomotive / Bonfiglioli • Type Heliworm • Gear Box Ratio 514.7: 3 • Lubrication Splash • Quantity One <p><u>FLOCCULATOR GEAR BOX</u></p> <ul style="list-style-type: none"> • Make Rotomotive / Bonfiglioli • Type Worm Reducer 30:1 • Lubrication Splash • Quantity One • Lubrication Life time Lubricated <p><u>CONTROL PANEL</u></p> <ul style="list-style-type: none"> • Dimensions 600mm X 400mm X 260mm • Voltage 400 V • Material /paint Low carbon steel powder coated <p><u>SHOWRING SYSTEM</u></p>					
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	<ul style="list-style-type: none"> Solenoid Valve 20 NB MOC-SS-304 Voltage 230 V Operation Governed by cyclic timer 10 second /10 min Nozzles quantity 6 Nos Capacity 6 lpm each nozzle (36 ltr / Min <p>Supply Condition</p> <p>Fully factory assembled dry tested and supplied in one unit</p>				
(C)	BOQ FOR ULTRA FILTRATION PLANT				
	Supply Installation, testing & commissioning of ULTRAFILTRATION PLANT (Reputed UF Membrane Make- QUA/Torry/GE)	1	No.		
a.	Feed Pump: 6.5 m3/hr continuous filtration Type- Centrifugal , Vertical Capacity- 6.5 m ³ /hr Head -35 MWC Make – Kirloskar Material Of Construction- CI	2	2Nos.		
b.	Micron Filter Type of Filter- Vertical Capacity -6.5 m ³ /hr Type of Media – Replaceable Filtration Rating -5 micron M.O.C. of Housing – 304SS Cartridge- Spun type Size of cartridge and number -4.5” x 20” x 5 Number in single housing	2	Nos.		
c.	Water Recovery System Item- Module consisting of inbuilt Membrane Housing with membranes Mounted on skid. Type of membrane - Composite Hollow Fiber multi capillary type MOC of Membrane- Polyamide with PES Operating Pressure - 2 – 5 kg/cm ²	2	Nos.		

	<p>MOC of Housing- UPVC (Inbuilt with Hydra membrane) feed flow rate- 6.5 m³/hr permeate flow rate- 6.0 m³/hr</p> <p>Type- Hollow fiber, outside in process Number of membrane- 2 Nos. Length of UF membrane -1860 mm Diameter - 225 mm Width- 342 mm Module surface area - 72 M² Nominal Pore Diameter- 0.03 Micron Filtrate Flux- 30 GFD Backwash Flux- 65 GFD Backwash Frequency- 55 min Backwash Duration- 50 Sec CIP Frequency- Once in 3 Month</p>				
d.	<p>Back Wash Pump Type- Centrifugal Capacity - AS per system selected Head- 30 MWC Make- Kirloskar Material Of Construction-CI Discharge Pressure- 3.0 kg/cm²</p>	1	No.		
e.	<p>Micron Cartridge Filter Type of Cartridge- Replaceable Capacity - AS per system selected Material of Cartridge- PP Cartridge Rating- 5 micron</p>	2	Nos.		
f.	<p>Water/Chemical Storage Tank Capacity - 500 Liters M.O.C.- HDPE Make- National / Sintex/Eq.</p>	1	No.		
g.	<p>CIP Pump Type- Centrifugal Capacity - AS per system selected Head- 30 MWC Make- CNP Material Of Construction- SS 304 Discharge Pressure- 3.0 kg/cm²</p>	1	No.		

h.	SYSTEM AUTOMATION: SYSTEM COMPONENT I- <u>INSTRUMENTATION</u> Flow Meter Type - Online or Panel mount Rotameter	3	Nos.		
h	BOQ & ESTIMATED OF COST OF CIVIL WORK & FABRICATION OF SHED WORK				
i	Civil Tank for Fitting of Screw Screen • Size-1.0Mx2.0Mx2.8M MOC-RCC	1	No.		
j	RCC platform for placing equipment's • Size-100 Sq. Meter • PCC- 100mm Thickness • RCC-100mm Thickness	100	SQ. MM		
k	Shed at STP Area-50 Sq. Meter	50	SQ. MM		
D	<u>Operation & Maintenance of STP:</u> Including the cost of Manpower, consumables (materials) required for running the Plant & monthly testing of the quality of influent and effluent from external agency and taking corrective measures as required for satisfactory operation of STP including cleaning of sewer lines, Gully Traps and the internal and external manholes of the campus as and when required. (a) Deployment of Manpower in General Shift (7days): (2 nos. operator, 1 no. helper) for the operation of STP <u>Note: One Supervisor monthly visit for checking working status etc.</u>	Annual (12 months)	FIRST YEAR		

	(b) Consumables cost like Urea, DAP, Jaggery, Bio-culture, Salt, Hypo, pH paper, Hardness Kit & FRC Kit				
	<u>Operation & Maintenance of Water Supply Pump Sets</u> with all associated items.	Annual (12 months)	FIRST YEAR		
	<u>STP/Pump House/Submersible Pump set-Preventive maintenance</u> Complete servicing of all pumps, motors, switch boards, valves, painting of switch panel, pump, also include Replacement of broken, switch handles, ensuring proper working of all measuring instruments, indicating lamps etc..	1	Job		

A. SEWAGE EFFLUENT CHARACTERISTICS

The raw effluent would have the following characteristics are shown in the table.

S.NO.	PARAMETERS	VALUES
1.	PH --	6.5 - 7.5
2.	Temperature	Ambient
3.	Colour --	Turbid

4.	Odour	--	Mild
5.	Chemical oxygen Demand (COD)		450-600 Mg/L
6.	Bio-Chemical oxygen demand (BOD)		350 Mg/L
7.**	Total Suspended Solids		410 Mg/L
8.	NH3 As Nitrogen		Less than 10 Mg/L
9.	Organic Nitrogen		43 Mg/L
10.	Oil & Grease		5 Mg/L
11.	Total Dissolved Solids		2000 Mg/L
12	Sulphate		Less than 500 Mg/L
13	Phenolic Compound		Less than 0.3 Mg/L

- The above characteristics of effluent would be bases on existing similar type of sewage treatment plant.
- **Total Dissolved Solid Depend upon raw water quality.**

B.DISCHARGE STANDARDS

S.NO.	PARAMETERS	UNITS	VALUES
1.	PH		6.5-7.5
2.	Temperature		Ambient
3.	Colour		Crystal clear
4.	Odour		Odourless
5.	Chemical oxygen Demand (COD)		Less Than 50 mg/l
6.	Bio-Chemical oxygen demand (BOD)		Less Than 10 mg/l
7.	Total Suspended Solids		Less Than 10 PPM
8.	Ammonia as NH4-N		Less Than 5 PPM

9.	Total Nitrogen	Less Than 10 mg/l
10.	Oil & Grease	Less than 2 PPM
11	Fecal Coliform (MPN/100m1)	Less than 100 MPN/100 MI

** Depend upon Raw Water TDS.

Comprehensive AMC of Operation and Maintenance of Water Supply Pump Sets, Sewage Treatment Plant with all associated items for a period of four (4) years at IIM Lucknow Noida Campus B-1, Institutional Area, Sector-62 Noida UP 201307.					
	Sr No. 1	Sr No. 2	Sr No. 3	Sr No. 4	Sr No. 5.
Details	First Year O &M cost Amount (in Rupees)	Second Year CAMC, O& M Amount (in Rupees)	Third Year CAMC, O& M Amount (in Rupees)	Fourth Year CAMC, O& M Amount (in Rupees)	Fifth Year CAMC, O& M Amount (in Rupees)
Amount					
GST					
Total					
Total Amount (complete of Sr No. 1+2+3+4+5) (in words)					

Institute reserve the right to curtail or enhance the scope of work as required and reviewed by the Institute from time to time and therefore, the final value of the work shall be worked out and paid to the extent of work actually carried out.

Total ____ number of pages/ documents from S. No. ____ to _____ are Attached with the tender document and all the duty numbered, signed and stamped on each page with office seal and date.

I/We have read the terms and conditions of the tender document. I hereby agree to abide by all the terms & conditions of this tender document. In case of any of the statement furnished by the undersigned is found to be false OR if any / all the terms and conditions are not complied with, the tender is liable to be cancelled and the earnest money deposited shall be forfeited by IIML NC.

Date:

Place:

Signature of the authorized signatory of the agency
with Official seal/ stamp