NATIONAL INSTITUTE OF TECHNOLOGY

TIRUCHIRAPPALLI – 15

Web: www.nitt.edu Phone: 0431 –250 3830



TENDER DOCUMENT (TECHNICAL BID)

Name of work : Annual Maintenance on repair and

renovation of Civil works at NITT,

Trichy.

Value of work : Rs. 150 Lakh

Tender Enquiry No : NITT/EMD/EE/AMC/CVL/2019-

20/017 Dated: 15.05.2019

Period of Contract : 12 Months



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPALLI - 15 Estate Maintenance Department

NOTICE INVITING TENDER

01.	Name of work	Annual Maintenance on repair and renovation of Civil works at NITT, Trichy		
02.	Estimated Cost	Rs.1,50,00,000/-		
03.	Earnest Money Deposit	Rs.300000 /-		
04. Completion Time		12 Months (From the date of commencement of the work which will be reckoned from the date of handing over of site to the Contractor)		
05.	Cost of Tender Document	NIL		
06.	06. Last Date & Time for receipt of Tenders 15.00 Hrs. on 13.06.2019 (The Institute be responsible for non-receipt or delayed postal delay or non-delivery of the tenders)			
07.	a) Date & Time of Tender Opening (Technical bid)	15.30 Hrs. on 14.06.2019		
	b) Pre-bid Meeting	11.00 Hrs on 30.05.2019 (Location EMD conference hall)		
	b) Opening of Price bid	After evaluation of technical bids, the date, time and place of opening of the Price bid will be intimated to technically qualified bidders.		
08.	Maintenance Period	6 (Six Months from the date of actual completion of the entire work and handing Over to National Institute of Technology)		
08.	Address for submission of Tender	The Director, National Institute of Technology, Tiruchirappalli - 620 015		
09.	Procedure for submission of Bid	Envelope 1: EMD Envelope 2: Technical Bid Envelope 3: Price bid Envelope 4: Larger size Outer Envelope (i.e., This is wrapper containing Envelope 1, 2 and 3) Note — Tender no and opening date must in mentioned in all envelopes		

Tender document contains 92 pages including Price Bid

Details to be furnished by the Contractor.

SI.No	Description / Requirement from the tenderer	Tenderer's response should be clear, firm, complete & legible. If necessary, separate sheet shall be used.	Page No (Must be filled)
1	Name & Complete address of the tenderer with contact details:		
2 (a)	Details of EMD(should be in the form of DD) Demand draft No. Amount Rs. Bank details:		
2 (b)	MSME/NSIC Registration No: Company Name & Address: Validity: Product for which registered:		
3	Status of the tenderer: Proprietorship / Partnership / Private Limited. / Public Limited		
4	Details of Contract Registration with Govt. depts. Class and value (If available)		
5 (a)	Details of PAN		
5 (b)	Employees provident fund Registration:		
5 (c)	Employees State Insurance Registration:		
5 (d)	GST Registration:		
6	Copy of Income Tax Return for the last 3 years ending 03/2018		
7	Details of similar works executed with Govt. depts. during last 3 years	Use separate sheet to furnish complete details	

Note: Self-Attested copy of relevant certificates for items 3-7 are to be enclosed.

I/We hereby certify that the information furnished above and the attached documents as proof of the information are true and correct to the best of our knowledge.

I/We also authorize the Director / NITT or his representative to approach the source of the certificate to verify our competence, if required, for processing the tender.



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

NOTICE INVITING TENDER

Tender Notification No.: NITT/EMD/EE/AMC/CVL/2019-20/017 Dated: 15.05.2019

National Institute of Technology, Tiruchirappalli invites sealed tenders, in **Two cover system (Technical Bid and Financial bid) up to 3.00 p.m. on 13.06.2019** for the following work:

Name of work	EMD	Period
Annual Maintenance on repair and renovation of Civil works at NITT, Trichy	Rs. 3,00,000/-	Twelve Months

Contract period is for twelve months.

1. Eligibility criteria:-

i) Contractors who fulfill the following criteria are eligible to submit tender.

Experience of having successfully completed similar civil construction /maintenance works during the last 3 (Three) years ending 31-03-2018 that should be either of the following:

a. Three similar works (at least one of them should be for Central/State Government/ Central/State Autonomous Bodies / Public Sector Undertaking) Each costing not less than Rs.60 lakhs.

OR

b. Two similar works (at least one of them should be for Central/State Government/ Central/State Autonomous Bodies / Public Sector Undertaking) Each costing not less than Rs.75 lakh

OR

c. One similar work (Central/State Government / Central/State Autonomous Bodies / Public Sector Undertaking) costing not less than Rs. 120 lakhs.

"Similar works" under this clause means Maintenance & Repair works of building & water supply etc.,/ Maintenance work to educational buildings/ institutional buildings/ commercial buildings/ public buildings/ hostels / factories. Necessary documentary proof like completion certificates and performance certificate should be submitted in case of Government organization and TDS in case of experience with Private limited company from the concerned department.

"Cost of work" for this clause shall mean final cost as mentioned in the final bill carried out under single contract including cost of materials, if any, supplied by clients. However the cost of materials issued free of cost shall not be considered for calculating the cost of work.

- ii) Should have an average annual financial turnover on civil works costing not less than Rs.90 lakh during the last three years ending 31.03.2018.
- iii) Should not have incurred any loss in more than two years during the last five years ending 31.03.2018
- iv) Should have a solvency of not less than Rs.60 lakh, from any Nationalised / scheduled bank.
- v) Separate Registration code No. for ESI, EPF and PAN on contractor's name / firm
- vi) Contractor has to submit live Agency/Company Registration certificate.
- 2. The tenders should be accompanied by one crossed Demand Draft, drawn in favour of The Director, NIT, Tiruchirappalli and payable at Trichy.

Draft for Rs. 3,00,000/- (Rupees Three Lakh only) towards Earnest Money Deposit which is refundable to the unsuccessful bidders. In respect of successful bidder, the same will be adjusted against the security deposit.

- 3. Tender documents received without EMD shall be summarily rejected.
- 4. Tenders along with completed Qualification Documents received in time will be opened at 03.30 p.m. on 13.06.209 at Store & Purchase section, NIT Tiruchirappalli in the presence of Tenderers or their authorized representatives who chose to be present. In the event of this day being declared a holiday, the tenders will be opened at the scheduled time and place on next working day.

5. Submission of Tender

The Tender should be submitted in three envelopes as detailed below:-

Cover 1- - Superscripted as "DD towards EMD"

-Only One draft for EMD / NSIC (relevant registration with value of work above 1 crore)

Cover 2– Superscripted as "TECHNICAL BID for "Annual Maintenance on repair and renovation of Civil works at NITT, Trichy".

This shall contain the various filled in formats detailing experience on similar work; completion certificates etc. as indicated, Letter of Transmittal, Forms A- E and Financial status etc. as detailed in the enclosed documents, to arrive at the score for the bidder against various thrust areas as indicated in Norms for Qualification.

Cover 3 - Superscripted as FINANCIAL BID for "Annual Maintenance on repair and renovation of Civil works at NITT, Trichy".

This shall contain the various conditions, specifications with rate indicated for all items raised to cost index @ 25.49% prevailing then, Service charges quoted by the bidder in percentage, drawings & etc.,

Master cover:

All the three covers (EMD, TECHNICAL BID & FINANCIAL BID) shall be placed in the Master cover superscripting: "Annual Maintenance on repair and renovation of Civil works at NITT, Trichy".

- 6. Other details and the method of evaluating the capacity of the prospective contractors are detailed elsewhere in this documents.
- 7. The Director, NIT, Tiruchirappalli reserves the right to accept or reject any or all the tenders without assigning any reason thereof.
- 8. The Director, NIT, Tiruchirappalli-15 also reserves the right to disqualify such bidders in the future tenders whose performance was not satisfactory against the earlier contracts entered into NIT, Tiruchirappalli-15.
- 9. After award of the contract, if performance of the selected contractor is found to be not satisfactory during the trial period of three months, NITT reserves the right to terminate the contract at any time by giving short notice and forfeiting the security deposit to compensate the extra cost to be incurred by NITT in carrying out the service through alternate agency. If the performance is satisfactory, the contract will be extended for nine more months.
- 10. The contract may be split and awarded to two agencies at the discretion of NITT by counteroffering the lowest acceptable percentage to the second lowest in the order of their tender position. If two agencies are considered for award, the original lowest will be awarded for Rs.90 lakh followed by Rs.60 lakh to the second lowest. The First lowest contractor will be allotted for the area Institute zone & Quarters zone. The second lowest contractor will be allotted for the area of Hostel zone. However in case of emergency and on need basis the agencies will be engaged for the works in other zones also as decided by Engineer-in-charge.
- 11. In the event of the disputes, differences, claims and questions arising between the parties hereto arising out of this agreement or anyway relating here to or any term, condition or provisions herein mentioned or the validity, interpretation, thereof or otherwise in relation hereto, all such dispute claims or question shall be referred to **Sole Arbitrator** appointed by the NITT. Such arbitration shall be held in accordance with the provisions of arbitration and conciliation act 1996 or re-enactment thereof for the time being in force and arbitration proceedings shall be held at Tiruchirappalli. All legal disputes shall be subject to the jurisdiction of court at Tiruchirappalli.



NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPALLI -620 015.

Estate Maintenance Department INSTRUCTION TO TENDERERS

- 1) Time is the essence of the contract. Being a time bound project, the contractor should make all efforts to complete the individual works in allotted time.
- 2) The tender value includes cost of cement, reinforcement steel, structural steel and all other related material required for completion of the work.
- 3) Even though the overall completion period is indicated as **12 months**, the work shall be completed progressively / individual part work order wise and handed over as per agreed split up schedule if any.
- 4) The tenderers are advised to visit the site and get themselves acquainted with the site conditions before submitting the offer.
- 5) This being a percentage rate contract, anticipated quantity of each item is not provided that depends on the NIT's requirement then and there. Hence the contractor is required to carry out any item for any quantity without any reservation at his overall single tender percentage. Further the actual execution is liable for variation without entitling the tenderer to any compensation, till the total value of contract vary by more than 30% (thirty percentage).
- 6) Quoted rate shall remain valid for a period of 90 days from the date of tender opening for the release of work order and will be firm throughout the contract period of **Twelve months** or till completion of work, once awarded and no cost escalation is allowed on any account.
- 7) The single percentage offered is for finished item of works and shall provide for the complete cost towards fuel, tools, tackles, plant & machinery, temporary works, labour, materials, levies, contingencies, taxes, transport, lay-out, repairs, rectifications, maintenance till handing over, supervision, labour colonies, establishment, services, roads, revenue expenses, overheads, profits & all other incidentals etc., complete. The quoted percentage shall include all royalties, terminal taxes, octroi duties, Central or Provincial Excise Tax, Sales Tax and any other taxes leviable under the State or Central Government rules. NITT will not entertain any claim whatever in this respect. *The applicable GST reimbursed by NITT along with the running I* final bill on production of documentary evidence by the agency for having paid the GST to the authorities concerned.
- 8) Probable operation of various items are shown in the bill of quantities as an indication. This being an annual maintenance contract, operation of each item and its quantum cannot be predicted at this stage. The successful tenderer is expected to carry out any item of work for any quantity without any reservation at the quoted percentage. Some of the items may be operated more or less or even not operated but the quoted percentage would take care of such factors. Single Percentage quoted shall be the basis for arriving at the lowest tenderer among the participants. Cost index prevailing now at Trichy (25.49%) is inbuilt over DSR 2016 basic rates and shown as estimated rates for each item. While quoting the service charges as single percentage the contractor has to account for statutory payments towards ESI & EPF to arrive at workability of rates for given items, apart from his establishment and offer MINUS, or ATPAR or Plus percentage towards service charges.

However it is made known that the basic DSR incorporates profit & overheads. A maximum of two agencies will be selected by counter offering the agreed lowest percentage to the immediate

next tenderer such a way to have two approved agencies at the same accepted tender percentage.

- 9) The work shall be carried out as per drawings released then and there, BIS/CPWD specifications and standard code of practice and as per the instructions of Engineer-in charge. The brief description of items of work is given in the specifications. Tenderer has to quote single percentage rate both in figures and in words considering all the items & factors stated above under the specifications provided in the Price Bid.
- 10) For any item of work not covered in schedule, the rate will be arrived at based on the procedure given in CPWD manual. Such additional items can be executed and billed as extra items at DSR rates "Plus inbuilt loading towards cost index (25.49%) plus accepted percentage" mentioned in Schedule that cover contractor's overheads and profits.

 As such "Market Rate" -shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour at the site where the work is to be executed "Plus accepted percentage" mentioned in Schedule that cover contractor's overheads and profits.
- 11) The contractor has to furnish the security deposit, as per the Clause indicated elsewhere in this document, if the work is awarded. Further the contractor has to furnish 50 % of security deposit before signing of agreement and commencement of work. {Refer Clause 40 (III)}
- 12) Since the responsibility for the quality, workmanship and accuracy of any work being carried out under this contract lies with the contractor, the contractor should ensure that no work is done without the presence of contractor's representative at the work spot, whose strength depends on the value of contract awarded. The contract should arrange for surveying construction site at his own cost.
- 13) The decision of Executive Engineer shall be final and binding on the contractor regarding clarification of items in this tender schedule.
- 14) The works contract to be entered into with the successful tenderer will be governed by the CPWD Works Manual in force & shall strictly adhere to various labour laws in force.
- 15) To safeguard the persons working at height in roof, wall etc., sufficient number of Industrial Safety nets shall be provided at tenderer's cost in appropriate level and locations. The working hand including Supervisors, Engineers should wear the personal protective items and safety measures such as helmets, safety belts, shoes, etc., before entering into working place.
- 16) The tenderer has to deploy adequate labour of required categories such as Unskilled, Semiskilled, Skilled, Mason, Carpenter, Plumber, Welder, Fitter, Mistry, Technically experienced, etc. so as to execute the works simultaneously in all areas of work.
- 17) Expertise labour only to be engaged for specialized items of work like laying of ceramic tiles, marbles, cuddapah slabs, granite slabs and false ceiling, partition, wall paneling, architectural finishing etc. and work experienced persons shall be engaged for fabrication, water supply, railway track laying and aligning works, sewerage system work, etc.
- 18) The contractor shall follow norms of NITT security system for movement of men & materials within the complex.
- 19) All the materials to be used in the work and the nature of work shall conform to the respective CPWD & BIS and National Building Organization, Standard Specifications forming

part of "DELHI STANDARD SCHEDULE OF RATES" specifications and shall be got approved by the Engineer-in-charge before actual incorporation in the work.

- 20) All materials brought by the Contractor for incorporation in the work shall be got inspected and approved by the Engineer-in-charge before they are incorporated in the work.
- 21) The materials supplied to the works shall be as per the given annexure-1.
- 22) All safety measures are to be followed during execution of work. Sufficient care shall be taken by the contractor during excavation to avoid damages to the buried pipe lines, cables and other infrastructure if any etc. Controlled blasting including muffling can be carried out with prior permission from safety department. Damages caused if any shall be rectified at contractor's risk and cost.
- 23) The contractor should extend fullest co-operation with the third party agencies engaged, if any by NITT, to adhere the Quality Control Procedures ensuring quality.
- 24) The contractor should extend full co-operation to the other contractors who may be doing other works in the same areas to enable them to execute their portions of work without any delay or difficulty.
- 25) Tenderers are requested to furnish the duly filled in E format attached as separate sheet along with a cancelled cheque leaf to accept Electronic fund transfer / R T G S transfer for any payment from NITT, Trichy.
- 26) No advance / mobilization advance will be given.

27) Default of Contractor

- LD / Penalty clause is applicable as per CPWD Works Manual in force. HOWEVER the Contractor shall immediately attend the defects and complaints noticed at site. The Contractor shall provide and develop a system for attending to Repair and Maintenance of all services immediately on call, which includes defects identifications and it's immediate rectification so that services are not affected. It shall be the sole responsibility of this agency that all the services are undisturbed while attending to the repairs and the entire facilities are in service round the clock during the currency of the contract.
- i) Repair and Maintenance related complaints of **emergency** nature that are required to be attended within that day shall be attended within that day, failing which a fine of Rs. 100 per day shall be imposed from the subsequent eligible payment to the contractor.
- ii) If the performance of the contract is not satisfactory and not corrected within 15 days of receiving notice, then NITT shall be at liberty to terminate the contract with due notice and get the work executed through alternate agency at the risk and cost of the defaulted Contractor and payment to the defaulter, if any shall be released only after the physical completion of whole work allotted to the earlier contractor.

Liquidated Damages for Delay

If the Contractor fails to attend any complaint or defect and if in the opinion of engineer, delay is on the part of this agency, the NITT can impose liquidated damages on the contractor as detailed in the respective conditions.

- 28) NITT reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract awarded against a different Tender.
- 29) The Contractor shall have to remit EPF & ESI contributions at the rates applicable under law to the authorities concerned for the total wages paid / abide by BOCW Act / Coverage in Group Insurance Scheme / All Risk Policy.
- 30) Percentage Rate should be quoted in FIGURES and in WORDS indicating MINUS / PLUS prefix to the quoted percentage or AT PAR if the offer is same as that of the rates in BOQ. In case of any difference in the quoted percentage in figures and in words, the lower of the two will be taken as the tendered percentage.
- 31) Tenders received after the due date and time of opening, will not be accepted.
- 32) The contractor's responsibility under this contract shall commence from the date of Receipt of the LOI by the tenderer. The scheduled period of completion for this work is as mentioned in page No. 01, and the Contractor will have to plan his work accordingly.
- 33) Generally, the maintenance period for any work under NITT will be SIX (6) MONTHS from the date of completion of each work and handing over to NITT.
- 34) All the documents shall be duly signed with seal in all pages and placed in a common sealed cover duly superscripting the **Name of Work, Tender reference & Date of opening** and submitted.
- 35) Any deviation to this tender terms & condition and schedules of this tender will cause total rejection of the offer submitted
- 36) Incomplete offers will become liable for rejection.

Tender addressed to **THE DIRECTOR**, **NIT**, Tiruchirappalli-620 015 will be received up to 15.00 Hrs. **at the office of the Registrar** as per the schedule of tender notice and will be opened at 15.30 Hrs. in the presence of those who may choose to attend the tender opening.

Tender submitted by post should be sent superscripting "**Register Post with Acknowledgement Due**". These should be posted with due allowance for any postal delay. Tender received after due date and time of opening tenders, will be rejected and NIT, Trichy will not be responsible for any postal delay.

37) Requirement of Technical Staff for the Work

The contractor immediately on award of work, is to intimate the details i.e. name(s), qualifications, and address (es) of the qualified Engineer(s) planned to be employed by him as per terms of the contract and to ensure that the said engineer(s) is/are actually available at site to supervise construction at all stages and note down the instructions conveyed by the Engineer-in-Charge.

(i) Engineer(s) and/or supervisor(s) deployed as per stipulation in the contract shall look after only the work under contract and no other work and shall be available exclusively for that particular work.

(ii) Even if the contractor (or partner in case of firm/company) is himself an Engineer/ Overseer/ supervisor, it is necessary on part of the contractor to employ Engineer(s) and/or/ for the supervision of the work(s) as per stipulation.

38. The following technical staff shall be engaged

a. 1 No. of Graduate Civil Engineer with computer knowledge, who will be receiving the complaints coming from online. As Principal technical Representative (Project Planning / Site / Billing Engineer)

AND

b. 1 Diploma Civil Engineer with minimum 5 years' experience, who will be supervisor for all site work activities. All the works should be done under his supervision.

39. Earnest Money Deposit:

Earnest Money is to be paid by each tenderer to ensure that the tenderer does not refuse to execute the work after it is awarded to him. Shall also be furnished in the form of Demand Draft in favour of The Director, NIT Tiruchirappalli. EMD in any other form will not be accepted. The rate of earnest money deposit shall be as under:

Works costing up to Rs. 1 lakh 1%

Works costing more than Rs.1 lakh 2% of the estimated cost put to tender

EMD by the Tenderer will be forfeit if,

- a) The tenderer does not commence the work within the period as per LOI / Contract. In case the LOI / contract is silent in this regard then within 15 days after award of contract the tender will be cancelled.
- b) EMD given by all unsuccessful tenderers shall be refunded normally within fifteen days of acceptance of award of work by the successful tenderer.
- c) EMD shall not carry any interest.

40. Security Deposit

I. Security Deposit should be collected from the successful tenderer, before start of the work, The rate of Security Deposit will be as below:

Up to Rs. 10 lakhs 10%

Above Rs. 10 lakhs up to Rs.50 lakhs Rs.1 lakh + 7.5% of the amount exceeding Rs. 10 lakhs. Above Rs. 50 lakhs Rs.4 lakhs + 5% of the amount exceeding Rs. 50 lakhs.

- II. Only Demand Draft in favour of **The Director, NIT, and Tiruchirappalli** is accepted towards Security Deposit.
- III. Security deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be deposited before start of the work and the balance 50% may be recovered from the running bills.

- IV. EMD of the successful tenderer shall be converted and adjusted against the security deposit.
- V. The security deposit shall not carry any interest.

Unless the contractor whose tender is accepted signs the Contract Agreements and makes the necessary security deposit specified in Para above within Fifteen days of the date of the order directing him to do so, the amount of Earnest Money Deposit already deposited by him will be forfeited and acceptance of his tender withdrawn.

41. NITT shall not be responsible for any loss of securities, due to liquidation for any other reasons, what-so-ever or any depreciation in the value of the securities while in their charge or for any loss of interest there on.

All compensation or other sums of money payable by the Contractor to NITT under the terms of this contract or under any other contract with NITT may be deducted from the Security Deposit or realized by the sale of the securities or from the interest arising therefrom or from any sums which may be due or may become due to the contractor by NITT and in the event of this Security Deposit being deducted by reason of such deductions or sale, as aforesaid, the Contractor shall within 7 days thereafter, make good in cash or in securities endorsed as aforesaid, any sum by which the Security Deposit has been reduced.

- 42. REFUND OF SECURITY DEPOSIT: The Security Deposit mentioned above may be refunded to the Contractor after a period of 6 months on termination or expiry of the contract provided always that the Contractor shall first have been paid the last and final bill and have rendered a "NIL CLAIM CERTIFICATE
- 43. National Institute of Technology will not be bound by any power of attorney granted by the tenderer or by changes in the composition of firm made subsequent to the execution of the contract. They may however recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contract concerned.
- a. If the tenderer deliberately gives wrong information in his tender or creates conditions favorable for the acceptance of his tender, NITT reserves the right to reject such tender at any stage.
- b. The expenses for completing and stamping the agreement shall be paid by the contractor.
- c. Tenderers shall not increase their quoted rate in case NITT, negotiates for reduction of rate. Such negotiation shall not amount to cancellation or withdrawal of the original offer and the rate originally quoted shall be binding on the tenderers for a period of three months from the date of opening of tenders.
- d. Canvassing in any form in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection
- e. All entries in the tender documents should be in one ink. Erasers and over writings are not permitted. All cancellations and insertions should be duly attested by the tenderer concerned.

- f. TENDERERS should fill in all the required particulars in the blank spaces provided for this purpose in the tender documents and also sign Each and every page of Tender Documents including the drawings attached there to, before submitting their tender.
- g. Conditional and Un witnessed tenders, tender containing absurd rates and amounts tenders which are incomplete or otherwise considered defective and tenders not in accordance with the tender conditions laid down by the Accepting Officer are liable to be rejected.
- h. Tenders not submitted on the prescribed form are liable to be rejected.
- i. This tender notice shall be deemed to form an integral part of the contract to be entered into for this work.
- j. The tenderers are advised to go through the condition stipulated in Tender document & code of conduct for Safety of Contract Labourer' in details. Any violation thereof will invite punitive action being taken against them. While quoting the rate all the above factors are to be taken into account.
- k. Agency registered with NSIC is exempted from payment of tender Earnest Money Deposit but required to attach the attested copy of registration indicating the company name, address, registration number, validity & product for which registered in the technical bid, for the specified financial criteria. Any deviation in the certificate on product or validity or name of the company tendering, will attract rejection resulting non-opening of respective price bid.

Arbitration:

Except where otherwise provided for in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions hereinbefore mentioned and as to the quality of workmanship or materials used on the work or as to any other **question**, **claim**, **right**, **matter or thing whatsoever in any way arising out of or relating to** the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the work or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the Director of NITT and if Director is unable or unwilling to act, to the sole arbitration of some other person appointed by the Director, willing to act as such arbitrator. The cases referred to arbitration shall be other than those for which the decision of the Estate Officer / Engineer-in-charge is expressed in the contract to be final and conclusive. There will be no objection if the arbitrator so appointed is an employee of NITT and that he had to deal with the matters to which the contract relates and that in the course of his duties as such he had expressed views on all or any of the matters in dispute or difference.

The arbitrator to whom the matter is originally referred being transferred or vacating his office or being unable to act for any reason, Director as aforesaid at the time of such transfer, vacation of office or inability to act, shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. Subject as aforesaid the provision of the Arbitration & Reconciliation Act, 1996 or any statutory modification or reenactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is a term of the contract that the party involving arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute. The arbitrator(s) may from time to time with consent of the parties enlarge the time for making and publishing the award.

The work under the Contract shall, if reasonably possible, continue, during the arbitration proceedings and no payment due or payable, to the Contractor shall be withheld on account of such proceeding.

The Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the Parties fixing the date of first hearings. The arbitrator shall give a separate award in respect of each dispute or difference referred to him. The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion. The award of the arbitrator shall be final, conclusive and binding on all parties to this contract.

In the event of disputes or differences arising between one public sector enterprise and a Govt. Department or between two public sector enterprises the above stipulations shall not apply or its amendments for arbitration shall be applicable.

44. **Force Majeure clause**: If at any time during the continuance of this contract the performance in whole or in part by either party of any obligations under this contract shall be prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events) then provided notice of happening of any such events is given by either party to other within twenty one days from the date of occurrence thereof.

Neither party shall reason of such events be entitled to terminate this contract nor shall either party have any such non-performance and delay is resumed as soon as practicable after such events has come to an end or ceased to exist.

If the performance in whole or part of any obligation under this contract is prevented or delayed by reason or any such event claims for extension of time shall be granted for period considered reasonable by NITT subject to prompt notification by the tenderer to NITT of the particulars of the events and supply to the NITT if required of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed to be a waiver of time in respect of remaining deliveries.

The correspondence exchanged against the tender from both tenderer and NITT through email are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business.

Any transaction pertaining to the tender from both the parties of business done round the clock irrespective of the office or business hours of the companies, are valid legally and binding on both the parties. This applies to the extent only in such cases where deadline time for transaction is not specifically declared by either or both the patties to the business.

In case Letter of Intent (LOI) is issued through email, the PC generated time and date of mail shall be construed as the official time and date of release of LOI. In as much as this date is within the last date of validity given by the bidder the LOI is said to have been issued within the validity period and shall be bidding on both the parties to the business.

Tenderers participating in the tender should declare in their technical bid that whether they have been black-listed / kept on hold for a specified period / given Business holiday for a

specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold shall be clearly furnished to NITT. If no such details are mentioned in the offer then it will be construed that the subject bidder is not under any such hold. But at a later date if it comes to the notice of NITT about any such hold under enforcement on the subject bidder, NITT will have every right to reject the offer of such vendors at any point of time and also under any stage of the finalisation of the subject tender irrespective of the status of the subject bidder in that tender. Such bidders will not be permitted to participate in the further tender proceedings and will be communicated suitably. They will not be also considered for any ongoing tenders even if participated till the hold is officially lifted and confirmed in writing.

45. Compensation for Delay:

If the contractor fails to maintain the required progress or to complete the work and clear the site on or before the contracted or extended period of completion, he shall, without prejudice to any other right or remedy of the NITT on account of such breach, pay as agreed compensation an amount calculated as stipulated below or such smaller amount as may be fixed by the NITT on the contract value of the work for every week that the progress remains below or that the work remains incomplete. This will also apply to items or group of items for which separate period of completion has been specified.

For this purpose the term 'Contract Value' shall be the value at contract rates of the work as ordered and the compensation for delay is by way of recovery at 1 percent of contract value per week of delay provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the contract value or of the contract value of the item or group of items of work for which a separate period of completion is given.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the NITT.

SECTION-I

GENERAL CONDITIONS OF CONTRACT

- 1. The work has to be carried out in NIT campus, Tiruchirappalli.
- 2. The scope of work inter alia includes the following with free power wherever needed, all within NITT
- 3. Scope of work includes maintenance activities of all Civil works, minor Structural steel works, Interior decorations, Roads, Water supply, Sewer lines, Horticulture etc., all in NITT campus that consist of Hostels, Institute Buildings, Residential Quarters and with other buildings like Auditorium, Seminar Hall, Schools, Hospital, Recreation Center, Kalyanamandapam, Shopping Centre, etc.
- 4. The scope of work also includes construction and maintenance activities of water supply pumping station, overhead tanks, Sewage treatment plants etc..
- 5. Usually, working hours are limited to day time only. In emergency cases to carryout works during nights, it may be done so with the specific prior permission of NITT. In such case, it is to be carried out in the presence of NITT officials or their authorized persons.
- 6. The tenderers are advised to visit NITT premise and get themselves acquainted with the site condition and nature of this maintenance contract before submitting the offer.
- 7. The tender value of Rs.150.00 lakh includes cost of cement, reinforcement steel & structural steel which can be split & awarded to two or more agencies, by counter offering the

lowest acceptable percentage to the other tenderers in the order of their position considering the higher value to the original lowest as indicated under clause 10 of Notice Inviting Tender.

- 8. The awarded value is only tentative and liable for variation without entitling the tenderer to any compensation, till the total value of contract does not vary by more than 30 % (thirty percentage).
- The quoted rate shall be firm throughout the contract period.
- 10. The contractor should bring the construction machineries like Paver, Road Roller, JCB etc., as and when required for the work without any delay. Also required number of the following Tools & Plants / instruments shall be made available always at site.
- a) Levelling instruments and theodolite.
- b) Full load mixture machine
- c) Petrol / Kerosene driven vibrator
- d) Cube moulds
- e) Inter carting vehicle (mini door, tractor, hand trolley etc)
- 11. Exclusive lorries to be deployed regularly to clear the debris generated and on no account the debris can be left for more than three days. Otherwise NITT would clear the debris at the contractor's risk and cost.
- 12. The contractor may be required to undertake works at remote places and in such cases the contractor should make his own arrangement for safety of NITT materials, water required for the work and power etc.
- 13. The responsibility of clearing the building materials and cleaning the area immediately after the completion of work lies with the contractor. The contractor should ensure more care while working at residence and other places of importance.
- 14. The contractor has to execute any item of work irrespective of the quantity without any reservation.
- 15. The contractor has to carry out the work without affecting the working environment.
- 16. The decision of Engineer-in-charge shall be final and binding on the contractor in case of any controversy in specification between the items in CPWD SR & specification elsewhere in the contract.
- 17. The contractor shall follow norms of NITT security system for movement of men & materials within the complex.
- 18. Since the responsibility for the quality, workmanship and accuracy of any work being carried out under this contract lies with the contractor, the contractor should ensure that no work is done without the presence of contractor's representative at the work spot.
- 19. Contractor's respective Supervisor / Engineer shall have to attend the maintenance office daily before 0900 Hrs. to collect the complaints and also to hand over the complaints attended the previous day.
- 20. Daily labour report for the manpower engaged on previous day area wise shall have to be submitted next day. Weekly progress report shall have to be submitted on every Monday.
- 21. The contractor has to submit the organization chart of their set up and any change thereafter in the organization set up shall have the prior approval of NITT.
- 22. Statement of completed works with detailed measurements shall be submitted by the contractor every month and the payment for the work done will be paid once in a month.
- 23. The contractor should establish his own site office and stores for which vacant land / quarters will be allotted on specific request.

- 24. The contractor is required to carry out construction / maintenance activities as and when directed by the department officials irrespective of quantum involved at any specified time. Considering the nature of maintenance activities, volume of work involved, scattered location of work spot, the contractor is required to engage certain minimum strength of experienced supervisors for effective supervision of works.
- 25. Adequate Quality Engineer and Safety Engineer should be deployed at site.
- 26. Additional supervisors shall have to be engaged depending upon the workload.
- 27. Also the tenderer has to deploy adequate labour of required categories such as Unskilled, Skilled, Mason, Carpenter, Plumber, Welder, Fitter, Mistry, Technically experienced, etc. so as to execute the works simultaneously in all areas of work.
- 28. Expertise labour only to be engaged for specialized items of work like laying of ceramic tiles, marbles, cuddapah slabs, granite slabs and false ceiling, partition, wall paneling, architectural finishing, cast iron pipe restoration works etc.
- 29. The tenderer should furnish the complete details called for. Inadequate and incomplete details which are not as per the document are liable to be rejected. At the same time unwanted and unconnected details need not be furnished.
- 30. The bidders are cautioned that furnishing of incomplete / ambiguous information, suppression of facts and alteration of prescribed format will entail outright rejection of tender application.
- 31. Should a bidder find discrepancies or omissions in the tender documents or should there any doubt as to their meaning, he should at once address the authority inviting the tender for clarification well before the due date so as to submit the tender in time. No extension of time shall be given for submission of the tender on any account.
- 32. Conditional tender, late tenders, tenders containing prima-facie absurd rates, tenders which are in complete or otherwise considered defective, tenders not in accordance with the tender conditions therein contained and the tenders not in original ARE LIABLE TO BE REJECTED.
- 33. The Contractor will be responsible and liable for the implementation of all the statutory provisions as regards to the personnel to be deployed by him in respect of minimum wages, Provident Fund, and ESI etc. as and when they become applicable under the Labour Laws. The Contractor shall maintain all the statutory registers under the law.

The Contractor shall produce the same on demand to Institute's authority or any other authority under law. As and when applicable the Contractor will obtain a license under the Contract Labour (R&A) Act. 1970. In case, the previous month's challan pertaining to ESI and EPF having been deposited do not accompany the bill as a documentary proof, the Institute has the right to hold up a requisite portion/ or whole of bill amount till such proof is produced and furnished, at the discretion of the Institute. The Contractor will ensure payment of wages to his personnel within the period prescribed under Labour Laws for the purpose. The Contractor is also required to have a registration under the Company's Act, 1956 or under Indian Partnership Act, 1932 and should have a 'Memorandum and Article of Association' of the company or Partnership Deed, a certified copy of which will be submitted along with the tender. In case the Contractor fails to comply with any statutory obligation under any Labour Laws, and as a result thereof the Institute is put to any loss or obligation, monetary or otherwise, the Institute will be entitled to get itself reimbursed out of the bills or the security deposit of the Contractor, to the extent of the loss or obligation in monetary terms.

- 34. In all matters of dispute, the decision of the Executive Engineer, National Institute of Technology, Tiruchirappalli -620 015 shall be final and binding on the tenderer / contractor.
- 35. Engineer in charge / Civil or his duly authorized representative shall have all reasonable times access to Contractor's premises of work and shall have the power at all the reasonable times to inspect and test any portion of the work and workmanship
- 36. All personal protective equipment conform with standard specification and Contractor including their agents and labour engaged on the work are required to scrupulously adhere to the safety regulations, safety precautions and measurers. Any violation thereof will invite punitive action being taken against them. Also contractors with frequent violations of safety regulations will not be entrusted with further work in this organization

TERMS AND CONDITIONS REGARDING COMPLIANCE WITH VARIOUS LABOUR LAWS BY THE CONTRACTORS FOR NITT

- 1. The Contractor shall not employ in connection with the work any person who has not completed 18 years of age.
- 2. The Contractor shall in respect of labour employed by him either directly or through subcontractors, comply with or cause to be complied with the following statutory provisions and rules and in regard to all matters provided therein.
- a) The Contract Labour (Regulation & Abolition) Act 1970
- b) The Minimum Wages Act 1948 and related Central Rules.
- c) The Payment of Wages Act 1936 and related Central Rules.
- d) The Employee's Provident Fund & Miscellaneous Provisions Act 1952.
- e) The Employees State Insurance Act 1948.
- f) The Workmen Compensation Act 1923.
- g) The Industrial Disputes Act 1947.
- h) The payment of bonus act 1965

and any other law or modifications to the above or to the Rules made thereunder from time to time.

- 3. The Contractor employing workmen is required to obtain license from the authorities (Assistant Commissioner of Labour). The license shall be amended and / or renewed wherever, there is an increase in the workmen employed by him or in the event of contract being extended or renewed. The Contractor shall inform the license number to the NITT Management before taking up the work.
- 4. The Contractor (Licensed or unlicensed) shall promptly furnish every information and document required by NITT authorities for the purpose of fulfilling their obligations as Principal Employer and shall render all necessary assistance for the same.

WAGES

- 5. The Contractor shall pay wages to the workmen employed by him at the rate which shall not be less than the minimum wages applicable under Law from time to time.
- 6. The Contractor shall fix wage periods in respect of which wages shall be payable. No wage period shall exceed one month.

- 7. The Contractor shall ensure payment of wages to the contract labour employed by him within three days from the end of wage period in case the wage period is one week or a fortnight and in all other cases before **7**th day of the following month.
- 8. All Payment of wages shall be made on working days at the work site/ online transaction and during the working time and on date notified in advance. In case the work is completed before the expiry of the wage period final payment shall be made within 48 hours of the last working day.
- 9. Where the employment of any worker is terminated by or on behalf of the Contractor, the wages earned by him shall be paid before the expiry of the second working day from the day on which his employment is terminated.
- 10. Wages due to every worker shall be paid to him direct or to the person authorized by him in this behalf. All wages shall be paid in current coin or currency in both.

REGISTERS & RECORDS: -

11. The Contractor shall maintain all registers and records in the proper manner and as required by the regulations of the various authorities concerned and indemnify the Employer from the consequences due to any inaccurate or faulty documentation on the part of the Contractor.

POST TECHNICAL AUDIT OF WORK AND BILLS:-

12. NITT reserves the right to carry out the post-payment Audit and technical examination of the work and final bill including all supporting vouchers, abstracts etc., and enforce recovery of any sum becoming due as a result thereof in the manner provided in the presiding sub-paragraphs. Such recovery shall be enforced any time even after passing the final bill.

SUBMISSION OF BILLS BY CONTRACTOR: -

13. Complaints shall be made in the prescribed format. A complaint register (in prescribed format) shall be maintained in the Office of the contractor in which all complaints received shall be documented.

The Contractor shall submit a bill in 3 copies to the Engineer by 7th day of Each month for the work executed up-to the end of previous month supported by the requisitions issued from time to time in tabulated form approved by the Engineer, showing the amounts to which the Contractor considers himself to be entitled. The bill must be supported with the following documents:-

- (a) Attendance sheets along-with salary certificates, wages sheets of all the workers and staffs deployed.
- (b) Certified bills miscellaneous materials purchased under different heads not covered in BOQ.
- (c) Details of defects/complaints attended and rectified within time.
- (d) Details of complaints attended late.
- (e) Test certificates of materials used and tests carried out for quality control as required by the specifications and the Engineers.
- f) Deviation from the items provided in the contract documents.
- g) Extra items / new items of work.
- H) Items in-respect of which rates have not been settled. He should in addition furnish a clear certificate to the effect that the claims submitted by him as aforesaid cover all his claims and

that no further claims shall be raised by him in respect of the work done upto and including the period under report.

.PAYMENT OF BILLS:-

14. All payments to be made to the Contractor, under this contract shall be by NEFT or RTGS within a reasonable time, after the certification of bills by the execution department.

RECOVERY FROM CONTRACTOR:-

15. Whenever under the contract, any sum of money, shall be recoverable from or payable by the Contractors, the same may be deducted from or any sum then due or which at any time thereafter may become due to Contractor under the contract or under any other contract with NITT or from his Security Deposit or he shall pay the claim on demand.

CANCELLATION OF CONTRACT FOR CORRUPT ACTS:-

16. NITT, whose decision shall be final and conclusive, shall without prejudice to any other right or remedy which shall have accrued shall accrue thereafter to NITT cancel the contract in any of the following cases and the Contractor shall be liable to make payment to NITT for any loss or damage resulting from any such cancellation to the same extent as provided in the case of cancellation for default.

If the Contractor shall:-

a) Offer or give or agree to give to any person in NITT service any gift or consideration of any kind, as an inducement or reward for doing or for bearing to do or for having done or for borne to do any act, in relation to the obtaining or execution of this or any other contract for NITT service,

OR

b) Enter in to a contract with NITT in connection with which commission has been paid or agreed to be paid by him or with his knowledge, unless the particulars of any such commission and the terms of payment thereof have previously been disclosed in writing to NITT.

OR

c) Obtain a contract with NITT as a result of ring tendering or by non-bonafide methods of competitive tendering, without first disclosing the fact in writing to NITT.

<u>CANCELLATION OF CONTRACT FOR INSOLVENCY ASSIGNMENT OF TRANSFER OR SUBLETTING OF CONTRACT:</u>

17. NITT, without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to NITT shall cancel the contract in any of the following cases:

If the Contractor,

Being an individual or if a firm any partner thereof shall at any time be adjudged bankrupt or have a receiving order for administration of his estate, made against him or shall take any proceedings for liquidation or composition under any bankruptcy Act or assignment of his effects of composition or arrangement for the benefit of his creditors or purport to do so, or if any application made under any Bankruptcy Act for the time being in force for the sequestration of his estate or if a trust deed be granted by him on behalf of his creditors

OF

(a) Being a Company, shall pass a resolution or the Court shall make an order for the liquidation of its affairs, or a receiver or Manager on-behalf of the debenture holders shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or Manager,

OR

- (b) Assigns, Transfers, Sub-lets or attempts to assign, transfer or sub-let any portion of the work without the prior written approval of the NITT.
- (c) Whenever NITT exercise the authority to cancel the contract under this conditions, NITT may have the work done by any means at the Contractor's risks and expenses provided always that in the event of the cost of the work so done (as certified by Engineer in charge which is final and conclusive) being less than the contract cost, the advantage shall accrue to the NITT and if the cost exceeds the money due to Contractor under the contract, the Contractor shall either pay the excess amount ordered by Estate Maintenance Dept. or the same shall be recovered from the Contractor by other means.
- (d) In case the NITT carries-out the work under the provisions of this condition the cost to be taken into account in determining the excess cost to be charged to the Contractor under this condition shall consist of the cost of the materials, hire charges of tools and plants and/or labour provided by the NITT with an addition of such percentage to cover superintendence and establishment charges as may be decided by Estate Maintenance Dept., whose decision shall be final and conclusive.

CANCELLATION OF CONTRACT IN PART OF FULL FOR CONTRACATOR'S DEFAULT:

- 18. <u>If the Contractor:</u>
- (a) makes default in carrying out the work as directed and continues in that state after a reasonable notice from Engineer in charge or his authorised representative
- (b) fails to comply with any of the Terms and Conditions of the contract or after reasonable notice in writing with orders properly issued thereunder
- (c) NITT, may without prejudice to any other right or remedy which shall have accrued or shall accrue thereafter to NITT, CANCEL the contract as whole or in part thereof or only such work order or items of work in default from the contract. Whenever NITT exercise the authority to cancel the contract as whole or part under this condition NITT may complete the work at the contractor's risk and cost (as certified by Engineer in charge, which is final and conclusive) being less than the contract cost, the advantage shall accrue to the NITT. If the cost exceeds the moneys due to the Contractor under this contract the Contractor shall either pay the excess amount ordered by Estate Maintenance Dept. or the same shall be recovered from the Contractor by other means. In case the NITT carries out the work or any part thereof under the provisions of the conditions the cost to be taken into account in determining the excess cost to be charged to the Contractor under this condition shall consist of the cost of the materials, hire charges of tools and plant and/or labour provided by the NITT with an addition of such percentage to cover the superintendence and establishment charges as may be decided by the Engineer in charge, whose decision shall be final and conclusive.

TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR.:-

19. without prejudice to any of the rights or remedies under this contract, if the Contractor dies, or if the firm is dissolved or the company is liquidated, NITT shall have the option of terminating the contract without compensation to the Contractor.

SPECIAL POWER TO TERMINATION:-

20. If at any time after the award of contract, NITT shall for any reason whatsoever not require whole or any part of the work to be carried out the Engineer in charge shall give notice in writing

of the fact to the Contractor who shall have no claim to any payment of compensation or otherwise howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the fore-closing of the work.

LABOUR:-

21. The Contractor shall remain liable for the payment of all wages or other moneys to his work-people or employees under the payment of Wages Act 1936, Employees Liability Act. 1938, Workmen's Compensation Act 1923 or any other Act or enactment, relating thereto and rules framed, thereunder from time to time.

22. Corrigendum / Amendment:

It is tenderer's responsibility to watch for any corrigendum or amendment till the opening of a particular tender that will be posted only at NITT web site.

SECTION - II

INFORMATION AND INSTRUCTION ON TECHNICAL BID

1. General

1.1 The "TECHNICAL BID" (application to qualify) shall contain data and information to enable the institute to draw up a list of qualified agencies who can take part in the tender process and whose "Financial Bids" (Tenders) can be processed further.

The following documents should be enclosed:

- i. Letter of transmittal in the enclosed format. ii. Solvency certificate from a nationalized bank. iii. Financial information in **Form A** (format enclosed). iv. Performance report in **Form B** of works (format enclosed).
- v. Details regarding the structure of the organization in Form- C (format enclosed).
- vi. Details of personnel establishment in **Form D** (format enclosed).
- vii. Details of equipment in Form E (format enclosed).
- 1.2 All information called for in the enclosed forms should be furnished against the respective columns in the forms. If information is furnished in a separate document, reference to the same should be given against respective columns. Such separate documents shall be

Chronologically placed at the end of the prescribed application. If information is 'nil' it should also be mentioned as 'Nil' or 'no such case'. If any particular / query is not applicable in case of the applicant, it should be stated as 'Not applicable'. However, the applicants are cautioned that furnishing of incomplete / ambiguous information, suppression of facts and alteration of prescribed format will entail outright rejection of tender application. Application made by fax and those received late after the prescribed date and time will not be entertained.

- 1.3 The applicant should sign in each page of the application.
- 1.4 Overwriting should be avoided. Correction, if any, shall be made by neatly crossing out, initialing, dating and rewriting.
- 1.5 References, information and certificates from the respective clients certifying suitability, technical know-how or capability of the applicant should be signed by an officer not below the rank of Executive Engineer / Project Manager or equivalent.
- 1.6 The applicant may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. However the applicants are also advised not to attach superfluous / additional information beyond the requirement of the Bid. No information will be entertained after technical bid is submitted, unless it is called for by the EE / EMD / NITT

1.7 Documents submitted in connection with the tender will be treated as confidential and will not be returned.

2. Definitions

In these documents the following words and expressions have their meaning here by assigned to them.

- a) Employer means The Director, NIT, and Tiruchirappalli.
- b) Applicant means individual, proprietary firm, and firm in partnership, limited company (private, public and corporation).

3. Method of Application

- 3.1 If an individual makes the application, it shall be signed by him above his full type written name and current address.
- 3.2 If a proprietary firm makes the application, it shall be signed by the proprietor (with seal) above his full typewritten name & the full name of his firm with its current address.
- 3.3 If the application is made by a firm in partnership, it shall be signed by (with seal) all the partners of the firm above their full typewritten names and current addresses or alternatively by a partner holding power of attorney for the firm in which case, a certified copy of the power of attorney shall accompany the application. A certified copy of the partnership deed along with current addresses of all the partners of the firm shall also accompany the application.
- 3.4 If a limited company or a corporation makes the application, it shall be signed by a duly authorized person holding power of attorney for signing the application, in which case, a certified copy of the power of attorney shall accompany the application. Such limited company or corporation may be required to furnish satisfactory evidence of its existence. The applicant shall also furnish a copy of the Memorandum and Articles of Association duly attested by a Notary Public.

4 Final Decision Making Authority

The Director, NIT Tiruchirappalli reserves the right to accept or reject all or any of the applications and to annul the qualification process / tender process at any time without assigning any reason or incurring any liability to the applicants.

5. Particulars - Provisional

The Particulars of work given in Section – I are provisional. They are liable to change and must be considered as advance information only to assist the applicant.

6. Site Visit

The applicant is advised to visit NITT campus where the works are to be carried out at his own cost and examine the surroundings and collect all information that he considers necessary for proper assessment of prospective assignment during working hours with prior permission from the **Executive Engineer** (Mobile: 9489066204).

7. The applicant should own required tools & tackles for proper and timely execution of the work. Else, he should certify that he would be able to manage the tools & tackles by hiring etc.

- 7.1 The applicant should have sufficient number of employees for proper execution of contract. The applicant should submit a list of his employees with their age (**Not more than 50 years**) and trade stating clearly how they would be involved in this work.
- 7.2 The applicant's performance in respect of completed works and ongoing works should be certified by an officer not below the rank of Executive Engineer or equivalent and should be obtained and delivered in sealed covers.

(b) Evaluation by Scoring

- 7. b.1. The applicants, who qualify the eligibility criteria mentioned under clause 1 of Notice Inviting Tender, shall be further evaluated for various criteria as shown in clause 7.3.3 and in the norms for qualification by scoring method based on the details submitted by them.
- 7.b.2 Inspection committees will carry out surprise visit to tenderers clients' places and their reports, form valuable inputs for the short-listing process.

The final selection of the contractor will be based on the lowest percentage towards service charges quoted among the qualified bidder taking into account the combination of all the trade and the respective rate indicated therein leading to the ultimate value for 12 months. The tender will be considered as a whole and hence overall lowest value will be the lowest tenderer. Quoting single percentage as service charges for all the items is mandatory and partial offer will be treated incomplete tender and rejected.

7.3.3 The applicants who fulfil the eligibility criteria as stated earlier shall only be evaluated further for the following criteria:-

(a)	Financial strength (Form - A)	Maximum 30 Marks
(b)	Experience in similar nature of work During last five years. (Form - B)	Maximum 30 Marks
(c)	Performance on works (Form - C)	Maximum 30 Marks
(d)	Personnel and Establishment (Form - D)	Maximum 10 Marks

Total 100 Marks

Note: To qualify, the applicant must secure at least 60% (Sixty percent) marks in aggregate. For qualification norms, refer pages 34 & 35 of tender document. The Director, NITT reserves the right to restrict the list of pre-qualified contractors to any number deemed suitable by it.

- 7.3.4 Even though an applicant may satisfy the above requirements, he would be liable for disqualification if he has:
- (a) Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the qualification document.
- (b) Record of poor performance such as, abandoning work, not properly completing the contract, not meeting the statutory requirement, or financial failures / weaknesses, terminated in the middle of the contract period etc.

8.0 Financial Information

The applicant should furnish the annual financial statement for the last 5 years in Form – A.

9.0 Experience in Similar Works

9.1 The applicant should furnish the list of *all* works of similar nature successfully completed during last 5 years and are now in progress in Form – B. Such Particulars duly authenticated / certified by an officer not below the rank of Executive Engineer or equivalent should be furnished separately for Each work

10.0 Organizational Information

Applicant is to submit the following information in respect of his organization in form C

- (a) Name and postal address including telephone, fax number, E-mail ID, etc.
- (b) Copies of original documents defining the legal status, place of registration and principal places of business.
- (c) Names and titles of Directors and officers to be concerned with the work, with designation of individuals authorized to act for the organization.
- (d) Information on any litigation / arbitration in which the applicant was involved during the last five years including any current litigation / arbitration in process.
- (e) Authorization for employer to seek detailed reference from clients to whom works were carried out.
- (f) Number of technical and administrative employees in parent company, subsidiary company and how these would be involved in this work Form D

11.0 Tools & Tackles

Applicant should furnish the list of equipment likely to be used / deployed for carrying out the work (in Form E). Details of any other equipment not mentioned in Form E, but available with the applicant and likely to be used in this work may also be indicated.

12.0 Tender Submission and Decision

After the details submitted by the applicant regarding his financial capacity, previous experience etc. are studied and evaluated, a list of agencies who can take part in the tendering process shall be prepared and all concerned will be intimated. The financial bids (Tender) of the applicants who have not been qualified after evaluation, shall be returned unopened. Qualified tenders shall be opened by the committee constituted for this purpose on the date and time to be intimated, in the presence of the tenderers or their authorized representatives who may choose to present.

SECTION – III SPECIAL CONDITIONS OF CONTRACT

1) Every tenderer is expected to inspect NITT campus for which the service is to be rendered before quoting service charges. The requirement of experienced labour under respective trade and required tools & tackles for the nature of work in general should be assessed and no claim for extra payment at a later date on that account shall be entertained.

Without written permission of EO, EMD, NITT, no part of the contract shall be sublet, shall transfer the power of attorney, authorizing others to receive the payment on contractors behalf.

- 2) If further information is required, the Estate Office will furnish such information, but it must be clearly understood that tender must be received in order and according to instruction.
- 3) The contractor should employ workers who have experience in civil maintenance work.
- 4) Child Labor is strictly prohibited and if there is any violation, the contract will be terminated.
- 5) Permits for workers to the campus / building shall be obtained by the contractor from the concerned authorities. Only photo passes shall be issued and no group passes shall be issued.
- 6) Necessary monthly bills should be submitted by the contractor on or before seventh of subsequent month by fulfilling all formalities attaching copy of statutory remittances.
- 7) All expenses related to the functioning of the employees engaged by the contractor shall be in the scope of the contractor. The record of duty hours and pay structure should be maintained as per rules for inspection by authorized government personnel and meeting other statutory and non-statutory benefits/obligations.
- 8) The contractor should take all measures for environmental protection, such as control of chemical pollution, proper disposal of waste etc., and ensure that there are no adverse effect on the ecology, particularly on flora and fauna of the campus.
- 9) The contractor shall collect completion certificate for the work done from the respective Department/ resident / steward which is to be handed over to EMD latest the next day of completion
- 10) The contractor shall submit a copy of the EPF/ESI/bonus/ insurance documents along with each running account bill. Monthly bill will not be processed unless the above are submitted. Necessary records shall be kept in compliance of the same for verification by the enforcing agencies.
- 11) Minimum wages as per the Central Government norms shall have to be disposed.
- 12) Rate per Each item is indicated in Rupees. The contractor is required to quote a single average percentage towards service charges and equivalent absolute value against the tender value and fill up the total contract value that will decide the lowest competitor. In case of any difference in the quoted value viz. in figures and words, the lower of the two will be taken as the service charges.
- 13) The quoted service charge should be inclusive of all taxes and duties levied or to be levied both by Central and State Government Statutory / regulatory authorities from time to time except Service Tax. NITT will not entertain any claim whatsoever in this regards. However NITT will reimburse only service tax paid by the agency on submission of documentary evidence for having paid so with respect to this work.
- 14) If after opening the tender, the tenderer revoke his tender to increase his earlier quoted rate or after acceptance of his tender does not commence the work in accordance with the

instruction of EO, ESTATE MAINTENANCE DEPT. the earnest money deposited by him, will be forfeited and acceptance of his tender withdrawn.

Nature / Scope of Work/ Frequency of Operation:

- a) The scope of work is well defined in the bill of quantities under financial bid where the agency is required to quote only a single service charge in percentage considering rates indicated for various items.
- b) The scope shall cover any other service / work that might arise depending upon contingency
- c) The contractor should produce the P.F. return for all workers, every six months.

Working Conditions:

- 1. The contract is normally required to be carried out on all days except Sundays & declared holidays. However if situation warrants, has to carry out works on holidays also.
- 2. The labourers put in work may be provided with identity card to distinguish them from other staff.
- 3. The payment will be made after deducting Income Tax, Labour Welfare Cess etc.

Statutory Requirement:

a) The contractor should get labour license for the work from licensing authority of the Government by paying necessary fees.

General:

- a) Work men should be vigilant while on work.
- b) Smoking in the institute premise is strictly prohibited.
- c) Workers must be free from influence of alcohol.
- d) Workers must be physically and mentally fit for work.
- e) Workers should avoid causing damage to the Institute property
- f) The NIT, Tiruchirappalli Administration will not accept any responsibility if the work man is injured.
- g) The movement of workers should be restricted to their area of work and should not wander into other areas.

Additional Conditions:

- 1) The contractor should execute an agreement in the non judicial stamp, incorporating the various terms and conditions.
- 2) If the contractor performance is not satisfactory, the contract will be terminated by giving due notice.
- 3) The contractor shall recoup NITT the cost of the damage incurred by the contractor on account of any breach of the terms and conditions of the agreement.
- 4) NITT will not be liable for any medical attention, injury / loss of life of the person engaged by the contractor.

- 5) The contractor shall be solely responsible for any claim arising out of employment or termination of employment of his employees and for statutory payments. The contractor shall employ only such personnel who are medically fit and above the age of 18.
- 6) In case of any lapse in services, quality standards or any standing instruction, the contractor shall be penalized accordingly.
- 7) The contract may be terminated due to violations or poor performance or noncompliance of statutory payments in time, with due notice.
- 8) The contractor shall at his own expense reinstate and make good to the satisfaction of NITT and pay compensation for any injury, loss or damage occurred to any property or rights whatever including property and rights of NITT employees.
- 9) In case of failure on the part of the contractor to complete any contractual obligations, NITT reserves the right to get the same done at the contractor's risk and cost by another agency / departmentally apart from imposing penalty.
- 10) In case NITT be held liable for any loss, damage or compensation to third party arising by the housekeeping contractor, such loss, damage or compensation shall be paid by the contractor to NITT together with the cost incurred by NITT on any legal proceedings pertaining thereto.
- 11) NITT reserves the right to disqualify such bidders who had a record of not meeting the contractual / statutory obligations against earlier contract entered into with NITT.
- 12) The proof of remittance of statutory deductions like EPF, ESI as appropriate, to the respective agency, for those employed at NITT must be provided by the contractor to NITT every month along with the running bill, failing which the claim bill shall not be settled. These remittances / payments must be made in a separate challan specifically for the contract personnel deployed to NITT in the name of NITT.
- 13) The technical bids will be subjected to evaluation by a committee calling for a technical presentation by the vendors which will include verifying financial turn over registration certificates, legal, financial, statutory, taxation and other associated compliance of contractual conditions. The committee may evaluate / verify the performance of the agency at any pf their existing contracts which may include obtaining references for visiting clients and the quality of services rendered by agencies. Further the committee may disqualify the bidder based on oral / written references or insufficient quality of service provided during existing or previous contracts.
- 14) The contractor shall at all times indemnify and keep indemnified the principle employer, the head of the office and its officers, servants and agents for and against all third party claims whatsoever (including time not limited to) property loss and damage, personal accident, injury or death of /or property or person of any sub contract and or the servant or agents of the contractor any sub-contractor and or the owner and the contractor shall at his own cost and imitative at all times maintain all liabilities under workman's compensation Act / Fatal Accident Act, personal injuries, Employees state Insurance Act, PF Act and or their industrial legislation from time to time in force.
- 15) The service charges as quoted by the agency in percentage shall remain firm for the entire contract duration.

The value of contract will be worked out based on the percentage service charges as quoted by bidder. Service Charge should be **inclusive of all taxes(excluding GST).**

Evaluation of the bidders will be done based on quote of percentage service charges mentioned in Price Bid Format. The contract would be awarded to the bidder quoting the minimum service charges in the Price bid format.

The Contractor shall be fully responsible for the timely payment of wages, provident fund, bonus or any other benefits payable under the aforesaid Acts, Laws and regulations to the workforce engaged by him at the work premises of the Institute. The Institute shall not be responsible for these payments or any other liability on this account. The Contractor shall also indemnify and compensate the Institute for any liability incurred by the Institute, if any, including costs incurred thereon. In that event the nominated officer of the Institute shall be entitled to recover the amount so paid, from the contractor, including forfeiture of the Security Deposit and if the sum so payable and the Security Deposit is less than Institute's claim, it shall be lawful for the Institute to recover the balance amount as a debt from the Contractor.

The Contractor shall indemnify and compensate the Institute, if the Institute as Principal Employer under the Contract Labour (Regulation and Abolition) Act, 1970 becomes liable to assume any liability towards the workforce engaged by the contractor. In that event, the provisions relating to recover as provided in relevant clauses of the said Act shall be applicable in to. The contractor is responsible for any injury/loss of life to the labour engaged by the contractor during the course of work/inside the NITT campus. In such case, NITT is nowhere responsible for any such occurrence.

16) The contractor may be allotted unoccupied old house for the purpose of storing his material related to the contract work and running his office during the currency of the contract

SPECIFIC CONDITIONS

- 1. No night work will be permitted without the written permission of the Engineer in charge.
- 2. Permission for erection of temporary work sheds etc., at site will have to be obtained from NITT in writing in advance.
- 3. The works contract to be entered into with the successful tenderer will be governed by the CPWD works Manual 2014 or the latest in force.
- 4. The successful tenderer / Contractor shall observe all safety regulations and take necessary safety precaution as called for and Safety Precautions enclosed herewith.
- 5. In all matters of dispute, the decision of the Estate Officer, National Institute of Technology, Tiruchirappalli -620 015. Shall be final and binding on the tenderer / contractor.
- 6. For Some changes are likely in the layout, design and specifications of the work. The Percentage rate quoted shall be deemed to be inclusive of all such contingencies.
- 7. Engineer in charge / Civil or his duly authorized representative shall have all reasonable times access to Contractor's premises of work and shall have the power at all the reasonable times to inspect and test any portion of the work or examine the materials and workmanship of the structures during their manufacture and test. The contractor shall give due notice in writing to the Inspecting Engineer of NITT when the materials supplied to be incorporated in the work are ready for Inspection and test. No material shall be incorporated in the work until the inspecting Engineer certified in writing that such materials have been inspected and approved by him or else the rejected material should be removed from site immediately.

- 8. The contractor should submit in advance every fortnight a detailed programme of work to be undertaken from time to time strictly in conformities with the "Time and Progress Chart" covering the entire constructed work and reschedule them wherever necessary during the progress of the work so as to achieve the target set.
- 9. Water if available may be supplied to the contractor by the department subject to the following conditions:-
- (i) The water charges @ 1 % shall be recovered on gross amount of the work done. (ii) The contractor shall make his/their own arrangement of water connection and laying of pipelines from existing main of source of supply.
- (iii) The Department do not guarantee uninterrupted water supply and it will be incumbent on the contractor to make alternative arrangements for water at his/ their own cost in the event of any temporary break down in the water main so that the progress of his/their work is not held up for want of water. No claim of damage or refund of water charges will be entertained on account of such break down

SAFETY PRECAUTIONS TO BE FOLLOWED AT WORK SITE DURING EXECUTION

The following safety measures should be strictly adhered to, during execution of works at sites.

- 1. Providing the working platform with toe board and handrail for continuous working at heights.
- 2. Providing safety belt and life line at all times for men working at heights.
- 3. Providing dust or fume respirator in places where dust and fume concentration exists.
- 4. Providing goggles and welding screens.
- 5. Providing acid and alkali proof rubber gloves for handling acid and alkali and chemical which are corrosive.
- 6. Providing rubber gloves for working on electrical works.
- 7. Ensuring proper lashing of the components while being transported in vehicles.
- 8. The vehicles must have side supports or have body to support the materials conveyed.
- 9. The materials should not be allowed to extend or overflow the sides of the vehicles.
- 10. Materials should not be allowed to overhang from the rear edge of the body of the vehicle.
- 11. Driver of the vehicle must possess license.
- 12. Vehicle must not be overloaded prescribed limits.
- 13. Red flags and lights for parts projecting from the body of vehicle must be provided.
- 14. The speed restrictions within the Institute must be strictly adhered to.
- 15. The gas cylinders must be always handled on trolleys or kept tied down not in use.
 They should never be rolled as Roller for conveying.
- 16. Cylinders should not be used without regulators.
- 17. All excavations must be barricaded and red lamps must be provided.
- 18. All electrical connections must be properly earthed.

- 19. Providing helmet, safety belt, etc., for high level work and sufficient number of Industrial Safety nets at appropriate level to safeguard the persons working at high level particularly in roofing etc.,
- 20. All personal protective equipment conform with standard specification and Contractor including their sub-contractors, agents and labour engaged on the work are required to scrupulously adhere to the safety regulations, safety precautions and measurers. Any violation thereof will invite punitive action being taken against them. Also contractors with frequent violations of safety regulations will not be entrusted with further work in this organization.

SAFETY PRECAUTIONS TO BE OBSERVED WHILE TRANSPORTING MATERIALS

I. VEHICLE

- 1. Vehicles carrying material should have proper registration documents and must be produced on demand by our Security Staff.
- 2. The light on right side, i.e., over the drivers cabin shall be in working condition.
- 3. Both the head lights as well as park lamps must be in working conditions.

II. MOVEMENT OF VEHICLE

- 1. The vehicle should not travel at more than 20 km.ph in our premises.
- 2. The Driver of the vehicle must possess heavy duty license and produce on demand by the Security Staff.
- 3. Vehicles carrying inflammable liquids in the tank containers should have grounding chain or the tank should be coated with insulating material also to avoid Static Electricity.
- 4. In road junctions, speed breakers and railway crossing, the speed should be lowered and vehicle should proceed cautiously.
- 5. The driving should 'KEEP TO THE LEFT' at all places.
- 6. The vehicle should not be parked in road which could obstruct the vehicular traffic.
- 7. No person other than driver should be allowed to sit or stand on the prime mover or trailer.
- 8. The vehicle should pass only through the approved routes. Short cuts should be forbidden.
- 9. There must be a safe distance behind another moving truck.
- 10. The driver should avoid making quick starts, jerky stops or quick turns at excessive speed.

QUALIFICATION INFORMATION LETTER OF RANSMITTAL

To

The Director NIT, Tiruchirappalli 620 015.

Sub: Annual Maintenance on repair and renovation of Civil works at NITT, Trichy

Sir,

Having examined the details given in notice inviting qualification application and tender for the above work, I / we hereby submit the qualification application documents (Technical Bid) and the tender (Financial Bid) for the work duly filled.

- 1. I/we hereby certify that all the statements made and information supplied in the enclosed forms and accompanying statements are true and correct.
- 2. I / we have furnished all information and details necessary for deciding our eligibility and to get qualified for taking part in the tendering process for the work. We have no further information to supply.
- 3. I / we submit the requisite latest solvency certificate in original and authorize the Director, NIT Tiruchirappalli or his authorized representative to approach the bank concerned to confirm the correctness of the certificate. I / we also authorize NIT Tiruchirappalli or its representative to approach individuals, firms and corporations to verify our competence and general reputation.

I am / we are aware that the tender document (Financial bid) will not be opened if I am / we are not qualified to take part in the tendering process.

Seal of the Applicant

Date of submission

Signature(s) of the applicant(s)

Form - A

FINANCIAL INFORMATION

I. Financial Analysis

Details are to be furnished duly supported by figures in Balance sheet / Profit and loss account for the last five years duly certified by the chartered accountant, as submitted by the applicant to the Income – Tax Department (Copies to be attached).

SI.	Details	Year Ending 31 st March of				
No.	2 3 3 3 1 2	2014	2015	2016	2017	2018
1.	Gross annual turnover in Civil construction & Maintenance related works					
2.	Profit (+) / Loss (-)					

II.	Financial	arrangement	for carrying	out the pre	oposed work.

- III. Income Tax PAN Details.
- IV. Solvency certificate from any Nationalised Bank.

Signature(s) of Applicant (s) with seal

Signature of Charted Accountant with seal

Form - B

Performance Report form for works completed and are in progress during last 7

(Attach copies of work order / agreement - Multiple copies may be generated as per

requirement) Name of the work / 1. Project & Location 2. Scope of work 3. Agreement No. **Tendered Cost** 4. 5. Value of work done 6. Date of commencement 7. Date of Completion 8. Performance report based on : Very Good / Good / Satisfactory / to improve quality of work, time management and resourcefulness Date: **Executive Engineer**

Project Manager, or Equivalent

Form - C

Structure and Organization

1	Name and	address of	the an	nlicant ·	
	Name and	addi Coo Oi	uic ap	piloant .	•

- 2. Telephone No. / Fax No. / E-Mail address :
- 3. Legal Status (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
- 4. Particulars of registration with various Government bodies (Attach attested photocopy):
 - a) Registration Number
 - b) Organization / Place of registration
- 5. Names and Titles of Directors and officers with designation to be concerned with this work with designation of individuals authorized to act for the organization.
- 6. Was the applicant ever required to suspend housekeeping for a period of more than one month continuously after the work was commenced? If so, give the name of the project and give reasons thereof.
- 7. Has the applicant or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion?
- 8. Has the applicant or any constituent partner in case of partnership firm, ever been debarred / black listed for tendering in any organization at any time? If so, give details.
- 9. Has the applicant or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so give details.
- 10. If any other information considered necessary related to housekeeping works but not included above.

Signature(s) of Applicant(s) with seal

Form D

DETAILS OF KEY TECHNICAL AND ADMINISTRATIVE PERSONNEL EMPLOYED BY THE FIRM / COMPANY

SI. No.	Designation	Total number	Name	Qualification / Professional Experience	Length of continuous service with the employer

Note: Additional information about technical personnel, if any, be submitted in separate sheet

Signature(s) of Applicant (s) with seal

FORM - E

Equipment Details

List of equipment owned and planned for deployment

SI. No.	Equipment	Numbers
1.		
2.		
3.		
4		
5		
6		
7		
8		

NORMS FOR QUALIFICATION

Name of work: Annual Maintenance on repair and renovation of Civil works at NITT, Trichy

Tender value of Rs. 150.00 Lakh

ELIGIBILITY:-

- 1. Separate Registration Code No. for EPF, ESI and PAN on contractor's name / firm.
- 2. Average annual turnover of civil works in the last three financial years should be at least Rs 90 lakh.
- 3. During last seven years should have successfully completed either

Three similar works Each not less than Rs. 60 lakhs

or

Two similar works Each not less than Rs. 75 lakhs

or

One similar work not less than Rs. 120 lakhs

- 4. Solvency for at least Rs 60 lakh from Nationalised / Scheduled Bank
- 5. Should not have incurred any loss in more than three years during the last five years ending 31.03.2018

	THRUST AREA	SCORE	QUALIFICATION NORMS
I	FINANCIAL STATUS	30	
		(Max)	
	i) Nature of Company	10	
		10	Public Limited
		8	Private Limited/Partnership Firm
		6	Sole Proprietor
	ii) Average annual turnover for civil	20	
	works in the last three years	20	More than Rs.120 Lakh
		10	Rs.60 Lakh
		10	(Pro-rata for in between cases)
II	Similar Experience (Civil related	30	
	construction / Maintenance works)	(Max)	
		30	More than Rs.120 Lakh.
	i) Value of Civil works executed in the last three years	18	Rs.90 Lakh (Pro-rata for in between cases)

III	Performance on previous works	30 (Max)	
	i) Number of Civil works successfully completed in the last three years	15	
		15	Successful completion of one major works in time. (Each costing at least Rs.120 lakh)
		12	Successful completion of two major works in time (Each costing at least Rs.90 lakh)
		10	Successful completion of three major work in time (Each costing at least Rs.60 lakh)
	ii) Highest value of single work completed	15	
		15	Rs. 120 Lakh & more
		10	Rs. 60 Lakh. (Pro-rata for in between cases)
IV	i) Qualified staff availability	10 (Max)	
		10	Graduate Engineer Plus workforce proportionate to the loading
		8	Diploma Engineer Plus workforce proportionate to the loading
		6	Supervisory/ Forman Plus workforce proportionate to the loading

NOTE: Minimum score required for qualification is 60 out of 100.

NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI – 15

Web: www.nitt.edu Phone: 0431 –250 3830



PRICE BID

Name of Work

: Annual Maintenance on repair and

renovation of Civil works at NITT, Trichy.

Value of work : Rs.1,50,00,000/-

Tender Enquiry No. : NITT/EMD/EE/AMC/CVL/2019-20/017 Dated:

15.05.2019

Period of Contract : 12 Months

LIST OF WORKS AND PRICES

NAME OF WORK:

DETAILS & QUANTITIES of Each item of work shown in the BILL OF QUANTITIES are only approximate. They are given as a guide for the purpose of tendering only and are liable to variation and alteration of the Competent Authority. The work under each item as executed shall be measured and priced at the corresponding rate quoted by the contractor in the BILL OF QUANTITIES

Sl.No.	Description of work / supplied	Total amount of work (in figures and words) Rs. Ps.	Period of contract
1.	Annual Maintenance on repair and renovation of Civil works at NIT, Trichy.	Rs.1,50,00,000/- (Rupees One Crore Fifty Lakh only).	12 Months

BILL OF QUANTITIES

SI. No.	Approx. Qty.	Description of	INBP	Rate (Both in Unit	Amoui	nt
		work	No.	fig & Words	Rs.	Ps.
				9		

AS PER SEPARATE SHEETS ATTACHED

N	Name of Work: Attending Masonry, Carpentry and other works in all zones at NITT.				
ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT	
1	2.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 Sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in-Charge:			
1.1	2.1.1	All kinds of soil	66.51	Sqm	
2	2.7	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 Sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in- charge.			
2.1	2.7.1	Ordinary rock	277.40	Cum	
2.2	2.7.2	Hard rock (requiring blasting)	493.55	Cum	
3	2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 Sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.			
3.1	2.8.1	All kinds of soil.	208.82	Cum	
4	2.1	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating Each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m:			
4.1	2.10.1	All kinds of soil			
4.1.1	2.10.1.1	Pipes, cables etc, not exceeding 80 mm dia.	173.24	Metre	
4.1.2	2.10.1.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	282.92	Metre	
4.1.3	2.10.1.3	Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm	441.72	Metre	
5	2.13	Excavating trenches of required width for pipes, cables, etc, including excavation for sockets, depth upto 1.5 m, including getting out the excavated materials, returning the soil as required in layers not exceeding 20 cm in depth, including consolidating Each deposited layers by ramming, watering etc., stacking serviceable material for measurements and disposal of unserviceable material as directed, within a lead of 50 m:			
5.1	2.13.1	Ordinary rock :			
5.1.1	2.13.1.1	Pipes, cables etc. not exceeding 80 mm dia	244.08	Metre	
5.1.2	2.13.1.2	Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia	604.36	Metre	

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
5.2	2.13.2	Hard rock (requiring blasting)		
5.2.1	2.13.2.1	Pipes, cables etc. not exceeding 80 mm dia	358.34	Metre
5.2.2	2.13.2.2	Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia	887.34	Metre
6	2.27	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	1151.68	Cum
7	2.28	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.		
7.1	2.28.1	All kinds of soil	17.51	Sqm
8	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	9.04	Sqm
9	2.32	Clearing grass and removal of the rubbish up to a distance of 50 m outside the periphery of the area cleared.	4.58	Sqm
10	2.38	Filling with available fly ash and earth (excluding rock) in trenches or embankment in layers (Each layer should not exceed 15 cm), with intermediate layer of compacted earth (Soil density of 98%) after every four layers of compacted depth of fly ash, sides & top layer of filling shall be done with earth having total minimum compacted thickness 30 cm or as decided by Engineer -in-charge, including compacting Each layer by rolling/ ramming and watering, all complete as per drawing and direction of Engineer -in - charge.	157.80	Cum
11.1	4.1.2	1:1½:3 (1 Cement: 1½ coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).	7434.84	Cum
11.2	4.1.3	1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size).	6879.30	Cum
11.3	4.1.10	1:5:10 (1 cement : 5 coarse sand (zone-III): 10 graded stone aggregate 40 mm nominal size).	5281.94	Cum
12	4.17	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	565.14	Sqm
13	5.1	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:		
13.1	5.1.2	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	7799.64	Cum
13.2	5.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	7244.10	Cum
14	5.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement:		
14.1	5.2.2	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) : 3 graded stone aggregate 20 mm nominal size).	8967.26	Cum

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
15	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	9274.71	Cum
16	5.9	Centering and shuttering including strutting, propping etc. and removal of form for:		
16.1	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	243.39	Sqm
16.2	5.9.2	Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.	475.11	Sqm
16.3	5.9.3	Suspended floors, roofs, landings, balconies and access platform	529.94	Sqm
16.4	5.9.4	Shelves (Cast in situ)	529.94	Sqm
16.5	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers	430.31	Sqm
16.6	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts	587.10	Sqm
16.7	5.9.7	Stairs, (excluding landings) except spiral-staircases	526.24	Sqm
17	5.16	Providing, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete in shelves, including setting in cement mortar 1:3 (1cement : 3 coarse sand), cost of required centering, shuttering and finishing with neat cement punning on exposed surfaces but, excluding the cost of reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).	15970.55	Cum
18	5.18	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 6mm nominal size), reinforced with 1.6 mm dia mild steel wire, including centering and shuttering, roughening cleaning, fixing and finishing with cement mortar 1:3 (1 cement: 3 fine sand) etc. complete, excluding plastering of the jambs, sills and soffits.		
18.1	5.18.1	50 mm thick	1022.18	Sqm
19	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.		
19.1	5.22.3	Cold twisted bars	71.03	Kg
19.2	5.22.6	Thermo-Mechanically Treated bars of grade Fe-500D or more.	71.03	Kg
20	5.22A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.		
20.1	5.22A.3	Cold twisted bars	71.03	Kg
20.2	5.22A.6	Thermo-Mechanically Treated bars of grade Fe-500 D or more.	71.03	Kg

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
21	5.33	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge."(Note:-Cement content considered in this item is @ 330 Kg/Cum."Excess/ less cement used as per design mix is payable/recoverable separately).		
21.1	5.33.1	All works upto plinth level	8089.65	Cum
21.2	5.33.2	All works above plinth level upto floor V level	9098.09	Cum
22	5.37	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work, including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement, including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete,improve workability without impairing strength and durability as per direction of the Engineer-in-charge. (Note:- Cement content considered in this item is @ 330 Kg/Cum. Excess/less cement used as per design mix is payable/recoverable separately)		
22.1	5.37.1	All works upto plinth level	8424.90	Cum
22.2	5.37.2	All works above plinth level upto floor V level	9433.33	Cum
23	5.45	Providing and fixing of expansion joint system related with wall joint (internal/ external) location as per drawings and direction of Engineer-In- Charge. The joints shall be of extruded aluminum base members, self aligning / centering arrangement and support plates as per ASTM B221- 02. The material shall be such that it provides an Expansion Joints System suitable for vertical wall to wall/ wall to corner application, both new and existing construction in office Buildings & complexes with no slipping down tendency amongst the components of the Joint System. The Joint System shall utilize light weight aluminum profiles exhibiting minimal exposed aluminum surfaces mechanically snap locking the multicellular to facilitate movement. (Material shall conform to ASTM 6063.)		
23.1	5.45.1	Wall Joint of 100 mm gap	4929.25	Metre
23.2	5.45.2	Wall Joint of 150 mm gap	5566.92	Metre

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
24	5.46	Providing and fixing of expansion joint system of approved make and manufacture for various roof locations as per approved drawings and direction of Engineer-In-Charge. The joints shall be of extruded aluminum base members with, self aligning and self centering arragement support plates as per ASTM B221-02. The system shall be such that it provides water tight roof to roof /roof to corner joint cover expansion control system that is capable of accommodating multidirectional seismic movement without stress to its components. System shall consist of metal profile that incorporates a universal aluminum base member designed to accommodate various project conditions and roof treatments. The cover plate shall be designed of width and thickness required to satisfy movement and loading requirements and secured to base members by utilizing manufacturer's pre-engineered self-centering arrangement that freely rotates / moves in all directions. The Self centering arrangement shall exhibit circular sphere ends that lock and slide inside the corresponding aluminum extrusion cavity to allow freedom of movement and flexure in all directions including vertical displacement. The Joint System shall resists damage or deterioration from the impact of falling ice, exposure to UV, airborne contaminants and occasional foot traffic from maintenance personnel. Provision of Moisture Barrier Membrane in the Joint System to have water tight joint is mandatory requirement. (Material shall confirm to ASTM 6063.)		
24.1	5.46.1	Roof Joint of 100 mm gap	5512.27	Metre
24.2	5.46.2	Roof Joint of 150 mm gap	6149.95	Metre
25	6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:		
25.1	6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	5962.85	Cum
26	6.4	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :		
26.1	6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	7005.92	Cum
27	6.12	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :		
27.1	6.12.2	cement mortar 1:4 (1 cement : 4 coarse sand)	744.78	Sqm
28	6.13	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.		
28.1	6.13.2	Cement mortar 1:4 (1 cement :4 coarse sand)	858.60	Sqm
29	7.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with :		
29.1	7.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	4976.75	Cum

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
30	8.2	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.		
30.1	8.2.2	Granite of any colour and shade		
30.1.1	8.2.2.1	Area of slab upto 0.50 Sqm	4206.36	Sqm
30.1.2	8.2.2.2	Area of slab over 0.50 Sqm	3906.88	Sqm
31	8.3	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.		
31.1	8.3.2	Granite work	308.33	Metre
32	8.1	Providing and fixing stone slab with table rubbed, edges rounded and polished, of size 75x50 cm deep and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-charge and finished smooth.		
32.1	8.10.2	Granite Stone of approved shade	3553.81	Sqm
33	8.13	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building, all complete as per the architectural drawings, with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand), laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade, including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.		
33.1	8.13.1	Polished Granite stone slab jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	3686.52	Sqm
34	9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).		
34.1	9.1.1	Second class teak wood	116383.25	Cum
35	9.3	Providing wood work in frames of false ceiling, partitions etc. sawn and fixed in position:		
35.1	9.3.1	Sal wood	100450.29	Cum
36	9.5	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge.		
36.1	9.5.1	Second class teak wood		
36.1.1	9.5.1.1	35 mm thick shutters	3197.67	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
36.1.2	9.5.1.2	30 mm thick shutters	2878.24	Sqm
37	9.7	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick:		
37.1	9.7.1	Second class teak wood	2556.29	Sqm
37.2	9.7.5	Particle Board 12 mm thick		
37.2.1	9.7.5.3	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side, Grade I, Type II IS: 12823 marked	1631.56	Sqm
37.2.2	9.7.5.4	Pre-laminated particle board with decorative lamination on both sides, Grade I, Type II, IS:12823 marked	1689.85	Sqm
38	9.9	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws.		
38.1	9.9.1	Second class teak wood		
38.1.1	9.9.1.1	35 mm thick	3839.49	Sqm
38.1.2	9.9.1.2	30 mm thick	3474.44	Sqm
39	9.16	Providing and fixing 25 mm thick shutters for cupboard etc. :		
39.1	9.16.1	Panelled or panelled & glazed shutters :		
39.1.1	9.16.1.1	Second class teak wood including ISI marked anodised aluminium butt hinges with necessary screws	3279.12	Sqm
39.1.2	9.16.1.2	Second class teak wood including iSi marked nickel plated bright finished M.S. piano hinges with necessary screws	3444.20	Sqm
39.2	9.16.2	Glazed shutters :		
39.2.1	9.16.2.1	Second class teak wood including ISI marked anodized aluminium butt hinges with necessary screws	3184.75	Sqm
40	9.17	Providing and fixing flat pressed 3 layer particle board medium density exterior grade (Grade I) or graded wood particle board IS: 3087 marked, to frame, backing or studding with screws etc. complete (Frames, backing or studding to be paid separately):		
40.1	9.17.1	12 mm thick	680.22	Sqm
40.2	9.17.2	18 mm thick	850.76	Sqm
41	9.18	Providing and fixing Pre-laminated flat pressed 3 layer (medium density) particle board or graded wood particle board IS: 3087 marked, with one side decorative and other side balancing lamination Grade I, Type II exterior grade IS: 12823 marked, in shelves with screws and fittings wherever required, edges to be painted with polyurethane primer (fittings to be paid separately).		
41.1	9.18.1	18 mm thick	1242.98	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
41.2	9.18.2	25 mm thick	1637.08	Sqm
42	9.2	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.		
42.1	9.20.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	3123.38	Sqm
43	9.21	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:		
43.1	9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	1957.33	Sqm
43.2	9.21.3	25 mm thick (for cupboard) including ISI marked nickel plated bright finished M.S. piano hinges with necessary screws	1884.73	Sqm
44	9.23	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	459.11	Sqm
45	9.24	Extra for providing vision panel not exceeding 0.1 Sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured):		
45.1	9.24.1	Rectangular or square	204.05	Sqm
46	9.26	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	160.31	Sqm
47	9.35	Providing and fixing in wall lining flat pressed three layer (medium density) particle board or graded wood Pre-laminated one side decorative lamination and other side balancing lamination Grade I, Type II, IS: 12823 marked, including priming coat on unexposed surface, with necessary fixing arrangement and screws etc. complete:		
47.1	9.35.1	12 mm thick	1197.17	Sqm
47.2	9.35.2	18 mm thick	1376.75	Sqm
47.3	9.35.3	25 mm thick	1785.60	Sqm
48	9.37	Providing and fixing plywood 4 mm thick, one side decorative veneer conforming to IS: 1328 (type-1), for plain lining / cladding with necessary screws, including priming coat on unexposed surface with:		
48.1	9.37.1	Decorative veneer facings of approved manufacture	1293.43	Sqm
49	9.45	Providing and fixing teak wood lipping of size 25x3 mm in pelmet.	51.58	Metre
50	9.46	Providing and fixing curtain rods of 1.25 mm thick chromium plated brass plate, with two chromium plated brass brackets fixed with C.P. brass screws and wooden plugs, etc., wherever necessary complete:		
50.1	9.46.2	20 mm dia	450.89	Metre
50.2	9.46.3	25 mm dia	582.09	Metre

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
51	9.47	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets:	, ,	
51.1	9.47.1	20 mm dia (heavy type)	149.65	Metre
51.2	9.47.2	25 mm dia (heavy type)	158.43	Metre
52	9.48	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.		
52.1	9.48.2	Fixed to openings /wooden frames with rawl plugs screws etc.	141.11	Kg
53	9.53	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	148.83	Each
54	9.76	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	698.29	Each
55	9.8	Providing and fixing 50 mm bright finished brass cup board or wardrobe knob of approved quality with necessary screws.	61.62	Each
56	9.83	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS: 3564, embossed on the body, door weight upto 35 Kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	520.09	Each
57	9.9	Providing and fixing special quality chromium plated brass cupboard locks with six levers of approved quality including necessary screws etc. complete.		
57.1	9.90.2	Size 50 mm	226.07	Each
58	9.91	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.	134.53	Each
59	9.95	Providing and fixing ISI marked aluminium butt hinges anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc. complete:		
59.1	9.95.1	125x75x4 mm	148.33	Each
59.2	9.95.2	125x63x4 mm	123.54	Each
59.3	9.95.3	100x75x4 mm	109.87	Each
60	9.96	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :		
60.1	9.96.1	300x16 mm	266.60	Each
60.2	9.96.2	250x16 mm	237.43	Each
61	9.97	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :		
61.1	9.97.1	300x10 mm	125.11	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
61.2	9.97.2	250x10 mm	110.56	Each
61.3	9.97.3	200x10 mm	95.56	Each
61.4	9.97.4	150x10 mm	80.69	Each
61.5	9.97.5	100x10 mm	61.74	Each
62	9.1	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete:		
62.1	9.100.1	125 mm	64.13	Each
62.2	9.100.2	100 mm	56.60	Each
62.3	9.100.3	75 mm	48.88	Each
63	9.101	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.		
63.1	9.101.1	Single rubber stopper	34.57	Each
63.2	9.101.2	Twin rubber stopper	47.69	Each
64	9.103	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS: 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	780.74	Each
65	9.113	Providing and fixing bright finished 100 mm mortice lock with 6 levers without pair of handles of approved quality for aluminium door, with necessary screws etc complete as per direction of Engineer- in-charge.	594.38	Each
66	9.114	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete.		
66.1	9.114.1	Triple strip vertical type	35.70	Each
67	9.119	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided throughout the frame. The door frame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer- in-Charge.	550.59	Metre

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
68	9.12	Providing and fixing factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19 mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5 mm thick heat moulded PVC 'C' channel of size 30 mm thickness, 70 mm width out of which 50 mm shall be flat and 20 mm shall be tapered in 45 degree angle on both side forming styles and 5 mm thick, 95 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115 mm wide PVC sheet out of which 75 mm shall be flat and 20 mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided both side of the panel. 10 mm (5 mm x 2) thick, 20 mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail, paneling of 5 mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7 mm (5 mm+2 mm) thick x 15 mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5 mm thick PVC strip of 20 mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per direction of Engineer-in-charge, manufacturer's specification & drawing.		
68.1	9.120.1	30 mm thick plain PVC door shutters	3473.69	Sqm
69	9.129	Providing and fixing cup board shutters 25 mm thick, with Pre- laminated flat pressed three layer particle board or graded wood particle board IS: 12823 marked, exterior grade (Grade I Type II), having one side decorative lamination and other side balancing lamination, including IInd class teak wood lipping of 25 mm wide x12 mm thick with necessary screws and bright finished stainless steel piano hinges, complete as per direction of the Engineer-in-Charge	1996.29	Sqm
70	9.13	Providing and fixing cup board shutters with 25 mm thick veneered particle board IS: 3097 marked, exterior grade (Grade I), of approved make, including IInd class teak wood lipping of 25 mm wide x 12 mm thick with necessary screws and bright finished stainless steel piano hinges, complete as per direction of Engineer-in-Charge.		
70.1	9.130.1	With decorative veneering on one side and commercial veneering on other side	1719.34	Sqm
71	10.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	73.35	Kg
72	10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	84.83	Kg
73	10.5	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.		

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
73.1	10.5.1	Using M.S. angles 40x40x6 mm for diagonal braces	3601.88	Sqm
74	10.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.		
74.1	10.6.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	2906.47	Sqm
75	10.7	Providing and fixing ball bearing for rolling shutters.	475.98	Each
76	10.16	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.		
76.1	10.16.1	Hot finished welded type tubes	113.25	Kg
77	10.17	Providing and fixing M.S. fan clamp type I or II of 16 mm dia M.S. bar, bent to shape with hooked ends in R.C.C. slabs or beams during laying, including painting the exposed portion of loop, all as per standard design complete.	140.74	Each
78	10.19	Providing and fixing mild steel round holding down bolts with nuts and washer plates complete.	85.33	Kg
79	10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.		
79.1	10.25.1	In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	82.57	Kg
79.2	10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	107.86	Kg
80	10.28	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in- charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	592.81	Kg
81	11.1	Brick on edge flooring with bricks of class designation 7.5 on a bed of 12 mm cement mortar, including filling the joints with same mortar, with common burnt clay non modular bricks:		
81.1	11.1.2	1:6 (1cement : 6 coarse sand)	800.63	Sqm
82	11.3	Cement concrete flooring 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.		

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
82.1	11.3.1	40 mm thick with 20 mm nominal size stone aggregate	455.03	Sqm
83	11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :		
83.1	11.26.1	25 mm thick	1453.30	Sqm
84	11.36	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3Kg per Sqm, including pointing in white cement mixed with pigment of matching shade complete.	934.65	Sqm
85	11.37	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS: 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement: 4 Coarse sand), jointing with grey cement slurry @ 3.3Kg/Sqm including pointing the joints with white cement and matching pigment etc., complete.	863.81	Sqm
86	11.41	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement: 4 coarse sand), jointing with grey cement slurry @ 3.3Kg/Sqm including grouting the joints with white cement and matching pigments etc., complete.		
86.1	11.41.2	Size of Tile 600x600 mm	1404.74	Sqm
87	11.46	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3Kg/Sqm including grouting the joint with white cement & matching pigments etc. complete.		
87.1	11.46.2	Size of Tile 600x600 mm	1424.56	Sqm
88	11.47	Providing and laying Vitrified tiles in different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).		
88.1	11.47.2	Size of Tile 600x600 mm	1556.83	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
89	12.16	10 cm thick (average) mud phaska of damped brick earth on roofs laid to slope consolidated and plastered with 25 mm thick mud mortar mixed with bhusa @ 35 Kg per Cum of earth and gobri leaping with mix 1:1 (1 clay : 1 cow dung) and covered with flat tile bricks, grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finished neat:		
89.1	12.16.1	With common burnt clay F.P.S.(non modular) brick tile of class designation 10	748.80	Sqm
90	12.2	Providing and laying pressed clay tiles (as per approved pattern 20 mm nominal thickness of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% integral water proofing compound, laid over a bed of 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete.	550.21	Sqm
91	12.22	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	235.42	Each
92	12.41	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.		
92.1	12.41.1	75 mm diameter	186.67	Metre
92.2	12.41.2	110 mm diameter	296.60	Metre
93	12.42	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10 mm gap for thermal expansion.		
93.1	12.42.1	Coupler		
93.1.1	12.42.1.1	75 mm	81.51	Each
93.1.2	12.42.1.2	110 mm	128.82	Each
93.2	12.42.3	Single tee with door		
93.2.1	12.42.3.1	75x75x75 mm	152.47	Each
93.2.2	12.42.3.2	110x110x110 mm	227.83	Each
93.3	12.42.4	Single tee without door		
93.3.1	12.42.4.1	75x75x75 mm	132.08	Each
93.3.2	12.42.4.2	110x110x110 mm	210.32	Each
93.4	12.42.5	Bend 87.5°		
93.4.1	12.42.5.1	75 mm bend	96.06	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
93.4.2	12.42.5. 2	110 mm bend	141.93	Each
93.5	12.42.6	Shoe (Plain)		
93.5.1	12.42.6.1	75 mm Shoe	82.95	Each
93.5.2	12.42.6.2	110 mm Shoe	122.98	Each
94	12.43	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.		
94.1	12.43.1	75 mm	229.08	Each
94.2	12.43.2	110 mm	227.64	Each
95	12.45	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/Sqm (both side inclusive) as per IS: 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm Each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with:		
95.1	12.45.1	12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- Part I	1011.70	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
95.2	12.45.4	Fully Perforated Gypsum Plaster Board of size 1200 x 2400x12.5 mm having approx. 15 % perforated area with perforation size and pattern as approved by the Engineer- incharge and as per manufacturer's specification, with all 4 side tapered and backed by acoustical tissue with NRC value not less than 0.60	1424.94	Sqm
96	12.5	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per Sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 Metre or as desired by Engineer- in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	690.70	Sqm
97	12.51	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+ 0.05 %) total coated thickness, Zinc coating 120 grams per Sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete:		
97.1	12.51.1	Ridges plain (500 - 600mm)	452.33	Metre
98	13.1	12 mm cement plaster of mix :		
98.1	13.1.1	1:4 (1 cement: 4 fine sand)	217.03	Sqm
98.2	13.1.2	1:6 (1 cement: 6 fine sand)	201.22	Sqm
99	13.2	15 mm cement plaster on the rough side of single or half brick wall of mix:		
99.1	13.2.2	1:6 (1 cement: 6 fine sand)	232.41	Sqm
100	13.3	20 mm cement plaster of mix :		
100.1	13.3.2	1:6 (1 cement: 6 fine sand)	276.83	Sqm
101	13.16	6 mm cement plaster of mix :		
101.1	13.16.1	1:3 (1 cement : 3 fine sand)	180.45	Sqm
102	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete.	148.96	Sqm
103	13.33	Pointing on stone work with cement mortar 1:3 (1 cement : 3 fine sand) :		
103.1	13.33.1	Flush/ Ruled pointing	211.39	Sqm
104	13.37	White washing with lime to give an even shade :		
104.1	13.37.1	New work (three or more coats)	21.65	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
105	13.42	Distempering with 1st quality acrylic distemper (ready mixed) of approved manufacturer, of required shade and colour complete, as per manufacturer's specification.	` /	
105.1	13.42.1	Two or more coats on new work	66.70	Sqm
106	13.43	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :		
106.1	13.43.1	Water thinnable cement primer	46.37	Sqm
107	13.44	Finishing walls with water proofing cement paint of required shade:		
107.1	13.44.1	New work (Two or more coats applied @ 3.84 Kg/10 Sqm)	73.79	Sqm
108	13.46	Finishing walls with Acrylic Smooth exterior paint of required shade:		
108.1	13.46.1	New work (Two or more coat applied @ 1.67 ltr/10 Sqm over and including priming coat of exterior primer applied @ 2.20 Kg/10 Sqm)	120.53	Sqm
109	13.47	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:		
109.1	13.47.1	New work (Two or more coats applied @ 1.43 ltr/10 Sqm over and including priming coat of exterior primer applied @ 2.20 Kg/10 Sqm)	121.47	Sqm
110	13.5	Applying priming coat:		
110.1	13.50.1	With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	43.86	Sqm
111	13.52	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.		
111.1	13.52.2	On concrete work	156.24	Sqm
112	13.6	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :		
112.1	13.60.1	Two or more coats on new work	105.98	Sqm
113	13.61	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :		
113.1	13.61.1	Two or more coats on new work	98.38	Sqm
114	13.63	Painting with aluminium paint of approved brand and manufacture to give an even shade.		
114.1	13.63.1	Two or more coats on new work	85.77	Sqm
115	13.65	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade:		
115.1	13.65.1	Two or more coats on new work	81.82	Sqm
116	13.66	Floor painting with floor enamel paint of approved brand and manufacture of required colour to give an even shade:		
116.1	13.66.1	Two or more coats on new work	96.00	Sqm
117	13.68	French spirit polishing :		
117.1	13.68.1	Two or more coats on new works including a coat of wood filler	263.22	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
118	14.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per directions of Engineer-In-Charge.	, ,	
118.1	14.1.1	With cement mortar 1:4 (1 cement : 4 fine sand)	332.30	Sqm
119	14.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts, embedding hold fasts in cement concrete blocks of size 15 x 10 x 10 cm with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size), painting two coats of approved wood preservative to sides of chowkhats and making good the damages to walls and floors as required complete, including disposal of rubbish to the dumping ground, all complete as per directions of Engineer-In-Charge.		
119.1	14.2.1	Door chowkhats	1070.05	Each
119.2	14.2.2	Window chowkhats	664.47	Each
120	14.3	Fixing chowkhat in existing opening in brick/ RCC wall with dash fasteners/ Chemical fasteners of appropriate size (3 nos on Each vertical member of door chowkhat and 2 nos on Each vertical member of window chowkhats), including Cost of dash fasteners/ chemical fastener.	198.21	Each
121	14.4	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface i/c disposal of mulba/ rubbish to the nearest municipal dumping ground, all complete as per directions of Engineer-In-Charge.		
121.1	14.4.1	For door/ window/ clerestory window	685.49	Sqm
122	14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty:		
122.1	14.5.1	Float glass panes of thickness 4 mm	800.50	Sqm
123	14.6	Renewing glass panes, with wooden fillets wherever necessary:		
123.1	14.6.1	Float glass panes of thickness 4 mm	1069.93	Sqm
124	14.7	Renewing glass panes and refixing existing wooden fillets:		
124.1	14.7.1	Float glass panes of thickness 4 mm	864.19	Sqm
124.2	14.7.2	Float glass panes of thickness 5.5 mm	1191.28	Sqm
125	14.9	Renewal of old putty of glass panes (length)	31.94	Metre
126	14.1	Refixing old glass panes with putty and nails	415.06	Sqm
127	14.11	Fixing old glass panes with wooden fillets (excluding cost of fillets)	370.26	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
128	14.17	Raking out joints in lime or cement mortar and preparing the surface for re-pointing or replastering, including disposal of rubbish to the dumping ground, all complete as per directions of Engineer-In-Charge.	37.21	Sqm
129	14.18	Flush pointing with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement for flat tile bricks on top of mud phaska :		
129.1	14.18.1	With F.P.S. brick tiles	79.00	Sqm
130	14.42	White washing with lime to give an even shade :		
130.1	14.42.1	Old work (two or more coats)	12.86	Sqm
130.2	14.42.2	Old work (one or more coats)	7.91	Sqm
131	14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	10.48	Sqm
132	14.46	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	13.55	Sqm
133	14.53	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:		
133.1	14.53.1	One or more coats on old work	69.33	Sqm
134	14.54	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:		
134.1	14.54.1	One or more coats on old work	64.38	Sqm
135	14.58	French spirit polishing :		
135.1	14.58.1	One or more coats on old work	132.83	Sqm
136	14.63	Distempering with 1st quality acrylic washable distemper (readymade) of approved manufacturer and of required shade and colour complete. as per manufacturer's specification.		
136.1	14.63.1	One or more coats on old work	37.40	Sqm
137	14.64	Finishing walls with water proofing cement paint of required shade:		
137.1	14.64.1	Old work (one or more coats applied @ 2.20 Kg/10 Sqm) over priming coat of primer applied @ 0.80 litrs/10 Sqm complete including cost of Priming coat.	69.90	Sqm
137.2	14.64.2	Old work (one or more coats @ 2.20 Kg/10 Sqm) complete.	47.56	Sqm
138	14.66	Finishing walls with Acrylic Smooth exterior paint of required shade:		
138.1	14.66.1	Old work (Two or more coat applied @ 1.67 ltr/ 10 Sqm) on existing cement paint surface	86.53	Sqm
139	14.67	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade		
139.1	14.67.1	Old work (Two or more coats applied @ 1.43 ltr/ 10 Sqm) over existing cement paint surface	88.78	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
140	14.72	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it thereafter .The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer- in-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made once irrespective of duration of scaffolding. Note: - This item to be used for maintenance work judicially, necessary deduction for scaffolding in the existing item to be done. Demolishing cement concrete manually/ by mechanical means	200.97	Sqm
141	15.2	including disposal of material within 50 Metres lead as per direction of Engineer - in - charge.		
141.1	15.2.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	771.95	Cum
142	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 Metres lead as per direction of Engineer - incharge.	1825.31	Cum
143	15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 Metres lead as per direction of Engineer-in-charge.		
143.1	15.7.4	In cement mortar	1057.57	Cum
144	15.9	Demolishing stone rubble masonry manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 Metres lead as per direction of Engineer-in-charge:		
144.1	15.9.2	In cement mortar	1262.05	Cum
145	15.12	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 Metres lead:		
145.1	15.12.1	Of area 3 sq. Metres and below	198.09	Each
145.2	15.12.2	Of area beyond 3 sq. Metres	271.56	Each
146	15.13	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 Metres lead:		
146.1	15.13.1	Of area 3 sq. Metres and below	76.86	Each
146.2	15.13.2	Of area beyond 3 sq. Metres	101.65	Each
147	15.14	Dismantling wood work in frames, trusses, purlins and rafters up to 10 Metres span and 5 Metres height including stacking the material within 50 Metres lead:		
147.1	15.14.1	Of sectional area 40 square centiMetres and above	2412.48	Cum

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
148	15.18	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 Metres lead.	3.01	Kg
149	15.23	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 Metres lead.		
149.1	15.23.1	For thickness of tiles 10 mm to 25 mm	39.59	Sqm
149.2	15.23.2	For thickness of tiles above 25 mm and up to 40 mm	61.74	Sqm
150	15.25	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 Metres lead.	137.22	Sqm
151	15.26	Demolishing brick tile covering in terracing including stacking of serviceable material and disposal of unserviceable material within 50 Metres lead.	57.35	Sqm
152	15.28	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 Metres lead of:		
152.1	15.28.2	Asbestos sheet	41.22	Sqm
153	15.39	Dismantling wooden boardings in lining of walls and partitions, excluding supporting members but including stacking within 50 Metres lead:		
153.1	15.39.2	Thickness above 10 mm up to 25 mm	41.60	Sqm
153.2	15.39.3	Thickness above 25 mm up to 40 mm	48.63	Sqm
154	15.4	Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 Metres lead:		
154.1	15.40.1	Thickness up to 40 mm	150.53	Sqm
155	15.41	Dismantling cement asbestos or other hard board ceiling or partition walls including stacking of serviceable materials and disposal of unserviceable materials within 50 Metres lead.	30.49	Sqm
156	15.42	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 Metres lead:		
156.1	15.42.1	75 to 80 mm dia pipe	38.84	Metre
156.2	15.42.2	100 mm dia pipe	40.09	Metre
157	15.44	Dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means including stacking of pipes within 50 Metres lead as per direction of Engineer-in-charge:		
157.1	15.44.1	15 mm to 40 mm nominal bore	79.87	Metre
157.2	15.44.2	Above 40 mm nominal bore	88.91	Metre
158	15.45	Dismantling C.I. pipes including excavation and refilling trenches after taking out the pipes, manually/ by mechanical means breaking lead caulked joints, melting of lead and making into blocks including stacking of pipes & lead at site within 50 Metre lead as per direction of Engineer-in-charge:		
158.1	15.45.1	Up to 150 mm diameter	229.71	Metre
158.2	15.45.2	Above 150 mm dia up to 300 mm dia	303.75	Metre

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
159	15.52	Dismantling of flushing cistern of all types (C.I./PVC/Vitrious China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 Metres lead.	490.92	Each
160	15.56	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 Metres lead.	28.11	Sqm
161	15.57	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material within 50 meters lead as directed by Engineer-incharge.	30.49	Sqm
162	15.6	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	151.28	Cum
163	16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead upto 50 Metres.	113.07	Sqm
164	16.2	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density).	13.43	Cum
165	16.3	Supplying and stacking at site.		
165.1	16.3.8	Red bajri	1900.36	Cum
165.2	16.3.9	Good earth	417.32	Cum
165.3	16.3.10	Moorum	807.15	Cum
166	16.11	Dry stone pitching 22.5 cm thick including supply of stones and preparing surface complete.	627.01	Sqm
167	16.13	Cutting road and making good the same including supply of extra quantities of materials i.e. aggregate, moorum screening, red bajri and labour required.		
167.1	16.13.1	bituminous portion	2991.74	Cum
167.2	16.13.2	Water bound macadam	1765.83	Cum
168	16.15	Supplying at site :		
168.1	16.15.1	R.C.C. Standards post/ struts/rails/ pales of mix 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 12.5 mm nominal size) with wooden plugs or 6mm bar nibs wherever required as per direction of Engineer-in- charge (cost of earth works in excavation, concrete works in foundation to be paid separately).	24815.08	Cum

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
169	16.17	Fencing with R.C.C. post placed at required distance, embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post one side only, provided with horizontal lines and two diagonals of barbed wire weighing 9.38 Kg per 100 Metres (minimum), between the two posts fitted and fixed with G.I. staples on wooden plugs or G.I. binding wire tied to 6 mm bar nibs fixed while casting the post (cost of R.C.C. posts, struts, earth work and concrete to be paid for separately):- Payment to be made per Metre cost of total length of barbed wire used.		
169.1	16.17.1	With G.I. barbed wire	10.35	Metre
170	16.18	Fencing with angle iron post placed at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 Kg per 100 m (minimum), between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately). Payment to be made per Metre cost of total length of barbed wire used.		
170.1	16.18.1	With G.I. barbed wire	15.87	Metre
171	16.19	Supplying at site Angle iron post & strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete.	77.87	Kg
172	16.68	Providing and laying 60mm thick faciory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved s;ze, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	772.64	Sqm
173	16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	6290.37	Cum
174	16.7	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.		
174.1	16.70.1	Made of G.I. wire of dia 4 mm	704.88	Sqm
174.2	16.70.2	Made of G.I. wire of dia. 4 mm, PVC coated to achieve outer dia not less than 5 mm in required colour and shade	746.23	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
175	16.71	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 25x25 mm made of G.I. wire of dia 3 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.	745.60	Sqm
176	16.82	Taking out existing kerb stones of all types from footpath/central verge, including removal of mortar etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 Metre lead as per direction of Engineer-in-Charge.	20.14	Metre
177	16.83	Taking out existing CC interlocking paver blocks from footpath/central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 Metre lead as per direction of Engineer-in-Charge.	67.70	Sqm
178	16.84	Laying old cement cocrete interlocking paver blocks of any design/ shape laid in required line, level, curvature, colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer- in-charge. (Old CC paver blocks shall be supplied by the department free of cost).	262.53	Sqm
179	16.85	Laying at or near ground level old kerb stones of all types in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints, except at sharp curve, shall not be more than 5 mm), including making drainage opening wherever required etc. complete as per direction of Engineer-in-charge. (Length of finished kerb edging shall be measured for payment). (Old kerb stones shall be supplied by the department free of cost)	61.36	Metre
180	17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:		
180.1	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	4384.87	Each
181	17.2	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS: 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:		
181.1	17.2.1	W.C. pan with ISI marked white solid plastic seat and lid	4290.13	Each
182	17.5	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS: 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required		

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
182.1	17.5.1	Single half stall urinal with 5 litre P.V.C. automatic flushing cistern	7764.57	Each
183	17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:		
183.1	17.7.4	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	2280.59	Each
184	17.8	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	1223.84	Each
185	17.10	Providing and fixing Stainless Steel A ISi 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required:		
185.1	17.10.1	Kitchen sink with drain board		
185.1.1	17.10.1.1	510x1040 mm bowl depth 250 mm	5171.19	Each
185.2.1	17.10.2	Kitchen sink without drain board		
185.2.2	17.10.2.1	610x510 mm bowl depth 200 mm	3107.89	Each
186	17.11	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required:		
186.1	17.11.2	Size 600x450x200 mm	4030.05	Each
187	17.13	Providing and fixing white vitreous china water closet squatting pan (Indian type) :		
187.1	17.13.1	Long pattern W.C. pan of size 580 mm	1346.88	Each
188	17.15	Providing and fixing white vitreous china pedestal type (European type/ wash down type) water closet pan.	1711.24	Each
189	17.18	Providing and fixing P.V.C. low level flushing cistern with manually controlled device (handle lever) conforming to IS: 7231, with all fittings and fixtures complete.		
189.1	17.18.1	10 litre capacity - White	1043.45	Each
189.1.1	17.18.2	10 litre capacity - coloured	960.56	Each
190	17.2	Providing and fixing solid plastic seat with lid for pedestal type W.C. pan complete :		
190.1	17.20.1	White solid plastic seat with lid	514.76	Each
191	17.23	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm or 340x410x265 mm sizes respectively.	1168.00	Each
192	17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.		
192.1	17.28.1	Semi rigid pipe		
192.1.1	17.28.1.1	32 mm dia	94.87	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
192.1.2	17.28.1.2	40 mm dia	102.15	Each
192.2.1	17.28.2	Flexible pipe		
192.2.1.1	17.28.2.1	32 mm dia	91.92	Each
192.2.1.2	17.28.2.2	40 mm dia	94.87	Each
193	17.31	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	1,026.45	Each
194	17.32	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing:		
194.1	17.32.2	Rectangular shape 453x357 mm	944.69	Each
195	17.33	Providing and fixing 600x120x5 mm glass shelf with edges round off, supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	719.43	Each
195.1	17.69	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour.		
196	17.69.1	Waste coupling 31 mm dia of 79 mm length and 62mm breadth weighing not less than 45 gms	103.59	Each
197	17.71	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	172.99	Each
198	17.72	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.	247.91	Each
199	17.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.		
199.1	17.73.2	600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms.	530.45	Each
200	17.74	Providing and fixing PTMT shelf 440 mm long, 124 mm width and 36 mm height of approved quality and colour, weighing not less than 300 gms.	590.24	Each
201	17.75	Providing and fixing PTMT 15 mm Urinal spreader size 95x69x100 mm with 1/2" BSP thread and shapes, weighing not less than 60 gms.	133.65	Each
202	17.76	Providing and fixing PTMT urinal cock of approved quality and colour.		
202.1	17.76.1	15 mm nominal bore, 80 mm long, 42 mm high and 30mm wide with BSP female threads weighing not less than 48 gms	180.64	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
203	18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. INTERNAL WORK - EXPOSED ON WALL	,	
203.1	18.7.1	15 mm nominal outer dia Pipes	179.39	Metre
203.1.1	18.7.2	20 mm nominal outer dia Pipes	225.82	Metre
203.1.2	18.7.3	25 mm nominal outer dia Pipes	271.31	Metre
203.2.2	18.7.4	32 mm nominal outer dia Pipes	362.73	Metre
203.2.3	18.7.5	40 mm nominal outer dia Pipes	483.76	Metre
203.2.4	18.7.6	50 mm nominal outer dia Pipes	688.38	Metre
204	18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc.		
204.1	18.8.1	15 mm nominal outer dia Pipes	308.96	Metre
204.2	18.8.2	20 mm nominal outer dia Pipes	357.46	Metre
204.3	18.8.3	25 mm nominal outer dia Pipes	418.63	Metre
204.4	18.8.4	32 mm nominal outer dia Pipes	518.15	Metre
205	18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. EXTERNAL WORK		
205.1	18.9.2	20 mm nominal outer dia Pipes	187.36	Metre
205.2	18.9.3	25 mm nominal outer dia Pipes	240.50	Metre
205.3	18.9.4	32 mm nominal outer dia Pipes	314.42	Metre
205.4	18.9.5	40 mm nominal outer dia Pipes	403.01	Metre
205.5	18.9.6	50 mm nominal outer dia Pipes	607.69	Metre
206	18.1	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. INTERNAL WORK - EXPOSED ON WALL		
206.1	18.10.2	20 mm dia nominal bore	281.29	Metre
206.2	18.10.3	25 mm dia nominal bore	311.03	Metre

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
206.3	18.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work	, ,	
206.4	18.12.2	20 mm dia nominal bore	233.79	Metre
206.5	18.12.3	25 mm dia nominal bore	258.32	Metre
206.6	18.12.4	32 mm dia nominal bore	310.46	Metre
206.7	18.12.5	40 mm dia nominal bore	377.79	Metre
206.8	18.12.6	50 mm dia nominal bore	430.05	Metre
207	18.13	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete:		
207.1	18.13.1	25 to 40 mm nominal bore	494.62	Each
207.2	18.13.2	50 to 80 mm nominal bore	967.78	Each
207.3	18.17.1	25 mm nominal bore	537.35	Each
207.4	18.17.2	32 mm nominal bore.	628.39	Each
207.5	18.17.3	40 mm nominal bore	733.74	Each
207.6	18.17.4	50 mm nominal bore	941.05	Each
208	18.18	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete:		
208.1	18.18.1	15 mm nominal bore	360.47	Each
208.2	18.18.2	20 mm nominal bore	410.42	Each
208.3	18.18.3	25 mm nominal bore	416.56	Each
209	18.19	Providing and fixing gun metal non- return valve of approved quality (screwed end):		
209.1	18.19.1	25 mm nominal bore		
209.2	18.19.1.1	Horizontal	515.07	Each
209.3	18.19.2	32 mm nominal bore		
209.4	18.19.2.1	Horizontal	693.27	Each
210	18.21	Providing and fixing uplasticised PVC connection pipe with brass unions :		
210.1	18.21.1	30 cm length		
210.2	18.21.1.1	15 mm nominal bore	74.54	Each
210.3	18.21.1.2	20 mm nominal bore	81.82	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
211	18.32	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick, finished with a floating coat of neat cement complete as per standard design :		
211.1	18.32.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	1500.04	Each
212	18.33	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :		
212.1	18.33.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	8,595.56	Each
213	18.46	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work):		
213.1	18.46.2	20 mm nominal bore	214.53	Each
213.2	18.46.3	25 mm nominal bore	258.26	Each
213.3	18.46.4	32 mm nominal bore	301.99	Each
213.4	18.46.5	40 mm nominal bore	374.90	Each
213.5	18.46.6	50 mm nominal bore	483.01	Each
	18.47	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws, including excavation, refilling the earth or cutting of wall and making good the same complete wherever required:		
214	18.47.2	20 mm nominal bore	488.72	Each
214.1	18.47.3	25 mm nominal bore	532.45	Each
214.2	18.47.4	32 mm nominal bore	576.19	Each
214.3	18.47.5	40 mm nominal bore	649.03	Each
214.4	18.47.6	50 mm nominal bore	856.91	Each
215	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS: 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.		

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
215.1	18.48.A	Circular tank	9.10	Per Litre
216	18.49	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931:		
216.1	18.49.1	15 mm nominal bore	466.45	Each
217	18.5	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms.		
217.1	18.50.1	15 mm nominal bore	696.85	Each
218	18.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.		
218.1	18.51.1	15 mm nominal bore	618.10	Each
219	18.52	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.		
219.1	18.52.1	15 mm nominal bore	685.11	Each
220	18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931		
220.1	18.53.1	15mm nominal bore	596.96	Each
221	18.54	Providing and fixing PTMT bib cock of approved quality and colour.		
221.1	18.54.1	15mm nominal bore, 86 mm long, weighing not less than 88 gms	129.63	Each
221.2	18.54.2	15 mm nominal bore, 122mm long, weighing not less than 99 gms	180.64	Each
221.3	18.54.3	15 mm nominal bore, 165 mm long, weighing not less than 110 gms	198.15	Each
222	18.55	Providing and fixing PTMT stop cock of approved quality and colour.		
222.1	18.55.1	15 mm nominal bore, 86 mm long, weighing not less than 88 gms	129.63	Each
222.2	18.55.3	Concealed stop cock, 15 mm nominal bore, 108 mm long, weighing not less than 108 gms	202.54	Each
223	18.56	Providing and fixing PTMT pillar cock of approved quality and colour		
223.1	18.56.1	15 mm nominal bore, 107 mm long, weighing not less than 110 gms	211.95	Each
223.2	18.56.2	15 mm nominal bore, 125 mm long foam flow, weighing not less than 120 gms	233.79	Each
224	18.58	Providing and fixing PTMT grating of approved quality and colour.		
224.1	18.58.1	Circular type		
224.1.1	18.58.1.1	100 mm nominal dia	41.10	Each
225	18.62	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P./H.P.H.D. plastic ball.		
225.1	18.62.1	15 mm nominal bore, 105 mm long, weighing not less than 138 gms	207.43	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
225.2	18.62.2	20 mm nominal bore, 120 mm long, weighing not less than 198 gms	271.94	Each
225.3	18.63	Providing and fixing PTMT angle stop cock 15 mm nominal bore, weighing not less than 85 gms	168.97	Each
226	18.65	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements, weighing not less than 106 gms.	140.93	Each
227	18.74	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour.		
227.1	18.74.1	15 mm nominal bore with 30cm length	77.43	Each
227.2	18.74.2	15 mm nominal bore with 45 cm length	83.64	Each
228	18.75	Providing and fixing PTMT extension nipple for water tank pipe, fittings of approved quality and colour.		
228.1	18.75.1	15 mm nominal bore, weighing not less than 32 gms	36.20	Each
228.2	18.75.2	20 mm nominal bore, weighing not less than 40 gms	49.32	Each
229	18.77	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), including finishing complete so as to make it leak proof.	262.59	Each
230	19.4	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 Kg and frame to be not less than 2.70 Kg as per standard design:		
	19.4.1	100x100 mm size P type		
230.1	19.4.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2010.85	Each
231	19.5	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:		
231.1	19.5.2	150 mm diameter	50.38	Metre
231.2	19.5.4	250 mm diameter	56.85	Metre
232	19.6	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :		
232.1	19.6.3	250 mm dia. R.C.C. pipe	604.92	Metre
232.2	19.6.4	300 mm dia. R.C.C. pipe	650.73	Metre
232.3	19.6.5	450 mm dia. R.C.C. pipe	904.72	Metre
232.4	19.6.7	600 mm dia. R.C.C. pipe	1753.22	Metre

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
233	19.7	Constructing brick masonry manhole in cement mortar 1:4 (1 cement: 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design:		
	19.7.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 Kg (weight of cover 23 Kg and weight of frame 15 Kg):		
233.1	19.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	10834.93	Each
	19.8	Extra for depth for manholes :		
	19.8.1	Size 90x80 cm		
233.2	19.8.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	7176.27	Metre
234	19.19	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of required shape and approved quality		
	19.19.1	L D- 2.5		
234.1	19.19.1. 1	Rectangular shape 600x450 mm internal dimensions	1346.57	Each
	19.23	Extra for depths beyond 60 cm of sand cast iron drop connection complete:		
234.2	19.23.1	For 100 mm dia sand cast iron drop connection	2471.65	Metre
234.3	19.23.2	For 150 mm dia sand cast iron drop connection	3248.94	Metre
235	19.24	Dismantling of manhole including R.C.C. top slab, C.I. cover with frame, including stacking of useful materials near the site and disposal of unserviceable materials, all as per direction of Engineer -in-Charge:		
235.1	19.24.1	Rectangular manhole 90x80 cm and 45 cm deep	1311.31	Each
236	19.26	Raising manhole cover and frame slab to required level including dismantling existing slab and making good the damage as required (Raising depth of manhole to be paid separately):		
236.1	19.26.1	Rectangular manhole 90x80 cm with rectangular cover 600 x 450 mm of grade LD - 2.5	2177.63	Each
236.2	19.26.2	Rectangular manhole 120x90 cm with circular cover 500 mm dia of grade MD - 10	3412.32	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
237	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately):		
	21.1.1	For fixed portion		
237.1	21.1.1.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	445.74	Kg
237.2	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	482.51	Kg
238	21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)		
238.1	21.1.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	520.85	Kg
238.2	21.1.2.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	558.31	Kg
239	21.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer-in-charge.		
239.1	21.2.1	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side	1036.99	Sqm
239.2	21.2.2	Pre-laminated particle board with decorative lamination on both sides	1087.50	Sqm
240	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):		
240.1	21.3.1	With float glass panes of 4.0 mm thickness	930.51	Sqm
240.2	21.3.2	With float glass panes of 5.50 mm thickness	1259.86	Sqm
241	21.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS: 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 Kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.		

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
241.1	21.4.1	With stainless steel cover plate minimum 1.25 mm thickness	2578.07	Each
242	21.13	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	450.51	Each
243	21.17	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	513.07	Kg
244	22.5	Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying: (a) First layer of slurry of cement @ 0.488 Kg/Sqm mixed with water proofing cement compound @ 0.253 Kg/ Sqm. This layer will be allowed to air cure for 4 hours. (b) Second layer of slurry of cement @ 0.242 Kg/Sqm mixed with water proofing cement compound @ 0.126 Kg/Sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	374.34	Sqm
245	22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 Kg/Sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement slurry using 2.75 Kg/ Sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer- in-charge. (d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer- in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :		
245.1	22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	1298.38	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
246	-	Chipping the existing concrete flooring and roughening the surface etc complete.	20.00	Sqm
247	-	Providing and laying rectified Glazed Ceramic floor tiles of size 380x380 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS: 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement: 4 Coarse sand), including pointing the joints with white cement and matching pigments etc., complete.	1110.00	Sqm
248	-	Providing and laying rectified Anti skid Ceramic floor tiles of size 380x380 mm or more (thickness to be specified by the manufacturer), of 1st quality conforming to IS: 15622, of approved make, in all colours, shades, except White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick bed of cement mortar 1:4 (1 Cement: 4 Coarse sand), including pointing the joints with white cement and matching pigments etc., complete.	1122.00	Sqm
249	-	Removing and refixing door shutters upto 0.90m x 2.10m size including planing the top and bottom face upto 10mm including fixing with stainless steel screws etc complete as directed by the Engineer-in charge. (cost of new hinges shall be paid seperately wherever required)	320.00	Each
250	-	providing and fixing of single side polished cuddapah slabs for kitchen platforms over 20mm thick base in CM1:4 (1 cement : 4 sand) with joints treated walls cement mortar mixing with pigment as per the direction of Engineer-in-charge. For 25mm to 40mm thick	567.00	Sqm
251	-	Providing and fixing of 40mm dia Unplasticised PVC pipes including all fittings i/c fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes & fittings with one step UPVC solvent cement and testing of joints complete as per the direction of Engineer-in-charge.	125.00	Metre
252	,	Providing and fixing of 75mm dia (Finolex or Avonplast-6Kg/cm2) unplasticised Rigid PVC soil pipes conforming to IS :13592 Type A including jointing with seal ring conforming to S :5382 leaving 10mm gap for thermal expansion. (i) Single socketed pipes	210.00	Metre
253	-	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 75 mm dia PVC Door TEE (Finolex or equivalent make)	120.00	Each
254	-	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 75 mm dia PVC plain elbow (Finolex or equivalent make)	98.00	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
255	-	Providing and fixing of 110 mm dia (Finolex or Avonplast-6Kg/cm2) unplasticised Rigid PVC soil pipes conforming to IS :13592 Type A including jointing with seal ring conforming to S :5382 leaving 10mm gap for thermal expansion. (i) Single socketed pipes	348.00	Metre
256	1	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 110 mm dia PVC plain elbow (Finolex or equivalent make)	135.00	Each
257	1	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS: 13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 75 mm dia PVC Door elbow (Finolex or equivalent make)	112.00	Each
258	1	Providing and fixing of 32mm dia Unplasticised PVC pipes (Avonplast make) including all fittings i/c fixing the pipe with clamps at 1.00m spacing. This includes jointing of pipes & fittings with one step UPVC solvent cement and testing of joints complete as per the direction of Engineer-in-charge.	120.00	Metre
259	,	Repolishing of old Mosaic floors, Dado, skirting etc., in grey and all colours and finishing the surfaces smooth including filling the joints and voids by matching pigments, chips etc complete all as per standard specifications. Rate including cost of materials, hire and running charges of materials, labours etc compete as directed by the Engineer incharge.	225.00	Sqm
260	-	Repairing the existing aluminum doors including replace the damaged aluminum accesories and other fittings etc complete.	820.00	Each
261	-	Providing and fixing weldmesh shutter with MS flat of size 30mm x 6mm and MS weld mesh size 3" x 1" with necessary bolts and nuts etc complete. The frame work will be paid extra.	855.00	Sqm
262	-	Supply of unplasticised-PVC moulded fittings/accessories for unplasicised Rigid PVC confirming to IS: 13592 Type A-6 Kg/cm2, including jointing with seal ring confirming to IS: 5382, leaving 10mm gap for thermal expansion. Saddle clamp- (75mm to 25mm)	153.00	Each
263	-	Providing and fixing ball valve (Zoloto or equivalent) confirming to IS: 1703 of approved quality (screwed end): 25mm dia nominal bore	750.00	Each
	-	Providing and fixing PVC cowl to the PVC pipes etc complete as per the direction of Engineer-in-charge.		
264.1	-	75 mm Cowl	30.00	Each
264.2	-	1100 mm Cowl	60.00	Each
265	-	Cutting holes upto 30x30 cm in walls including making good the same: with F.P.S. bricks.	220.00	Each
266	-	Repairing the existing MS window shutter up to five floors including removing the shutter, bending, welding, hinges repair, scafolding and refixing the same in good condition etc as per the direction of Engineer-in-charge.	380.00	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
267		Providing and fixing open type cupboards with shelves of overall size 600x600x300mm including fixing to wall with rawl plugs and C.P brass screws using 6/19mm thick both side prelaminated BWR grade ply wood as per the direction of the Engineer-in-charge and consisting of: a) 19mm thick both side pre-laminated BWR grade ply wood for bottom, sides, top and middle horizontal with necessary adhesive and screws. b) 6mm thick both side pre laminated BWR grade ply wood for backing with necessary adhesive and screws c) 2mm thick PVC edge moulding for the exposed face of the prelaminated BWR grade ply wood using necessary adhesive and machine pressing.	2100.00	Each
268	-	Providing and fixing S.S.pipe curtain rods with SS brackets : 25mm dia (heavy type)	470.00	Metre
269	-	Providing and fixing powder coated aluminum curtain rod with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangements of approved quality as directed by Engineer-in-charge.	140.00	Metre
270	-	Providing & Fixing double side polished Cuddappa slab to shelves etc complete.25 mm thick	650.00	Sqm
271	-	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 75 mm dia PVC single door 'Y' (Finolex or equivalent make)	140.00	Each
272	,	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 75 mm dia PVC double door 'Y' (Finolex or equivalent make)	145.00	Each
273	ı	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 110 mm dia PVC single door 'Y' (Finolex or equivalent make)	230.00	Each
274	-	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 110 mm dia PVC double door 'Y' (Finolex or equivalent make)	222.00	Each
275	-	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 90 mm to 75mm dia PVC reducer (Finolex or equivalent make)	79.00	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
276	-	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 125 mm to 100 mm dia PVC reducer (Finolex or equivalent make)	98.00	Each
277	-	Providing and fixing on wall face unplasticised-PVC moulded fittings/accessories for unplasticised Rigid PVC pipes conforming to IS:13592 Type A including jointing with seal ring conforming to S:5382 leaving 10mm gap for thermal expansion. (i) 110 mm door 'L' (Finolex or equivalent make)	150.00	Each
278	-	Providing and fixing of 18mm thick non decorative plywood (water proof) resting on the walls etc complete.	1710.00	Sqm
279	-	Supply of unplasticised-PVC moulded fittings/accessories for unplasicised Rigid PVC confirming to IS: 13592 Type A-6 Kg/cm2, including jointing with seal ring confirming to IS: 5382, leaving 10mm gap for thermal expansion. Saddle clamp- (40mm to 32mm)	110.00	Each
280	-	Providing & Fixing of Cuddapah slab sink of size 600mm x 450mm etc complete.	1100.00	Each
281	ı	Providing and fixing MS Heel to existing window including removal of old damaged existing heel with necessary grinding & welding as per the direction of Engineer-in-charge.	190.00	Each
282	-	Providing and fixing MS handle to existing window with necessary grinding & welding as per the direction of Engineer-in-charge.	145.00	Each
283	-	Providing and fixing MS Stay rod to existing window with necessary grinding & welding as per the direction of Engineer-in-charge.	180.00	Each
284	•	Repairing the PVC sliding door shutter including removing and refixing in good condition with necessary aluminum sliding channels etc complete.	750.00	Each
285	-	Providing & Fixing ornamental 3 way bib cock etc complete.	2587.00	Each
286	-	Providing and fixing PTMT Health facuet with three way tap etc complete.	920.00	Each
287	-	Providing and fixing plywood cupboard shutter with piano hinges etc complete.18mm thick	1403.00	Sqm
288	-	Providing and Fixing wooden moulded beeding of size 25mm x 12mm etc complete.	40.00	Meter
289	-	Suplying and fixing sun control film for glazed windows,door,Aluminum partition & ventilator shutter including the cost of all materials and labour charges etc.	600.00	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
290	-	Arresting leakage through RCC Construction joints The scope of work includes routing out the horizontal cracks along/construction joints to expose the RCC joint and applying CERA SEAL/TEC POLYSEAL G/Sika Crack Seal /NACC poly seal gun grade polysulphide sealant/Dr.FIXIT PU SEALANT.The scope also includes application of CERAFLEX/TEC WAVE 3000/Sika Rain gard/NACC Roof COATING /DR.FIXIT NEW COAT single component flexible membrane with intermediate layer of cloth over the exposed are after allowing the PS(POLYSULPHIDE SEALENT) TO CURE FOR 72 HOURS, All as per manufactures recommendations/standard specifications and instructions of Engineer-in-charge.Rate quoted includes cost of all materials,labour charges,conveyance,tools and all other incidental charges etc complete.	499.10	Sqm
291	-	Dismantling the existing chainlink fencing and disposal of 2 km radiusaround as per the direction of Engineer-in-charge including lead charges etc complete.	16.67	Sqm
292	-	Labour charges for fixing Aluminum partition as per site condition including fixtures, rubber beeding and resizing the novopan & glass shutters if required etc complete as per the direction of Engineer-in-charge	650.00	Sqm
293	-	Providing & fixing 4" Hanjee hook etc complete.	30.00	Each
294	-	Repairing the existing windows for easy operation i.e. opening & closing etc. rate oncluding cost of labour, scaffolding charges & plaining etc complete.	95.00	Sqm
295	-	Providing & fixing circular PVC floor trap to pvc pipe etc complete.	350.00	Each
296	-	Attending to leak at roof slab and wall joint. The scope of work includes clearing the tiles terrace surfaces to be free of dust, loose particles, algae growth and atmospheric deposits, filling small blow holes if any with CERAFIL 45/TEC TILE 12/Sika Grout/NACC Tile Grout/Dr.Fixit Crack-x and providing primer and top coat of CERAFLEX/TEC WAVE 3000/Sika raingard/NACC High Flex single component/Dr.Fixit new coat highly flexible membrane coating including curing adequately. All as per manufactures recommendation/standard specifications and instructions of Engineer-in-charge. rate quoted includes cost of all materials, labour charges, conveyance, tools and all other incidential charges etc complete for in accessible areas. one primer and two top coats.	518.30	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
297	-	Providing one coat of CERALASTIC/TECH WAVE 2000/Sika raingard/NACC roof coating/Dr.FIXIT PDIDFIN 2K water proofing membrane coating followed by one bond coat of CERA BOND SBR /TEC BOND SBR/Sika latex/NACC latex/Dr.Fixit Pidicrete urp sbr latex over the membrane coating and providing cement plastering 6mm thick in CM LATEX over the membrane coating and providing cement plastering 6mm thick in CM 1:4 admixed with general purpose water proofing compound of respective products and curing adequately. All as per manufacturers recommendation/standard specifications and instructions of Engineer-in-charge.The scope of work includes dismantling the existing damaged weathering course and tiles to expose to the RCC slab and finishing to match with the existing weathering course. Rate quoted includes cost of all materials except cement which will be issued free of cost at BHEL stores, labour charges, conveyance, tools and all other incidental charges etc complete. Replacing the damaged tiles and repointing where ever required which will be paid under separate item for accessible areas. (cement consumption = 2.74 Kg/Sqm)	338.25	Sqm
298	-	Attending Crack filling at parapet level without pressure grouting. The scope of work includes routing the cracks with a mechanically operated groove cutter and sealing the groove with flexible sealant-CERA CRACK FILLER/TEC KRACK FILLER Sika CRACK SEAL/NACC CRACK FILLER/Dr.Fixit Crack-X paste and providing two coats of CERAFLEX/TEC WAVE 3000/Sika RAIN GARD/NACC ROOF COATING/Dr.FIXIT NEW COAT highly flexible membrane for a width of 10cms aligned to the centre of the crack. All as per /manufactures recommendations/standard specifications and instructions of Engineer-in-charge. rate quoted includes coat of all materials , labour charges,conveyance, tools and all other incidential charges etc complete.	112.75	Metre
299	-	Drilling pockets and fixing PVC Nipples in position along weak concrete junctions and leakage points in walls/floor and pressure grouting CERA EXPAN 250/TEC SWELL/Sika INTRA PLAST/NACC EXPAN/Dr.FIXIT PIDICRETE AM 250 expansive grouting additive admixed with cement slurry using hand operated grouting pump. The scope also includes plugging the grout hole with CERA PLUG/TEC STOP/Sika HYDRO PLUG/NACC PLUG/Dr.FIXIT INSTANT LEAK PLUG. All asper manufactures recommendations/standard specifications and instructions of Engineers-in-charge. Rate quoted includes cost of all materials, labour charges, conveyance, tools and all other incidental charges except cement which will be issued free of cost at NITT stores. (CEMENT CONSUMPTION = 0.35KG/POINT)	145.75	Point

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
300	-	Providing one coat of Antifungal coating-tec tough/Cera replayed/Sika Multi guard or Sika gard 67/NACC acrylic/Dr.FIXIT DAMPGUARD-protective and decorative coating system as per manufactures recommendations/standard specifications and instructions of Engineer-in-chagre. The scope of work includes surface preparations including cleaing the wall surfaces to be free of previous coatings, dust loose particles, algae growth and atmospheric deposits, filling small blow holes if any with puty,. Rate quoted includes cost of all materials, labour charges, conveyance, tools and all other incidentials charges etc complete.	203.20	Sqm
301	-	Providing aluminum Sheet Flashing. The scope of work includes cutting a neat groove along the brick wall and fixing Aluminum sheet flashing of 1' to 1'6" as required including refilling the grooves and sealing the joints with CERA SEAL / TEC POLYSEAL G /Sika Polysulphide/NACC poly seal gun grade polysulphide sealant/Dr. FIXIT PU SEALANT.All as per Manufacturer's recommendations / standard specifications and instructions of Engineer-in- Charge. Rate quoted includes cost of all materials, labour charges, convey-ance, tools and other incidental charges etc.complete.	479.80	Metre
302	-	Making the opening on Randaon rubble masonry wall by core cutter for laying pipe line etc as per the direction of Engineer-in-charge.	400.00	Each
303	-	Dismantling the exisiting water closet without damaging the existing sewer line etc complete.	210.00	Each
304	-	Providing & Fixing PTMT shower rose etc complete.	287.00	Each
305	-	Providing and fixing of 12" Dia PVC pipe (6Kg/cm2) etc. Rate including the cost of all materials and labour charges etc.complete.(305 mm)	2525.00	Metre
306	-	Providing and fixing of 9" Dia PVC pipe (6Kg/cm2) etc. Rate including the cost of all materials and labour charges etc.complete.(225 mm)	1602.00	Metre
307	-	Providing and fixing brass door stopper etc complete	350.00	Each
308	-	Providing & Fixing CP brass health facuet with cp brass two way tap etc complete.	1600.00	Each
309	-	Providing & fixing PVC sheet to existing door top surface etc complete.	450.00	Sqm
310	-	Providing and fixing 25 mm dia UPVC half turn value to the pipe line etc complete.	130.00	Each
311	-	Providing and fixing precoated galvanished iron profile sheets (Colour less) (size,shape and pitch of corrugation as approved by engineer-in-charge) 0.43mm (+0.05%) total coated thickness with zinc coating 120 grams per Sqm as per IS:277, in 240mpa steel grade, 5-7 microns epoxy primer on both side of sheet and polyster top coat 15-18 microns. Sheet should be supplied in single length up to 12 Metre or as designed by engineer-in-charge. The sheet shall be fixed using self drilling/self tapping screws of size (5.5x55mm) with EPDM seal, complete up to any pitch in horizontal/vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	490.00	Sqm

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
312	-	Providing and fixing of 6" Dia PVC pipe (6Kg/cm2) etc. Rate including the cost of all materials and labour charges etc.complete.	775.00	Metre
313	-	Supply of 20mm water proof plywood etc.Rate including cost of all materials and labour charges etc complete.	2250.00	Sqm
314	-	Providing & Fixing Aluminum curatain rod of size 1" (25mm). Rate including cost of all materials, taxes and labour charges etc complete.	130.00	Metre
315	-	Providing & Fixing Aluminum end bracket for curtain rod etc complete.	55.00	Each
316	-	Providing and laying factory made coloured chamfered edge Cement Concrete paver blocks of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of fine sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with jamuna sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. complete as per manufacturer's specifications & direction of Engineer-in-Charge. 60mm thick C.C. paver block of M-30 grade with approved colour, design & pattern.	725.00	Sqm
317	-	Providing & Fixing PTMT Two in One tap etc complete	333.00	Each
318	-	Providing and laying debrices for base flooring including consolidating,ramming etc complete as per the direction of Engineer-in-charge.	450.00	Cum
319	-	Providing and fixing oval type wash basin of size 550mm etc complete	2,530.00	Each
320	-	Providing & fixing second class teak wood reeper of size 11/2" x 11/2" etc complete.	145.00	Metre
321	-	Providing and laying anti-skid coloured chequerred precast cement concrete tiles 22mm thick BETON\EUROCON or equivalent laid over 20mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joint with white cement & matching pigments etc complete. (for flooring)	1,200.15	Sqm
322	-	Drilling of Core cutting of size 2" dia in Reinforced cement concrete wall and brick work wall up to a distance of 150mm and 230mm respectively etc complete as per the direction of engineer-in-charge.	450.00	Each
323	-	Drilling of Core cutting of size 2" dia in Reinforced cement concrete wall up to a distance of 375mm etc complete as per the direction of engineer-in-charge.	550.00	Each
324	-	Attending general carpentry works/faulty works (Minor) to all doors, windows & ventilators etc complete.	80.00	Job
325	-	Attending general Masonry and other works/faulty works (Minor) to all locations etc complete.	80.00	Job
326	-	Attending general Plumbing and other works/faulty works (Minor) to all locations etc complete.	80.00	Job
327	-	Providing & Fixing CP brass health facuet etc complete.	1280.00	Each
328	-	Supply of New PTMT 1" Float and Epoxy coated aluminium rod (Prayag/Leo/ Water Tech)	632.50	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
330	-	Supply of New PTMT 3/4" Float and Epoxy coated aluminium rod (Prayag/Leo/ Water Tech)	632.50	Each
331	-	Providing & Laying of 1" pvc line Etc complete.	287.50	Each
332	-	Attending line burst repair work in water pumping lines (Open and Submerged) including supply of the respective burst line etc, Rate including cost of all materials & labour charges, refilling of the earth, etc complete. (Earth work will be paid extra)		
332.1	-	1. ³¼" PVC 15 Kg Finolex/ astral/ kundan or equivalent	175.00	
332.2	-	2. 1" PVC 15 Kg Finolex/ astral/ kundan or equivalent	190.00	
332.3	-	3. 1 1/4" PVC 6 Kg Finolex/ astral/ kundan or equivalent	208.00	
332.4	-	4. 1 1/2" PVC 6 Kg Finolex/ astral/ kundan or equivalent	240.00	
332.5	-	5. 2" PVC 6 Kg Finolex/ astral/ kundan or equivalent	249.00	
332.6	-	6. 2 ½" PVC 6 Kg Finolex/ astral/ kundan or equivalent	296.00	
332.7	-	7. 3" PVC 6 Kg Finolex/ astral/ kundan or equivalent	428.00	
332.8	-	8. 4" PVC 6 Kg Finolex/ astral/ kundan or equivalent	644.00	
332.9	-	9. 6" PVC 6 Kg Finolex/ astral/ kundan or equivalent	1000.00	
332.10	-	10. 8" PVC 6 Kg Finolex/ astral/ kundan or equivalent	1300.00	
333	-	Attending line burst repair work in water pumping lines (Open and Submerged) including supply of the respective burst line etc, Rate including cost of all materials & labour charges, refilling of the earth, etc complete. (Earth work will be paid extra)		
333.1	-	1. ¾" GI IS Specs	376.00	RM
333.2	-	2. 1" GI IS Specs	463.00	RM
333.3	-	3. 1 1/4" GI IS Specs	550.00	RM
333.4	-	4. 1 ½" GI IS Specs	629.00	RM
333.5	-	5. 2" GI IS Specs	797.00	RM
333.6	-	6. 2 1/2" GI IS Specs	1000.00	RM
333.7	-	7. 3" GI IS Specs	1300.00	RM
333.8	-	8. 4" GI IS Specs	1575.00	RM
334	-	Removing the burst A.C. Pipes from the pipe line and removal of slushy soil and baling out water and replacing the pipe line with sound pipe including jointing and cost of refilling the pipe line with water for retesting the pipe line etc complete (excluding cost of sound pipe and jointing materials and earth work) and as directed by the Engieer-in-Charge	583.00	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
335	-	Removing the burst C.I. pipes from the pipe line and removal of slushy soil and baling out water and replacing the pipeline with sound pipe including jointing and cost of refilling the pipeline with water for retesting the pipe line etc complete. (Excluding cost of sound pipe and jointing materials and earth work) and as directed by the Officers. (as per twad rates)		
-	-	For depth upto 2m		
335.1	-	1. 80mm dia C.I. Pipes	852.00	Each
335.2	-	2. 150mm dia C.I. Pipes	1759.00	Each
335.3	-	3. 200mm dia C.I. Pipes	2454.00	Each
335.3	-	4. 300mm dia C.I. Pipes	4293.00	Each
336	-	Supplying and fixing the following gun metal gate valves including removing the existing damaged gate valve etc complete		
336.1	-	3/4" GM Gate Valve AS PER IS BS 5154 and related IS Specs	470.00	Nos
336.2	-	1" GM Gate Valve AS PER IS BS 5154 and related IS Specs	631.00	Nos
336.3	-	1 1/4" GM Gate Valve AS PER IS BS 5154 and related IS Specs	838.00	Nos
336.4	-	1 1/2" GM Gate Valve AS PER IS BS 5154 and related IS Specs	1132.00	Nos
336.5	-	2" GM Gate Valve AS PER IS BS 5154 and related IS Specs	1818.00	Nos
337	-	Supplying and fixing the following UPVC/CPVC/PVC valves including removing the existing damaged gate valve etc complete		
337.1	-	3/4" PVC, CPVC and UPVC Gate valve	250.00	Nos
337.2	-	1" PVC, CPVC and UPVC Gate valve	350.00	Nos
337.3	-	1 1/4" PVC, CPVC and UPVC Gate valve	450.00	Nos
337.4	-	1 1/2" PVC, CPVC and UPVC Gate valve	475.00	Nos
337.5	-	2" PVC, CPVC and UPVC Gate valve	500.00	Nos
338	-	Sluice Valve Check nut & shutter repairing work with materials		
338.1	-	(a) 100mm	4025.00	Each
338.2	-	(b) 200mm	5175.00	Each
338.3	-	(c) 300mm	6325.00	Each
339	-	Bore well motors rewinding works	6325.00	Each
340	-	Open well motors rewinding works	6325.00	Each
341	-	Supply of 1/2" oil rope and Fixing gland rope for 100 mm sluice valves with bolt nut & washer.	74.75	Each
342	-	Supply of 3/4" oil rope and Fixing gland rope for 200 mm sluice valves with bolt nut & washer.	86.25	Each
343	-	Supply of 3/4" oil rope and Fixing gland rope for 300 mm sluice valves with bolt nut & washer.	97.75	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
344	-	Sintex Tank shift from one place to other as directed by Engineer- in-charge		Each
345	-	Attending repair/burst work including supply of respective following pipes etc. Rate including cost of all materials, labour and other incidental charges etc complete.		
345.1	-	(a) 3/4" PVC 15 Kg Finolex/ astral/ kundan or equivalent	230.00	Each
345.2	-	(b) 1" PVC 15 Kg Finolex/ astral/ kundan or equivalent	258.75	Each
345.3	-	© 1 1/2" PVC 15 Kg Finolex/ astral/ kundan or equivalent	287.50	Each
346	Labour charges for Cleaning the Tank using required quantity of blEaching powder, including removing and refixing the cover slab, cleaning the sides, bottom and top surface of Service tank/ R.C.C Sump/ R.C.C OHT using Pressure Jetting machine etc., complete as per the directions of the department Engineer-in-charge.			
346.1	-	1. Water Tank of Capacity ranging up to 5,000 litre	450.00	Each
346.2	-	2. Water Tank of Capacity ranging from 7,000 litre - 30,000 litre.	1800.00	Each
346.3	-	3. Under Ground Sump of Capacity of 1,00,000 litre.	2500.00	Each
346.4	-	4. Under Ground Sump of Capacity ranging from 4,00,000 litre - 5,00,000 litre		Each
346.5	-	5. Over Head Tank of Capacity ranging from 3,00,000 litre - 4,00,000 litre.		Each
347	-	Sodium Hypo chloride 500 Kg (More than 100 gm/liter) / per month including the conveyance charges and all other incidental charges etc. complete		Kg
348	-	Attending Faults in the CI and GI Air valves		Each
349	-	Supply of materials and fixing Bolt and Nut with washer cost including for the sluice valve glands and repair work of valves and all other incidental charges etc. complete		
349.1	-	a. 25mm x 100mm	120.00	Kg
349.2	-	b. 25mm x 75mm	120.00	Kg
349.3	-	c. 25mm x 50mm	120.00	Kg
349.4	-	d. 20mm x 100mm	120.00	Kg
349.5	-	e.20mm x 75mm	120.00	Kg
349.6	-	f.20mm x 50mm		Kg
350	-	Supply of Drinking water through motorised water tanker at NIT, Trichirappalli to fill the water at ground level sump and at building overhead tank up to a ht of 15 Metre. Rate including cost of water, all conveyance labour and other incidental charges etc complete.		Per Litre
351	-	Replacing the damaged inner set of flushing cistern of the following capacity. Rate including cost of all materials and labour & other incidental charges etc complete.	180.00	Each

ITEM No.	CODE	SUB-HEADS AND ITEM OF WORK	RATE (Rs.)	UNIT
352	-	Replacing the damaged 32mm dia PVC connection pipe from European water closet to Flushing cistern etc. rate including cost of all materials and labour charges etc complete.	75.00	Each
353	-	Hire charges for JCB including diesel driver beta, etc., Complete as per the direction of Engineer in-charge.	850.00	Per Hour

Contractor's Service Charges (establishment, profit, overheads) either at							
MINUS%	OR	AT PAR	OR	PLUS%			
(Bidder is to select any or offer will be summarily rejection.	cted if f	ound confl	•				
(QUOTED PERCENTAGE IN W				% Only)			

Applicable to all the above individual rates of items separately or in combination with any item for any quantity and as such the quote by the agency confirms to carry out any item or combination of any item for any quantity without any reservation.

NOTE:-1) The above quoted percentage shall not include GST. GST shall be paid @ 12% of the value of work done and tax invoice shall be produced along with the bill which will be reimbursed along the bill.

- 2) Other than the above mentioned items, additional items can be executed and billed for as extra items at DSR rates loaded with CI @25.49% Plus accepted service charges quoted in the tender towards establishment, overheads and profits.
- 3) Market Rate-shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour at the site where the work is to be executed "Plus accepted service charges.
- 4) The contract may be allotted to a maximum of two agencies as indicated elsewhere in the tender by counter offering the lowest acceptable percentage to the next level tenderer and on award to have uniform rates for operation. The contractor is required to carry out combination of any item to any quantity without any reservation and anywhere within NITT.

	Contract Agreement No	
		TENDER
	То	
	The Director, National Institute of Technology TIRUCHIRAPPALLI –620 015.	
	I / We hereby offer to carry out the work of	
	I / We hereby carefully perused the following docu abide by the same.	ments connected with the above noted work and agree to
	1.Specifications (General & Particular)2.Drawings3.Schedule 'A',4.Bill of Quantities	
	5.CPWD works Manual in force.	
	refunded should this tender be rejected. I / We furth Rsmentioned above shall ma	as Earnest Money, which shall be er agree to deposit such sum which along with the sum of the up 50% of the fully Security Deposit for this work as ITUTE OF TECHNOLOGY General Conditions of Contract.
	contained or referred therein and as detailed in Sche	ed to in the said documents upon the terms & conditions dule 'A' and Bill of Quantities thereto and to carry out such a NITTupto a maximum of 30% of the tendered amount of
	I / We further agree to refer all disputes, as reby the Director, NITT., in his sole discretion whose of	equired to the sole arbitration of an Officer, to be appointed lecision shall be final and binding.
	WITNESS	Signature of the Contractor
1.		Date:
2.		

THE DIRECTOR NATIONAL ISNTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI – 620 015

	Information
	Invoice No :
Name of the Company:	Invoice Date :
Address:	GST No. :
Addiess.	PAN No. :
	TIN No. :
Contact Number:	PF No. :
	ESI No. :

SL.NO	DESCRIPTION	AMOUNT (RS.)			
	TOTAL				

TENDER

То

The Director, National Institute of Technology TIRUCHIRAPPALLI –620 015.

I / We hereby offer to carry out the work of Annual Maintenance on repair and renovation of Civil works at NITT, Trichy						
I / We hereby carefully perused the following documents connected work and agree to abide by the same.	I with the above noted					
 Specifications (General & Particular) Drawings Schedule 'A', Bill of Quantities CPWD works Manual in force. 						
I / We forward herewith the sum of Rs	leposit such sum which along with 50% of the fully Security Deposit					
I / We further agree to execute all the work referred to in the said docucentained or referred therein and as detailed in Schedule 'A' and Bill out such deviations as may be ordered, vide conditions of the NIT tendered amount of Rs.	of Quantities thereto and to carry					
I / We further agree to refer all disputes, as required to the sole arbitra by the Director, NITT, in his sole discretion whose decision shall be fir						
WITNESS	Signature of the Contractor					
	Date:					

1.

2.

Enclosure I COMPLAINT REGISTRATION FORM

Date:					
Time:					
Nature of complain	nt:				
			Complainant		
			Signature		
Complaint attende	d.				
Date					
Time:	From	То			
Certified that the complaint has been satisfactorily attended.					
Contractor			Complainant		
Date:					
To be submitted al	ong with running bills				

Enclosure -II

Sl. No	Date & time	Complainant with address	Nature of complaint in brief	Complaint attended & date	Remarks	Signature of the contractor

MAINTENANCE COMPLAINT REGISTER

ANNEXURE-I

MATERIAL SUPPLY SHALL CONFIRM TO THE FOLLOWING BRANDS

<u>Note</u>: Any material supplied equivalent to the branded name, shall have to be got approved by Engineer-in-charge/EMD

CERAMIC/VERTIFIED : NITCO, JOHNSON / SOMANYA / KAJARIA /

TILES REGENCY or Equivalent

PVC PIPES : AVON PLAST / FINOLEX / TRUBORE or Equivalent

GI PIPES : TMT/Kalinga/ORIENT or Equivalent

UPVC / CPVC PIPES : Avonplast/Finolex/Truebore or Equivalent

UPVC / CPVC SPECIALS : Avonplast/Finolex/Truebore or Equivalent

SANITARY ITEMS : Parryware/Neycer/Hindware or Equivalent

VALVES : TMT/Orient or equivalent

STOP COCKS : Metro/Prayag/Water tec or equivalent

TAPS : Prayag, Water tec, Metro or equivalent

SHOWER : Metro/Prayag/Water tec or equivalent

PILLARCOCKS : Metro/Prayag/Water tec or equivalent

CARPENTRY ITEMS

ALDROP : Classic/Navdeep/brown or equivalent

TOWERBOLT : Classic/Navdeep/brown or equivalent

DOOR STOPPER : Classic/Navdeep/brown or equivalent

HOOK & EYE : Classic/Navdeep/brown or equivalent

FLOAT VALVE : Prayag/Water tec or equivalent

PLAIN & PIN : Saint Gobain or equivalent

HEADED GLASS : Saint Gobain or equivalent