

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for "Routine maintenance work at Old Residential Campus (Zone-A) for 2018-19 at IIT Kharagpur."



INDIAN INSTITUTE OF TECHNOLOGY  
KHARAGPUR, WEST BENGAL

TENDER DOCUMENT  
FOR

Routine maintenance work at Old Residential Campus (Zone-A) for  
2018-19 at IIT Kharagpur.

PART – I: TECHNICAL BID

NOTICE INVITING TENDER NO.: SE(C)/IIT/TEN/2018-19/001(Recall-1)  
DATED : 07.05.2018

May 2018

Cost of Tender Document : ₹1,000.00 (Non-Refundable)  
**Last Date & Time of Submission : 22.05.2018 upto 03:00 PM**

CIVIL CONSTRUCTION & MAINTENANCE SECTION  
IIT, KHARAGPUR,  
WEST BENGAL

SUPERINTENDING ENGINEER (CIVIL)  
IIT KHARAGPUR

योगः कर्मसु कौशलम्

Name and Address of Bidder: M/S.....

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.....

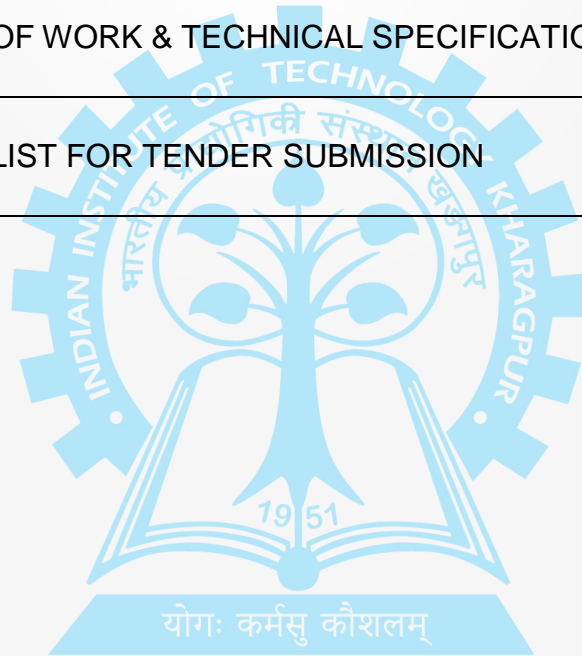
CCM Tender Sl. No. \_\_\_\_\_

Dated \_\_\_\_\_

# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for "Routine maintenance work at Old Residential Campus (Zone-A) for 2018-19 at IIT Kharagpur."

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**INDIAN INSTITUTE OF TECHNOLOGY  
KHARAGPUR**

No. SE(C)/IIT/TEN/2018-19/001(Recall-1)

Date: 07.05.2018

**NOTICE INVITING TENDER**

The Superintending Engineer (Civil), IIT Kharagpur, invites sealed **Percentage Rate Tenders** under Two part Bid System containing Part-I (Technical Bid) & Part-II (Financial Bid) from the approved and eligible contractors of the Indian Institute of Technology, Kharagpur/CPWD/PWD/MES and other bona-fide agencies meeting the minimum qualification criteria for the following work:

| Name of work  | Estimated Amount (₹) | Earnest Money Deposit (₹) | Time for Completion | Start Date & Time of Tender Document Download / Bid Submission | End Date & Time of Tender Document Download / Bid Submission | Date & Time of opening of Technical Bid |
|---|----------------------|---------------------------|---------------------|--|--|---|
| Routine maintenance work at Old Residential Campus (Zone-A) for 2018-19 at IIT Kharagpur. | 25,00,000.00         | 50,000.00                 | 12 (Twelve) months  | 07.05.2018<br>03:30 PM   | 22.05.2018<br>upto 03:00 PM                                  | 22.05.2018<br>at 03:30 PM               |

Cost of Tender Paper ₹ 1,000.00 (Rupees One Thousand only), NON REFUNDABLE, should be deposited in the form of DD only in favour of IIT Kharagpur, payable at Kharagpur. Tender without 'Cost of Tender Document' will be summarily rejected. The Earnest Money (EMD) should be deposited in the form of DD only in favour of IIT Kharagpur, payable at Kharagpur. Tender without requisite EMD will be summarily rejected. Validity of both the DD should be at least 03 months from the date of publication of NIT. The DD for Cost of Tender Paper and DD for EMD should be submitted in a separately sealed envelope kept within the main envelope containing another two envelopes of Technical & Financial Bid.

**Eligibility Criteria**

Contractors who fulfill the following minimum qualification criteria shall be considered as eligible bidder:

1. Agencies should have satisfactorily completed the works as mentioned below during the last 07 (Seven) years ending last day of the *April, 2018*:
  - i) 03 (three) similar works each costing not less than 40% of estimated cost or
  - ii) 02 (two) similar works each costing not less than 60% of estimated cost or
  - iii) 01 (one) similar work costing not less than 80% of estimated cost executed under Central/State Government Department / Central/State Autonomous Body / Central/State Public Sector Undertaking.

Similar work shall mean: **Repair & Renovation/ Maintenance work of buildings.**

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum calculated from the date of completion to last date of applications for tenders.

Completion certificate issued by Competent Authority will only be considered as credential. If the Completion certificate issued by Competent Authority does not reflect the type of work, then Final bill / Schedule of Quantity of the qualifying works also to be attached along with the Completion certificates. Certificate from private individuals / organizations for whom such works have been executed shall not be accepted.

The tender document (consisting of specifications, the schedule of quantities of various types of items to be executed, the set of terms and conditions of the contract and other documents / drawings, if any) can be downloaded from the **Central Public Procurement Portal** of Government of India <https://eprocure.gov.in/cppp/tendersearch> & **Institute's website** <http://www1.iitkgp.ac.in/topfiles/tenders.php>. *Corrigenda, if any, will be published only on Institute Website and Central Public Procurement Portal. The institute shall not be responsible for any delay / difficulties / inaccessibility of downloading facility for any reason whatsoever. In case of any discrepancy between the tender documents downloaded from internet and the master copy available in this office, the letter shall prevail and will be binding on the tender(s). No claim on this account will be entertained. Rates quoted by the bidder should be GST compliant.*

Tender should be submitted as per the prescribed format within the specified date and time at Office of Civil Construction & Maintenance Section, IIT Kharagpur, failing which the offer shall be summarily rejected. **Bid Validity period is 90 Days** from submission of bid. Bid will be opened at Civil Construction & Maintenance Section, IIT Kharagpur. **The Institute reserves the right to reject any tender without assigning any reason thereof.**

Superintending Engineer (Civil)  
On behalf of Indian Institute of Technology  
Kharagpur

**Copy to:**

- 1) Registrar
- 2) Chairman (CCM)
- 3) Vice Chairman (CCM)-Civil
- 4) Executive Engineer (Civil)
- 5) Executive (CCM)
- 6) Asstt./Jr. Engineer (Civil)
- 7) Notice Board
- 8) Office file

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## INSTRUCTIONS TO THE BIDDER

1. Attention of the tenderer is directed to the conditions of tender and general conditions of contract of IIT Kharagpur. Bidders who are not aware of the "General Conditions of Contract" of IIT Kharagpur are instructed to collect the same from Civil Construction and Maintenance Section, IIT Kharagpur and read the terms & conditions before submission of the tender.
2. The tenderer shall visit and inspect the site and obtain all information on his own responsibility and at own cost, which may be necessary for the purpose of quoting and submitting the tender. No excuse or ignorance as to site conditions and local information shall be accepted after awarding of the contract. All costs, charges & expenses that may be incurred in connection with the preparation of his tender shall be borne by him and the Institute accepts no liability whatsoever therefore. Failure by the tenderer to have done all the things, which in accordance with his condition he is deemed to have done shall not relieve the successful tenderer of the responsibility for satisfactory completion of the work as required. If there is any clarification required, the tenderer shall submit the queries in writing 03 (Three) days before the last date & time of submission of the tender, to the Civil Construction & Maintenance Section, IIT Kharagpur. Access to the site will be granted, if necessary, to the tendered by prior permission of the Engineer-in-charge.
3. The time for completion of work is **12 (Twelve) months** & will be reckoned from the 7<sup>th</sup> day from the date of issue of Work Order or handing over of site, whichever is earlier.
4. EMD of requisite amount as mentioned in NIT/Corrigenda in favour of **IIT Kharagpur** in the form of **Demand Draft** only from any **Nationalized Bank** payable at **Kharagpur** should be enclosed within a **Separately Sealed Envelope** within the main envelope. Validity of DD should be at least 90 days from date of publication of NIT. Any tender received without requisite Earnest Money in the form and manner as mentioned above shall be summarily rejected and treated as cancelled. The Earnest Money received shall be refunded to the unsuccessful bidders without any interest, subject to the provisions of Clause 5 of ITB. The Earnest Money Deposit (EMD) of successful tenderer shall be retained and converted as part of Security Deposit.
5. Earnest Money Deposit (EMD) will be forfeited in the following cases -
  - a. If the tenderer withdraws / modifies his tender during the period of Bid Validity.
  - b. If the tenderer does not accept the correction of arithmetical errors of his tender.
  - c. If the tenderer after award of work, does not start the work within the stipulated time period as per Letter of Acceptance / Work Order.
6. **Eligibility Criteria**

A. Contractors who fulfill the following requirements shall be considered as Eligible Bidder: Agencies should have satisfactorily completed during the last 07 (Seven) years ending last day of the *April 2018*:

- a) 03 similar works each costing not less than 40% of estimated cost, i.e. **₹. 10,00,000.00 or**
- b) 02 similar works each costing not less than 60% of estimated cost, i.e. **₹. 15,00,000.00 or**
- c) 01 similar work costing not less than 80% of estimated cost, i.e. **₹. 20,00,000.00**

executed under Central/State Government Department or Central/State Autonomous Body or Central/State Public Sector Undertaking. **Completion certificate** issued by Competent Authority will only be considered as credential.

**Similar work shall mean: Repair & Renovation/ Maintenance work of buildings.**

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum calculated from the date of completion to last date of applications for tenders. If the Completion certificate issued by Competent Authority does not reflect the type of work, then final bill / schedule of quantity of the qualifying works also to be attached along with the Completion certificates within Technical Bid.

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## 7. Submission of Bid

The bids shall be submitted in **Two Bid System** in **Three separate sealed envelopes**:

- I. **Envelope-1 : Tender Fee and EMD** will comprise of -
  - i) **Cost of Tender Paper** Rs. 1000.00, NON REFUNDABLE in the form of DD in favour of IIT Kharagpur, payable at Kharagpur (validity of DD should be at least 03 months from the date of publication of NIT). Tender without 'Cost of Tender Document' will be treated as cancelled.
  - ii) **EMD** of requisite amount in the form of DD in favour of IIT Kharagpur payable at Kharagpur (validity of DD should be at least 03 months from the date of publication of NIT). Bid without EMD would be summarily rejected.
- II. **Envelope-2 : Technical Bid** will comprise of -
  - i) Self certified copies of Credential documents fulfilling the minimum eligibility criteria as per Clause 6 above, i.e., Experience Certificates for completion of similar type of job within last seven years.
  - ii) Original Tender Document – Part-I: Technical Bid duly Stamped & Signed in all pages.
  - iii) Self certified copies of Statutory documents like Trade License, PAN, IT Return for last 3 years, GST Registration details etc.
- III. **Envelope-3 : Financial Bid** will comprise of -  
Original Tender Document – Part-II: Financial Bid with duly filled-up **Schedule of Quantities** and **Form of Tender** as an acceptance to the terms and conditions set in the tender (stamped & signed in all pages).

All the envelopes should be duly marked on top with **NIT Number, Name of work and Tender Fee & EMD / Technical Bid / Financial Bid** as the case may be and the **name of the bidder**. All these three envelopes to be put in another sealed large envelope duly marked on top with **NIT Number and Name of work and name of the bidder**. Tenders must be delivered at the place and time as indicated in NIT / further corrigenda. Bids that are not in the above format will be rejected.

8. Each and every page of the tender documents and correspondences accompanying the tender shall have to be duly signed and stamped by the Bidder / Authorised Signatory before submission. The person / officer signing the tender / bid should be the **Owner / Proprietor / Partner / CEO / MD / Director** of the company or delegated with an appropriate **Power of Attorney (duly endorsed by a Notary Public)** to sign such documents by the **Owner / Proprietor / Partner / CEO / MD / Director** of the company.
9. The bidder shall have to submit certified copies of valid Trade License, PAN, Income Tax Return for last 3 yrs, GST registration details, other statutory tax clearance certificates (if any) and credential documents fulfilling the minimum eligibility criteria along with his tender. The original copies of these documents will have to be produced when demanded for verification.
10. All Percentages, Rates, Prices, Amounts and Sums quoted by the bidder shall be in Indian currency only. The language used throughout shall be English.
11. All Rates, Amounts, Percentages & Sums shall have to be quoted in indelible ink and written both in figures and words. If the rate/percentage quoted in words does not tally with the rate/percentage quoted in figures then the rate/percentage which corresponds to the lesser amount shall be considered.
12. Any overwriting / correction / applying correction fluid shall be avoided and in case any correction is made the same must be initialized and stamped.
13. Tender must be submitted with the rates for all the items of work involved and any incomplete tender will not be considered. The items for which the rates are not quoted will be considered as '**Zero**' & the agency shall complete that item of work without any claim.
14. No alteration shall be made by the tenderer in the tender and no conditional tender will be entertained. Tender with split rate will not be considered.

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15. The bid shall remain valid for a period of **90 Days** from the date of opening of the bid. If before expiry of the validity period or issue of work order, whichever is earlier, the bidder amends / modifies / withdraws his bid, making unacceptable to the institute, then the Earnest Money Deposit shall be liable to forfeiture at the option of the Institute.
16. The Rates quoted by the tenderer should be *inclusive of all taxes (GST) & duties*, freight, cost for loading & unloading etc. and must hold good till the completion of work and shall not be subjected to escalation due to increase in local market rates of materials and labour. No claim on this account what so ever shall be entertained at any stage including the extended period, if any.
17. The Intending bidders will have to produce documentary evidence in original in support of their credentials before the competent authority whenever demanded for verification. If any information furnished by the bidder is found as false / fabricated then his bid will be rejected and treated as cancelled, even if the same is detected at any stage after signing of the contract and would lead to termination of the contract besides forfeiture of Earnest Money Deposit (EMD) and liabilities towards prosecution under appropriate law. In such cases the bidder / tenderer will be debarred from participation in future tendering process for next 03 (Three) years.
18. Should there be any doubt or obscurity as to the meaning of any of the tender documents or if any further information is required, the tenderer must address his enquiry in writing in duplicate to *Superintending Engineer (Civil)*, Civil Construction & Maintenance Section, Indian Institute of Technology Kharagpur - 721302, West Bengal. Such enquiries must be submitted not later than **03 (Three)** working days before the last date fixed for submission of the tenders.
19. The sealed Bids shall be received by the Institute at Civil Construction and Maintenance Section not later than the time and date stipulated in the Notice Inviting Tender or Corrigenda otherwise. Tenders that are received after the date and time specified will not be considered.
20. The Technical Bid of tender will be opened on the specified date and time of opening at the Civil Construction & Maintenance Section, IIT Kharagpur in the presence of bidders / tenderers or their Authorised representatives (with proper authorization letter from Owner / Proprietor / Partner / CEO / MD / Director of the company mentioning Name, Address and designation of the person being authorised).
21. Date and time of opening of Price Bid will be informed to the Technically Qualified Bidders and will be opened at the Civil Construction & Maintenance Section, IIT Kharagpur in the presence of bidders / tenderers or their Authorised representatives (with proper authorization letter from Owner/Proprietor/Partner/CEO/MD/Director of the company mentioning Name, Address and designation of the person being authorised).
22. The Institute reserves the right to accept or reject any or all the offer including the lowest without assigning any reason. The Institute does not bind itself to accept the lowest offer.
23. The successful tenderer, shall deposit an amount equal to 5% of the tendered and accepted value of the work as performance guarantee in the form of Demand Draft of a Scheduled Bank in favour of IIT Kharagpur payable at Kharagpur. The time allowed for submission of the performance guarantee shall be 15 days of receiving "Letter of Acceptance" (LOA). This period can be further extended as the written request of the contractor by the Engineer-in-charge for a maximum period ranging from 1 to 15 days with a late fee @ 1.00% per day of Performance Guarantee Amount. If the bidder still fails to deposit the performance guarantee within the extended time period, i.e. within 16<sup>th</sup> day to 30<sup>th</sup> day from the issue of letter of acceptance (LOA), his bid will be rejected and treated as cancelled and the entire Earnest Money Deposit shall be forfeited. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the Contractor, without any interest.
24. Standard Institute payment procedure shall be followed. A sum @ 5% of the gross amount of the bill shall be deducted as Security Deposit from the bill of the contractor. However, Earnest Money shall be adjusted first in the Security Deposit and the rest amount to complete a sum of 5% of gross bill value will be deducted from the contractor's bill. The security deposit of the Contractor shall not be refunded before the expiry of defect liability period after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

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## ADDITIONAL CONDITIONS OF CONTRACT

1. The quantities indicated are approximate and may vary at the time of execution. The Institute will exercise absolute discretion for operating all or some items of the schedule.
2. Contractor has to remove all the debris from the site of execution and dispose them at suitable places shown by the Engineer or his authorised representative at site.
3. Cement used for the work should not be older than two months from the date of manufacture. The contractor should purchase the cement from authorised dealer and submit the test certificates/vouchers prior to execution of the work.
4. All temporary arrangements, staging, working platforms etc. is to be provided by the tenderer at his own expense to the satisfaction of the Engineer-in-Charge. The Institute will not however, be liable to pay any compensation due to accident, injury to the contractor's work men or any account what-so-ever.
5. Steel to be supplied and used should be from approved manufacturers. Steel from manufacturers other than approved make / re-rolled steel will not be acceptable. The consumption of steel will be regulated as per bar bending schedule and drawing to the contractor and/or as directed by Engineer-in-charge. Payment of reinforcement rod, will be made as per actual use including overlaps, crank, bending etc., as needed at work site, if any, as per approved drawing. Quantity will be calculated using standard weight per running metre. No wastage on any account is payable. Test certificate of steel should be submitted by the contractor. The contractor must submit vouchers for the steel purchased to the Engineer. All reinforcement used should be free from loose mill scale, loose rust, paint and oil coating etc.
6. All concreting works shall be Machine mixed and Machine vibrated and will have required levels of strength at the time of testing. Poorly executed concrete have to be demolished and repair will not be allowed.
7. The Institute will be at liberty to take samples during the course execution of work and get the same tested at Institute's laboratory to ascertain the quality conforming to relevant specification. The cost of sample and the charges for the testing will have to be borne by the contractor.
8. The contractor will have to maintain the work for **SIX** calendar months from the certified date of its completion.
9. The job is to be done as per WBPWD Building & Sanitary works specification for Building / Civil works and WBPWD Roads specification for Road Works, as applicable and provisions made in relevant IS codes must be followed. Wherever these are silent, the construction and completion of works shall conform to sound engineering practice as approved by the Engineer-In-Charge. In case of any dispute arises out of the interpretation of the above, the decision of the Engineer-In-Charge shall be final and binding to the contractor.
10. The bituminous road work shall be carried out by using **bitumen of grade VG30 preferably from IOCL** whenever applicable.
11. **Roof treatment work / water proofing treatment work should be guaranteed by the contractor for 10 years after successful completion of work, wherever applicable.**
12. The splashes of paints over doors, windows and floor shall be cleaned thoroughly after execution of the work.
13. Irrespective of rates quoted by the bidder, the contractor shall be solely responsible for payment of *Minimum Wages* as stipulated by the Government from time to time.

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## 14. For painting works-

- i. Volume of paint required is to be procured & stored at site during starting of work to avoid mismatch of shade and Challan/Tax invoice of procured paint, certified by the Manufacturers, should be submitted to the department
- ii. Sampling of paint should be done in presence of the manufacturers' representatives and the quality of application to be certified by the manufacturer and the same to be submitted to the department.
- iii. Surface preparation and procedure of paint application as suggested by the paint manufacturers to be followed properly and Checklist of paint (pro-forma will be provided by EIC during execution) to be jointly signed by the contractor, paint manufacturer.
- iv. External Painting works to be guaranteed by the paint manufacturer for a period of 03years for Normal Acrylic Emulsion, 05 years for 100% Acrylic Emulsion and 07 years for super protective Acrylic Emulsion Paint. The warranty should cover replacing of paint to the extent of defect including cost of labour for re-application of coating as may be necessary to set right the paint failure, at the contractor's own risk and cost.

Paint failure shall mean'

- a) Flaking/ peeling/ cracking or chalking of paint film
- or, b) growth of micro-organism like algae/fungus on the painted surface.
- or, c) fading of colour shade of painted surface.
- v. For particular area, primer and paint to be used should be same approved by IIT Khargpur.

15. The contractor shall take adequate precaution and safety measures while executing the maintenance work so as not to cause any damage to adjacent areas, rooms, toilets, water main and electrical / networking lines / cables etc. Suitable safety arrangement should be provided as per CPWD safety code.
16. The contractor should ensure that the work front and its adjoining areas should be kept clean of any debris / rubbish at his own risk and cost.
17. As the work relates to the *Residential Campus* and several works are to be attended on an emergency basis, the contractor has to ensure deployment of suitable work-force on all days.
18. The contractor has to ensure that complains handed over to him has to be taken up immediately and there should be no delay in executing the works.



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## SCOPE OF WORK & TECHNICAL SPECIFICATION

**The scope of work includes:** *Routine maintenance work at Old Residential Campus (Zone-A) for 2018-19 at IIT Kharagpur.*

### APPROVED MAKE LIST OF MATERIALS TO BE USED IN CIVIL, SANITARY & WATER WORKS

| SL. NO. | ITEM   | SUGGESTED BRAND NAME OR SIMILAR (APPROVED BY THE AUTHORITY) |
|---------|--|---|
| 01.     | Cement (PSC)   | ACC / Ultratech / Ambuja / Lafarge / Birla                  |
| 02.     | Reinforcement Steel  | TATA / SAIL / RINL  |
| 03.a    | Structural Steel   | TATA / SAIL / RINL  |
| 03.b    | Lighter Structural sections not manufactured by TATA/SAIL/RINL | Shyam Steel / SRMB / Jindal (Hissar)                        |
| 04.     | Ceramic Tiles  | Johnson / Kajaria / Somany                                  |
| 05.     | G.I. Pipes   | TATA / Jindal   |
| 06.     | G.I. Fittings  | HB / R  |
| 07.     | Extruded Aluminum sections / Grill                             | HINDALCO / INDAL / JINDAL                                   |
| 08.     | P.V.C. Shutters  | Sintex / Raunaq / Duroplast                                 |
| 09.     | P.V.C. Pipes   | Oriplast / Supreme / Finolex                                |
| 10.     | P.V.C. Cistern   | Parryware / Hindware / Cera                                 |
| 11.     | P.V.C. Closet Seat Cover                                       | Parryware / Hindware / Cera / Prayag                        |
| 12.     | P.V.C. Connector Pipe  | Prayag  |
| 13.     | P.V.C. Ball Cock   | Prayag  |
| 14.     | P.V.C. Bib Cock / Stop Cock/ Angular Stop Cock / Pillar Cock   | Prayag  |
| 15.     | P.V.C. Waste & Sanitary Fittings                               | Prayag  |
| 16.     | IPWC/EPWC/Urinal/Basin/Lab Sink                                | Parryware / Hindware / Cera                                 |
| 17.     | SS Sink  | Parryware / Cera / Nirali                                   |
| 18.     | Gate Valve   | Leader / Zoloto   |
| 19.     | C.P. Bib Cock / Stop Cock/ Angular Stop Cock / Pillar Cock     | Essco / Jaquar / Marc                                       |
| 20.     | C.P. Shower & Shower Arm                                       | Essco / Jaquar / Marc                                       |
| 21.     | C. P. Waste Fittings   | Essco / Jaquar / Marc                                       |
| 22.     | C. P. Bottle Trap  | Essco / Jaquar / Marc                                       |
| 23.     | Cast Iron Pipe & Fittings                                      | NECO / BIC / D.N.Sinha / AMC / ALC                          |
| 24.     | Gun Metal Wheel Valve  | Zoloto / Alto / Leader                                      |
| 25.     | Mirror / Glass Panes   | Modi Guard / Saint Gobain                                   |
| 26.     | Wall Putty   | JK / Birla / Sika   |
| 27.     | Internal & External Paint and Primer                           | Asian Paints / Berger / AkzoNobel                           |
| 28.     | APP Membrane   | SIKA / PIDILITE / FOSROC / TIKIDAN                          |
| 29.     | Anti corrosive water proofing paint with Aluminium finish      | SIKA / Shalimar   |
| 30.     | Flush Door   | Green Ply / Century Ply                                     |

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Tender Document for "Routine maintenance work at Old Residential Campus (Zone-A) for 2018-19 at IIT Kharagpur."

|     |  |  |
|-----|--|--|
| 31. | Architectural Hardware fittings                        |  |
|     | a) MS  | Mowjee   |
|     | b) Anodized Aluminium                                  | Allen / Metco / N.L.C.O.   |
| 32. | SS Railing Sections                                    | Ozone / D-Line / Jindal  |
| 33. | Interlocking Paver Tiles                               | Hindustan Tiles / Wonder / Ultra Tiles                                   |
| 34. | Sunken floor water proofing                            | Choksey / Sika / BASF/ Fosroc  |
| 35. | Gypsum False Ceiling                                   | Gyprock / Armstrong  |
| 36. | PVC Flooring   | Responsive / Armstrong / Wonder Floor / Tarkett                          |
| 37. | Polysulphide Sealant                                   | Pidilite / Fosroc / Choksey / Sika / BASF                                |
| 38. | Polycarbonate Sheets                                   | GE / Macrolux / Polytechno / Danpalon                                    |
| 39. | Vitrified Tiles<br>(double charged or fully vitrified) | Johnson, Somany, Kajaria   |
| 40. | Stainless steel D-handles                              | Godrej, Hettich, D-line, Dorma, Dorset, Ozone                            |
| 41. | Door Locks   | Godrej, Dorma  |
| 42. | Weather Silicon  | Pidilite, Choksey, Forsoc, Sika  |
| 43. | Aluminium Cladding sheets                              | Alstrong, Alpolic, Alucobond, Alstone International, Aludecor Lamination |
| 44. | Water proofing / Injection Grouting                    | Fosroc, Choksey, Sika, BASF  |
| 45. | Ply board  | Greenply, Kitply, Century  |
| 46. | Door Closer/Floor spring                               | Godrej, Ozone, Hettich, Dorma, Hardwyn                                   |
| 47. | Bitumen (grade VG30)                                   | IOCL   |

**Note:** For items not covered in the above list or in case of non-availability of preferred make of any item listed above, the make / brand to be used in the work, should have prior approval from the Engineer-In-Charge.

योग: कर्मसु कौशलम्

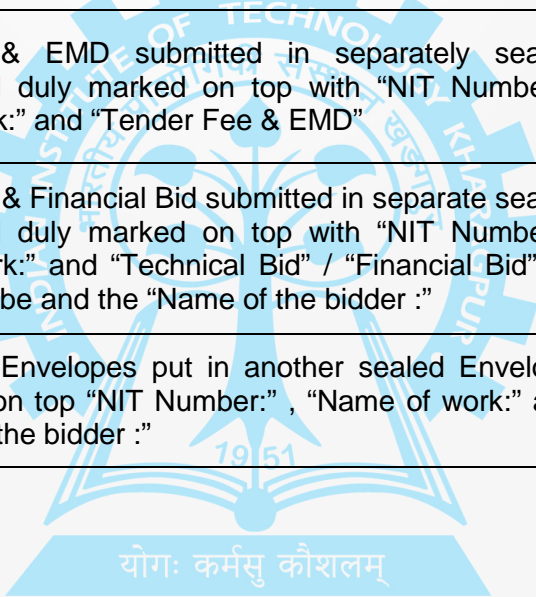
# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for "Routine maintenance work at Old Residential Campus (Zone-A) for 2018-19 at IIT Kharagpur."

## CHECK LIST FOR TENDER SUBMISSION (TWO BID)

(To be filled by the Tenderer by putting "√" and to be signed & stamped)

| Sl. No. | Description  | Yes | No |
|---------|--|-----|----|
| 1       | Submitted requisite Tender fee   |     |    |
| 2       | Submitted requisite EMD  |     |    |
| 3       | Each pages of the tender document duly signed & stamped  |     |    |
| 4       | Form of Tender properly signed, stamped and enclosed with Financial Bid  |     |    |
| 5       | Financial Bid filled up with quoted prices (% above / below / at par) with proper Signature & Stamp  |     |    |
| 6       | Tender fee & EMD submitted in separately sealed envelope and duly marked on top with "NIT Number:", "Name of work:" and "Tender Fee & EMD"   |     |    |
| 7       | Technical Bid & Financial Bid submitted in separate sealed envelope and duly marked on top with "NIT Number:", "Name of work:" and "Technical Bid" / "Financial Bid" as the case may be and the "Name of the bidder :" |     |    |
| 8       | All the three Envelopes put in another sealed Envelope duly marked on top "NIT Number:" , "Name of work:" and the "Name of the bidder :"   |     |    |



**Name of the Bidder** \_\_\_\_\_

(in Block letters)

Signature: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for "Routine maintenance work at Old Residential Campus (Zone-A) for 2018-19 at IIT Kharagpur."



INDIAN INSTITUTE OF TECHNOLOGY  
KHARAGPUR, WEST BENGAL

TENDER DOCUMENT  
FOR

*Routine maintenance work at Old Residential Campus (Zone-A) for  
2018-19 at IIT Kharagpur.*

PART – II: FINANCIAL BID

NOTICE INVITING TENDER NO. : SE(C)/IIT/TEN/2018-19/001(Recall-1)  
DATED : 07.05.2018

May 2018

Last Date & Time of Submission: 22.05.2018 upto 03:00 PM

CIVIL CONSTRUCTION & MAINTENANCE SECTION  
IIT, KHARAGPUR,  
WEST BENGAL

योग: कर्मसु कौशलम्

SUPERINTENDING ENGINEER (CIVIL)  
IIT KHARAGPUR

Name and Address of Bidder: M/S.....

.....  
.....  
.....  
.....

CCM Tender Sl. No. \_\_\_\_\_

Dated \_\_\_\_\_

# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for "Routine maintenance work at Old Residential Campus (Zone-A) for 2018-19 at IIT Kharagpur."

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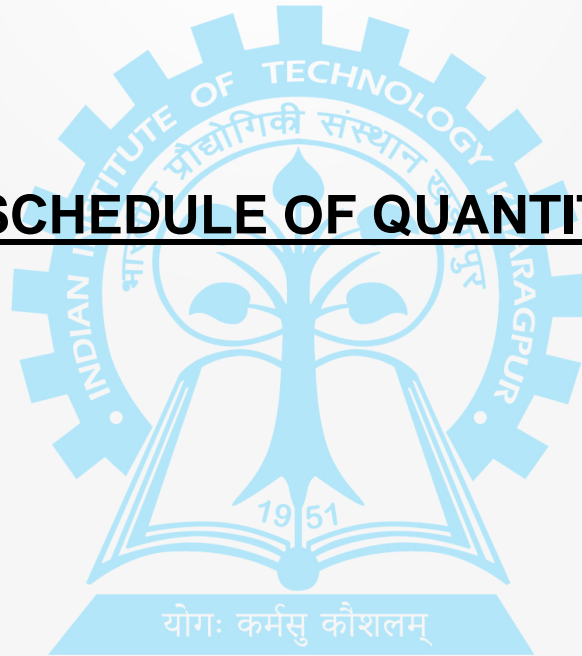


# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for "Routine maintenance work at Old Residential Campus (Zone-A) for 2018-19 at IIT Kharagpur."



## SCHEDULE OF QUANTITIES



**CIVIL CONSTRUCTION & MAINTENANCE SECTION  
IIT KHARAGPUR**

**Name of Work: Routine Maintenance work at Old Residential Campus (Zone-A) for 2018-19 at IIT Kharagpur.**

**SCHEDULE OF QUANTITIES**

| Sl. No. | Description of items  | Unit  | Quantity | Rate (₹) |
|---------|---|-------|----------|----------|
| 1       | Clearing compound premises of shrubs, plants jungles etc. by cutting and removing as directed (Specific permission of Engineer-in-Charge prior to execution will be necessary). (Payment to be made on area cleared)  | Sqm   | R.O.     | 11.00    |
| 2       | Uprooting and removing plants from the surface of walls parapet etc and making good damages. Repairing of damages to be paid separately.  |       |          |          |
|         | (a) Small plant of girth of exposed stem upto 75 mm lift upto 6 metre.  | Each  | R.O.     | 50.00    |
|         | (b) Medium size plant of girth of exposed stem above 75 mm but not exceeding 150 mm lift upto 6 mtr.  | Each  | R.O.     | 60.00    |
| 3       | Dismantling all types of masonry excepting cement concrete plain or reinforced, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m. In ground floor including roof.  | Cum   | R.O.     | 447.00   |
| 4       | Dismantling all types of plain cement concrete works, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m. In ground floor including roof upto 150 mm. thick  | Cum   | R.O.     | 939.00   |
| 5       | Dismantling R.C. floor, roof, beams etc. including cutting rods and removing rubbish as directed within a lead of 75 m. including stacking of steel bars. In any floor.   | Cum   | R.O.     | 1956.00  |
| 6       | Dismantling artificial stone flooring upto 50 mm. thick by carefully chiselling without damaging the base and removing rubbishes directed within a lead of 75 m. In ground floor including roof   | Sq.M. | R.O.     | 50.00    |
| 7       | Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. - For thickness of tiles 10 mm to 25 mm  | Sqm.  | R.O.     | 31.55    |
| 8       | Earth work in excavation of foundation trenches or drains, in all sorts of soil (including mixed soil but excluding laterite or sandstone) including removing, spreading or staking the spoils within a lead of 75 m as directed. The item includes necessary trimming the sides of trenches, levelling, dressing and ramming the bottom, bailing out water as required complete. Depth of excavation not exceeding 1,500 mm.   | Cum   | R.O.     | 119.27   |
| 9       | Filling in foundation or plinth by Fine sand in layers not exceeding 150 mm as directed and consolidating the same by thorough saturation with water ramming complete including the cost of supply of sand. (Payment to be made on measurement of finished quantity)  | Cum   | R.O.     | 509.85   |
| 10      | Supplying, spreading and consolidating moorum with requisite depth including consolidating by power roller to proper grade and camber including watering, guarding, barricading and making necessary earthen bundh to protect the edges and pouring water, mending cracks by rolling etc. The rate includes the supply of moorum, carriage, loading, unloading and stacking at road side and spreading including all incidental charges of roller, cost of fuel & lubricants etc. all complete. (The payment will be made after deduction of 1/13th for the shrinkage). | Cum   | R.O.     | 469.18   |
| 11      | Cement concrete with graded stone ballast (40 mm size excluding shuttering), Pakur Variety, 1:4:8 proportion.   | Cum   | R.O.     | 4841.00  |

| Sl. No. | Description of items   | Unit | Quantity | Rate (₹) |
|---------|--|------|----------|----------|
| 12      | Ordinary Cement concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, in ground floor as per IS 456-2000. Pakur Variety.   | F    | R.O.     | 5236.00  |
| 13      | Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, in ground floor as per relevant IS codes. Pakur Variety  | Cum  | R.O.     | 5791.00  |
| 14      | Hire and labour charges for shuttering with centering and necessary staging upto 4 m using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs, beams and columns, lintels curved or straight including fitting, fixing and striking out after completion of works (upto roof of ground floor) (When the height of a particular floor is more than 4 m the equivalent floor height shall be taken as 4m and extra for works beyond the initial 4m ht. shall be allowed under (c) for every 4m for part thereof) |      |          |          |
|         | a) 25 mm to 30 mm thick wooden shuttering as per decision & direction of Engineer-in-Charge,   | Sqm  | R.O.     | 321.00   |
|         | b) 25 mm to 30 mm thick shuttering without staging in foundation   | Sqm  | R.O.     | 203.00   |
|         | c) Extra for staging beyond 4 m in any floor (Mode of measurement: area in plan x mean height of staging upto soffit of shuttering above initial 4 m)  | Cum  | R.O.     | 58.00    |
|         | d) Shuttering with hard wood for precast R.C. Slab curved, or stright and striking out the same including fitting, fixing the precast slab in position with necessary carriage & haulage, hosting etc, complete in all respect. (only the area in contact with concrete to be measured)  | Sq.m | R.O.     | 92.00    |
| 15      | Reinforcement for reinforced concrete work in all sorts of structures including distribution bars. Stirrups. Binders etc. initial straightening and removal of loose rust (if necessary). Cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge block annealed wire at every intersection. complete as per drawing and direction. For works in foundation, basement and unto roof of ground floor / unto 4 m. Tor steel /Mild Steel  |      |          |          |
|         | I)SAIL/ TATA/RINL  | K.G  | R.O.     | 58.10    |
|         | II)Other than SAIL/TATA/RINL   | K.G  | R.O.     | 55.63    |
| 16      | R.C. shelves (1:1.5:3) either precast or cast in situ with stone chips and necessary reinforcement upto 1% (0.8% main and 0.2% distribution bars), shuttering etc. and 10 mm thick cement plaster (1:4) including neat cement finishing and cutting chase fitting and fixing in position. mending good damages as necessary complete. In ground floor 50 mm Thick panels   |      |          |          |
|         | (a) SAIL/ TATA/RINL  | Sq.M | R.O.     | 985.00   |
|         | (b) Other than SAIL/ TATA/ RINL  | Sq.M | R.O.     | 953.00   |
| 17      | 200 mm. thick Brick work with Fly Ash Bricks set in cement sand mortar (1:6) including raking out joints, curing, scaffolding etc. complete in all respect.  |      |          |          |
|         | (a) In ground floor  | Cum  | R.O.     | 4676.00  |
|         | (b) Add extra for each addl. Up to 4th floor   | Cum  | R.O.     | 115.00   |
| 18      | a) 100 mm thk brick work with Fly Ash Bricks set in cement sand mortar (1:4) including raking out joints, curing, scaffolding etc. complete in all respect.  | Sqm  | R.O.     | 539.00   |
| 19      | Stripping off worn out plaster and raking out joints of walls, celings etc. upto any height and in any floor including removing rubbish within a lead of 75m as directed.  | Sqm  | R.O.     | 19.00    |



| Sl. No.                             | Description of items   | Unit | Quantity | Rate (₹) |
|-------------------------------------|--|------|----------|----------|
| 20                                  | Labour for Chipping of concrete surface before taking up Plastering work.  | Sqm  | R.O.     | 21.00    |
| 21                                  | Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, noising and drip course, scaffolding/staging where necessary (Ground floor). [Excluding cost of Chipping over concrete surface]   |      |          |          |
|                                     | a) With 1:6 cement mortar 20 mm thick  | Sqm  | R.O.     | 152.00   |
|                                     | b) With 1:6 cement mortar 15 mm thick  | Sqm  | R.O.     | 134.00   |
|                                     | c) With 1:4 cement mortar 10 mm thick  | Sqm  | R.O.     | 122.00   |
| 22                                  | Supplying, fitting & fixing 1st quality Ceramic tiles in walls and floors to match with the existing work & 4 nos of key stones (10 mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide if required to match the colour of tiles including roughening of concrete surface, if necessary or by synthetic adhesive & grout materials etc.   |      |          |          |
|                                     | (A) Floor: With sand cement mortar (1:4) 20 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg/Sq.m & joint filling using white cement slurry @ 0.20kg/Sq.m & joint filling using white cement slurry @0.20kg/Sq.m. Coloured decorative.   |      |          |          |
|                                     | a) Area of each tile upto 0.09 sq.m  | Sqm  | R.O.     | 731.00   |
|                                     | b) Area of each tile above 0.09 sq.m   | Sqm  | R.O.     | 895.00   |
|                                     | (B) Wall: With sand cement mortar (1:4) 20 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg/Sq.m & joint filling using white cement slurry @ 0.20kg/Sq.m & joint filling using white cement slurry @0.20kg/Sq.m. Coloured decorative.  |      |          |          |
| a) Area of each tile upto 0.09 sq.m | Sqm  | R.O. | 738.00   |          |
| 23                                  | Supplying and laying true to line and level vitrified tiles of approved brand (size not less than 600 mm X 600 mm X 10 mm thick) in floor, skirting etc. set in 20 mm sand cement mortar (1.4) and 2 mm thick cement slurry back side of tiles using cement @ 2.91 Kg/M <sup>2</sup> or using polymerised adhesive (6 mm thick layer applied directly over finished artificial stone floor /Mosaic etc without any backing course) laid after application slurry using 1.75 Kg of cement per M <sup>2</sup> below mortar only, joints grouted with admixture of white cement and colouring pigment to match with colour of tiles / epoxy grout materials of approved make as directed and removal of wax coating of top surface of tiles with warm water and polishing the tiles using soft and dry cloth upto mirror finish complete including the cost of materials, labour and all other incidental charges complete true to the manufacturer's specification and direction of Engineer -in-Charge (White cement, synthetic adhesive and grout material to be supplied by the contractor) |      |          |          |
| 24                                  | A) With application slurry @1.75 kg/Sq.m sand cement mortar (1.4) & 2 mm thick cement slurry at back side of tiles, 0.2 kg/Sq.m white cement for joint filling with pigment. Light Colour.   | Sqm  | R.O.     | 1261.00  |

| Sl. No. | Description of items   | Unit | Quantity | Rate (₹) |
|---------|--|------|----------|----------|
| 25      | Supplying, fitting & fixing granite slabs 15mm to 18 mm. thick with uniform texture & without decorative veins in columns, wall, fascia etc. with 15 mm thick [avg] cement mortar (1:2) including making suitable arrangements to hold the stones properly by brass / copper hooks including pointing in cement mortar (1:2) (1 white cement: 2 marble dust) with admixture of pigment matching the stone shades all complete as per direction of the Engineer-in-charge including cost of all materials, labours, scaffolding, staging, curing and roughening of concrete surface complete. [Using cement slurry at back side of granite @ 4.4 kg/sq.m & white cement slurry for joint filling @ 1.8 kg/sq.m] | Sqm  | R.O.     | 2307.00  |
| 26      | 18 mm to 22 mm. thick Kota stone slab set in 20 mm thick (avg) cement mortar (1:4) in floor, stair & lobby including pointing in cement slurry with admixture of pigment matching the stone shade. Including grinding & polishing as per direction of Engineer-in-charge to match with the existing work [Slurry for bedding @4.4 kg /sq.m and pointing @ 2.0 kg/sq.m and pointing @ 2.0 kg /sq.m]   | Sq.M | R.O.     | 1002.00  |
| 27      | Supplying fitting and fixing Black Stone slab used in Kitchen slab, alcove, wardrobe etc. laid and jointed with necessary adhesive Cement mortar (1:2) including grinding or polishing as per direction of Engineer-in-Charge in Ground Floor. S   |      |          |          |
|         | (a) Slab thickness 20 to 25 mm.  | Sqm  | R.O.     | 642.00   |
|         | (b) Slab Thickness above 25 mm and upto 37.5 mm  | Sqm  | R.O.     | 712.00   |
| 28      | Polishing only of old marble or terrazo work with oxalic acid powder using 33 gms/sqm by manual labour/machine where necessary   | Sqm  | R.O.     | 38.00    |
| 29      | Washing and cleaning with oxalic acid powder using 33 gms./sq.m, Other than marble   | Sqm  | R.O.     | 6.97     |
| 30      | Artificial stone in floor, dado, staircase etc. with cement concrete (1:2:4) with stone chips, laid in panels as directed with tapping made with ordinary or with cement (as necessary) and marble dust in proportion (1:2) including smooth finishing and rounding off corners including ranking out joints or roughening of concrete surface and application of cement slurry before flooring works using cement @ 1.75 kg/sq.m all complete including all materials and labour. In ground floor. 3 mm. thick topping (High polishing grinding on this item is not permitted with ordinary cement).  |      |          |          |
|         | (i) 25 mm thick  | Sqm  | R.O.     | 267.00   |
|         | (ii) 35 mm thick   | Sqm  | R.O.     | 328.00   |
| 31      | Neat cement punning about 1.5 mm thick in wall, dado, window, sills, floor, drain etc.   | Sqm  | R.O.     | 34.00    |
| 32      | Concrete Chowkat with rabbet (in sill of door or window) made with cement concrete (1:2:4) and finished with 15 mm. thick cement plaster (1:4) and neat cement punning complete: In Ground floor, With rabbet on one side 75 mm X 50 mm or 75 mm X 75 mm. section (Cement 3.7Kg/Mtr.)  | Mtr  | R.O.     | 67.00    |
| 33      | (a) Scraping and removing greasy soot from walls or ceiling of kitchen or similar smoke affected rooms and preparing the surface.  | Sqm  | R.O.     | 11.00    |

| Sl. No. | Description of items   | Unit | Quantity | Rate (₹) |
|---------|--|------|----------|----------|
|         | (b) Scraping of moss, blisters etc. thoroughly from exterior surface of walls necessitating the use of scraper, wire brush etc. (Payment against this item will be made only when this has been done on the specific direction of the Engineer-in-charge)  | Sqm  | R.O.     | 7.00     |
| 34      | Removing old scales, blisters etc. of interior surface of walls, ceiling by scraping etc. and preparing smooth and even surface with rendering or cement mortar (1:2) (as necessary), to make the surface suitable for receiving distemper. (Payment against this item will be made only when this has been done on the specific direction of the Engineer-in-charge). | Sqm  | R.O.     | 10.08    |
| 35      | White washing including cleaning and smoothing surface thoroughly. All floors: One coat  | Sqm  | R.O.     | 13.09    |
| 36      | Colour washing with "ELLA" with a coat of white wash priming including cleaning and smoothing surface thoroughly: Internal (all floors). One Coat  | Sqm  | R.O.     | 14.37    |
| 37      | Applying interior grade Acrylic Primer of approved quality and brand on plastered or concrete surface old or new surface to receive distemper / Acrylic emulsion paint including scraping and preparing the surface thoroughly, complete as per manufacturer's specification and as per direction of the EIC. One Coat, Water based interior grade Acrylic Primer      | Sqm  | R.O.     | 30.80    |
| 38      | Acrylic Distemper to interior wall, ceiling without primer (as per manufacturer's specification) including cleaning and smoothing of surface - Two Coats   | Sqm  | R.O.     | 39.20    |
| 39      | Applying Acrylic Emulsion Paint of approved make and brand on walls and ceiling including sand papering in intermediate coats including putty (to be done under specific instruction of Engineer-in-Charge): (Two coats), Standard Quality   | Sqm  | R.O.     | 62.00    |
| 40      | Rendering the surface of walls and ceiling with white cement based wall putty of approved make and brand (1.5mm thick)   | Sqm  | R.O.     | 110.00   |
| 41      | Applying Exterior grade Acrylic primer of approved quality and brand on plastered or concrete surface old or new surface to receive decorative textured (matt finish) or smooth finish acrylic exterior emulsion paint including scraping and preparing the surface thoroughly, complete as per manufacturer's specification and as per direction of the EIC. One Coat | Sqm  | R.O.     | 31.40    |
| 42      | Protective and Decorative Acrylic exterior emulsion paint of approved quality, as per manufacturer's specification and as per direction of EIC to be applied over acrylic primer as required. The rate includes cost of material, labour, scaffolding and all incidental charges but excluding the cost of primer. (Two Coat),   |      |          |          |
|         | a) Normal Acrylic Emulsion.  | Sqm  | R.O.     | 67.00    |
| 43      | a) Priming one coat on timber or plastered surface with synthetic oil bound primer of approved quality including smoothing surfaces by sand papering etc.  | Sqm  | R.O.     | 38.00    |
|         | (b) Priming one coat on steel or other metal surface with synthetic oil bound primer of approved quality including smoothing surfaces by sand papering etc.  | Sqm  | R.O.     | 29.00    |
| 44      | Painting with best quality synthetic enamel paint of approved make and brand including smoothing surface by sand papering etc. including using of approved putty etc. on the surface in necessary.   |      |          |          |
|         | a) On timber or plastered surface: One Coat (with any shade except white)  | Sqm  | R.O.     | 52.00    |
|         | b) On timber or plastered surface: Two Coat (with any shade except white)  | Sqm  | R.O.     | 78.00    |
|         | c) On steel or other metal surface: One coat (with any shade except white)   | Sqm  | R.O.     | 49.00    |

| Sl. No. | Description of items   | Unit | Quantity | Rate (₹) |
|---------|--|------|----------|----------|
|         | d) On steel or other metal surface: Two coat (with any shade except white)   | Sqm  | R.O.     | 77.00    |
| 45      | (a) Applying 2 coats of bonding agent with synthetic multi functional rubber emulsion having adhesive and water proofing properties by mixing with water in proportion (1 bonding agent: 4 water:6 cement) as per Manufacturer's specification (Cement not to be supplied by the Department)   | Sqm  | R.O.     | 88.00    |
|         | (b) Applying 2 coats of Non-Toxic Acrylic Polymer modified Paint having adhesive & waterproofing properties by mixing in proportion (1 liquid: 4 cementitious material) or as per manufacturer's specification for water proofing layer in water tank etc. (No Departmental Cement is required)  | Sqm  | R.O.     | 257.00   |
| 46      | Removal of existing treatment such as old terfelt etc. throughly the surface using blower etc. and providing and laying A.P.P. (Atactic polypropylene polymer) modified prefabricated 4mm thick watwer proofiing membrane (Hydroflame, Dr. Fixit, Texsa or equivalent), black finished reinforced with non-woven polyester matt. consisting of a coat of bitumen primer for bitumen membrane @ 0.40 lit/sq.m by the same membrane manufacture of dencity of 25° C 0.87-0.89 kg/lit. and viscosity 70-160 cps over the primer coat the layer of membrane shall be laid using Butane Torch and ceiling all joints etc. and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be: joint strength in longitudinal and transverse direction at 23° C as 650/450 N/5cm. Tear strength in longitudinal and transeverse direction at 300/250 N. shoffing point of membrane not less than 150° C Cold flexibility shall be upto 2° C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane. 4 mm thick. (Work should be guaranted for 10 years). | Sqm  | R.O.     | 466.00   |
| 47      | Painting of Oxidised bitumenus anti corrotive water proofing paint with aluminium finish over APP surface.   | Sqm  | R.O.     | 46.00    |
| 48      | Brick edging 75mm wide with picked jhama bricks, laid true to line & level including cutting necessary trenches in soil or in hard metalled surface, laying the bricks & repacking the trenches (on both sides of the edging) with spoils & ramming the surface thoroughly, complete as per direction. Brick-on-edge edging (125mm) depth.   | Mtr. | R.O.     | 45.70    |
| 49      | Single brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand  | Sqm  | R.O.     | 343.00   |
| 50      | Supplying fitting and fixing chicken mess of approved quality in floor, wall, dado, plinth protection etc. as areinforcement fixing with nails if necessary as par direction of Engineer -In-Charge.   | Sqm  | R.O.     | 43.69    |
| 51      | a) Repairing cracks in floor with cement mortar (1:2) with necessary pigment to match with existing works, including prior cutting and cleaning the cracks as directed.  | Mtr  | R.O.     | 6.82     |
|         | b) Repairing crack in wall by cement grouting (1:2) including widening the crack on the surface (into V section) cleaning and packing the same with cement mortar (1:2) and finishing off to match with adjacent surface. (Cement - 69 Kg/ 100 m)  | Mtr  | R.O.     | 13.01    |
| 52      | (a) Supplying best Indian sheet glass panes set in putty and fitted and fixed with nails and putty complete (in all floors for internal wall & upto 6 m height for external wall) 4 mm thick   | Sqm  | R.O.     | 536.00   |
|         | (b) Supplying bubble free float glass of approved make and brand conforming to IS: 2835-1987.6mm thick clear glass.  | Sqm  | R.O.     | 608.00   |
| 53      | Renewing worn out putty of glass panes: Panes not exceeding 0.2 Sq.m   | Each | R.O.     | 33.00    |

| Sl. No. | Description of items  | Unit | Quantity | Rate (₹) |
|---------|---|------|----------|----------|
| 54      | Cleaning and removing paint mark from glass pane with spirit and removing strains etc. Note:- Add 5% extra for each 6 Mtr. height or part thereof beyond the initial height of 6 Mtr..This extra rates is applicable for external works. For maintenance work, 20% extra on the rate of corresponding item to be added.   | Sqm  | R.O.     | 17.00    |
| 55      | Making one set of scaffolding only for replacing glass panels, painting, uprooting plant and another repairing works of building and S&P works for external works only with 10 cm. dia bamboo as main posts at the rate of 1 metre centre to centre and 7.5 cm. dia bamboo ties @ 0.75 metre apart fitting and fixing with necessary coir, nails etc. as per direction of the Engineer-in-charge. |      |          |          |
|         | a) 3.90 metre height  | Each | R.O.     | 279.00   |
|         | b) Extra for additional 3.6 height or part thereof  | Each | R.O.     | 245.00   |
| 56      | Iron butt hinges of approved quality fitted and fixed with steel screws, with ISI mark.   |      |          |          |
|         | i) 75mm X 40mm X 1.12mm   | Nos  | R.O.     | 28.00    |
|         | ii) 100mm X 50mm X 1.25mm   | Nos  | R.O.     | 43.00    |
| 57      | Iron catch hook of approved quality fitted and fixed to shutter and chowkat.  |      |          |          |
|         | a) 6mm dia X 100 mm long  | Each | R.O.     | 36.00    |
|         | b) 6mm dia x 225mm long   | Each | R.O.     | 64.00    |
| 58      | Iron socket bolt of approved quality fitted and fixed complete.   |      |          |          |
|         | i) 150mm long X 10mm dial bolt.   | Each | R.O.     | 63.00    |
|         | ii) 300mm long X 10mm dia bolt.   | Each | R.O.     | 95.00    |
| 59      | Iron hasp bolt of approved quality fitted and fixed complete (oxidised) with 16mm dia rod with centre bolt and round fitting. 300mm long  | Each | R.O.     | 166.00   |
| 60      | Iron door handle or approved quality fitted and fixed complete: 100mm X 5mm   | Each | R.O.     | 40.00    |
| 61      | (a) Door stopper.(Brass)  | Each | R.O.     | 177.00   |
|         | (b) Door stopper (Anodised aluminium)   | Each | R.O.     | 70.00    |
|         | (c) Steel body foot-door holder.  | Each | R.O.     | 67.00    |
| 62      | Hydraulic door closer of approved quality as per I.S.I. standard fitted and fixed complete.   |      |          |          |
|         | a) Medium type (I.S.I. size 2)  | Each | R.O.     | 1366.00  |
| 63      | Supplying Godrej mortice lock chromium plated with keys 4 levers, including fitting and fixing complete.  | Each | R.O.     | 1081.00  |
| 64      | Supplying 4 lever mortice lock of any approved make and brand as per direction of the Engineer-in-Charge. 100 mm  | Each | R.O.     | 212.00   |
| 65      | Anodised aluminium barrel /tower /socket-bolt (full covered of approved manufactured from extruded section conforming to I.S. 204/74 fitted and fixed with cadmium plated screws.   |      |          |          |
|         | i) 150mm long X 10mm dia. bolt.   | Each | R.O.     | 53.00    |
|         | ii) 225mm long X 10mm dia. bolt.  | Each | R.O.     | 84.00    |
| 66      | Anodised aluminium Aldrop /Sliding boots of approved quality manufactured from extruded section conforming to I.S specification (I.S. 2681/66) fitted and fixed complete. 250mm long X 16mm dia. bolt.  | Each | R.O.     | 233.00   |
| 67      | Anodised aluminium D-type handle of approved quality manufactured from extruded section conforming to I.S. specification (I.S. 230/72) fitted and fixed complete. With continuous plate base (Hexagonal /Round rod) 150mm grip X 10mm dia. bolt.  | Each | R.O.     | 97.00    |
| 68      | Helical door spring hinge of approved quality fitted and fixed complete.Iron (Heavy type). 125mm size.  | Each | R.O.     | 177.00   |

| Sl. No. | Description of items   | Unit | Quantity | Rate (₹) |
|---------|--|------|----------|----------|
| 69      | Supplying heavy duty hydraulic double action floor spring along with top pin/set of pivots conforming to IS: 6315 or any approved make as per direction of Engineer in charge.   | Each | R.O.     | 1729.00  |
| 70      | Providing and fixing PVC Door Frame of size 50x47mm with a wall thickness of 5mm ( $\pm 0.2$ mm) made out of single piece extruded PVC profile, with mitred cut joint sand joint with 2 nos. of PVC bracket of size 190 mm x 100 mm long arms of cross section size 35 mm x 15 mm & self driven self tapping screws, the vertical door profiles to be reinforced with 40x20mm M.S. rectangular tube of 0.8 mm, including providing EPDM rubber gasket weather seal throughout the frame, including jointing 5 mm PVC frame strip with PVC solvent cement on the back of the profile. The doorframe to be fixed to the wall using 8 x100mm long anchor fasteners complete, all as per manufacturer's specification and direction of Engineer -in- charge.   | Mtr  | R.O.     | 445.00   |
| 71      | a) PVC Door Shutter-37 mm thick: Supplying fitting and fixing P.V.C.door shutter of approved quality & shade in position, the style & rail of the P.V.C. Door shutter will be made of rigid P.V.C multicavity hollow chamber of suitable size and section with 2.0mm ( $\pm 0.2$ mm) wall thickness, the section will have 2 nos. built in beads, horizontal & vertical section shall be fixed to each other by self tapping screws and 2 nos. of solid plastic or M.s tubular galvanized brackets of length 200mm X 80mm and other 100mm X 100mm both 1.20 mm in each corner of the shutter frame for placing hinges. Polymer based multicavity hollow section of 105mm X 37mm with 2.0mm ( $\pm 0.2$ mm) wall thickness will be fitted in the middle as lock rail reinforced by solid polymer bar of 200mm long at ends & screws for both sides. the section frame will then be fitted in by prepanels of size 100mm X 20 mm with wall thickness 1.2mm ( $\pm 0.2$ mm) and 2 nos of 6mm dia bright rod will be inserted horizontally with both side check and nut system and stretches where fixing of hinges /hasp bolt/tower bolt/door ring are required to be strong enough to with stand wear and tear. the rate is inclusive of cost of all materials, labour, and hire of tools and plants and appliances. Carriage of all materials taxes and all other incidental charges complete. The rate is exclusive of cost of hinges, hasp bolt, tower bolt, door ring etc. In ground floor | Sqm  | R.O.     | 2287.00  |
| 72      | b) PVC Door Shutter-30 mm thick:Supplying fitting and fixing P.V.C.door shutter of approved quality & shade in position, the style & rail of the P.V.C. Door shutter will be made of rigid P.V.C multicavity hollow chamber of 59 mm X 30 mm section with 2.0mm ( $\pm 0.2$ mm) wall thickness, horizontal & vertical section shall be fixed to each other by self tapping screws and one solid polymeric / M.s tubular galvanized L-Shaped brackets 100mm X 200mm in each corner of the shutter frame for placing hinges. Polymer based multicavity hollow section of 120mm X 30mm with 2.0mm ( $\pm 0.2$ mm) wall thickness will be placed in the middle reinforced by solid polymer bar of 200mm long at ends & screws for both sides. the section frame will then be fitted in by PVC panels of size 100mm X 25 mm with wall thickness 1.2mm ( $\pm 0.2$ mm) and 2 nos of 6mm dia bright rod will be inserted horizontally with both side check and nut system and stretches where fixing of hinges /hasp bolt/tower bolt/door ring are required to be strong enough to with stand wear and tear. the rate is inclusive of cost of all materials, labour, and hire of tools and plants and appliances. Carriage of all materials taxes and all other incidental charges complete. The rate is exclusive of cost of hinges, hasp bolt, tower bolt, door ring etc.   | Sqm  | R.O.     | 2117.00  |

| Sl. No. | Description of items   | Unit | Quantity | Rate (₹) |
|---------|--|------|----------|----------|
| 73      | Supplying solid flush type doors of commercial quality, the timber frame consisting of top and bottom rails and side styles of well seasoned timber 65mm wide each and the entire frame fitted with 37.5mm wide battens places both ways in order to made the door of solid core and internal lipping with Garjan or similar wood veneers using phenol formaldehyde as glue etc. complete, including fitting, fixing the shutters in position but excluding the cost of hinges and other fittings in ground floor. 35 mm thick shutters (single leaf). | Sqm  | R.O.     | 2659.00  |
| 74      | Wood work in door and window frame fitted and fixed in position complete including a protective cost of painting at the contact surface of the frame excluding cost of concrete, iron Butt Hinges and M.S. clamps. (The quantum should be corrected upto three decimals). Sal: local   | Cum  | R.O.     | 72954.00 |
| 75      | Rough dressed timber planks fitted and fixed with nut bolts excluding framework complete. In Ground floor 25 mm thick planks Sal local.  | Sqm  | R.O.     | 1503.00  |
| 76      | Glazed shutters of doors window, fan light, clerestory windows etc. As per design (with ordinary glass of 7.4kg /sq.m. 3mm Thick) fitted with putty bad and teak wood bead and nails including fitting and fixing shutter in position but excluding the cost of hinges and other fittings, cost of glass, putty, wooded beads etc. which will be paid separately. In Ground floor 35mm thick shutters. Sishu, Gamar, Champ, Badam, Bhola, Mogra, Hallak.   | Sqm  | R.O.     | 2642.00  |
| 77      | Styles and rails of wooden shutters fitted and fixed complete. (Payment to be made on area of new work only). In Ground Floor: 35m Thick shutter. Sishu, Gamar, Champ, Badam, Bhola, Mogra, Hallak.  | Sqm  | R.O.     | 2178.00  |
| 78      | Panel (Made of single plank) of door and window shutters to design as directed: in Ground Floor, 19mm Thick panel of 30cm to 45cm width with Sishu, Gamar, Champ, Badam, Bhola, Mogra, Hallak.   | Sqm  | R.O.     | 1118.00  |
| 79      | Panel shutters of door and window, as per design (each panel consisting of single plank without joint). Including fitting and fixing the same in position but excluding the cost of hinge and other fittings. (In case of non-supply of single plank, panel rate of reduction of 20% will be made) 35mm thick shutters with 19mm thick panel of size 30 to 45 Cm. Champ, Hallok, Sisu, Badam.  | Sqm  | R.O.     | 2789.00  |
| 80      | Z-batten shutters of door and window as per design havings tongued and groove-half lap jointed as per direction of the Engineer-in -charge including fitting and fixing shutter in position, but excluding the cost of hinges and other fittings in ground floor. Shutter with 25mm thick planks, 19mm thick battens. Sishu, Gamar, Champ, Badam, Bhola, Morga, Hallak.  | Sqm  | R.O.     | 2616.00  |
| 81      | Supplying fitting and fixing I.R.C. fabric mesh with covering battens including cost of screws etc complete (excluding the cost of battens).(a) 50mm x 25mm x 2.7mm x 2.7mm.   | Sqm  | R.O.     | 237.00   |
| 82      | Supplying, fitting, Fixing Fly / Mosquito proof net on any type of window, door shutter frame with necessary fixing arrangements complete.   | Sqm  | R.O.     | 834.00   |
| 83      | Taking out shutter of door and window, dismantling by parts (For repair or replacement of damaged parts), reassembling and refitting and rehanging same with old fittings but with new screws as necessary (Where different parts of same shutter are renewed under different item, payment under item 73 will be made once only).   | Sqm  | R.O.     | 126.00   |

| Sl. No. | Description of items  | Unit | Quantity | Rate (₹) |
|---------|---|------|----------|----------|
| 84      | Taking out M.S. or W.I. Grills from wooden frame including cutting lungs from masonry wall and refitting the same and mending good damages after repairs. (Excluding the cost of necessary repair of damages) or doing any other necessary works.   | Each | R.O.     | 99.00    |
| 85      | Renewing steel plated or oxidised casement stay or peg stay of steel window frames including painting two coats with approved paint complete.   | Each | R.O.     | 71.00    |
| 86      | Renewing two point steel plated or (oxidised) handle of steel doors and windows as directed including painting complete.  | Each | R.O.     | 66.00    |
| 87      | Renewing M.S. clamps for door and window frame made of flat bent bar, end bifurcated with necessary screws etc. in cement concrete (1:2:4) including cutting of brick work/concrete work as per direction (Cost of concrete will be paid separately) 40mm X 6mm, 125mm Length   | Each | R.O.     | 38.00    |
| 88      | Renewing hinged cleat with old hinge and new screws. Local Sal  | Each | R.O.     | 40.00    |
| 89      | MS or W.I. Ornamental grill of approved design joints continuously welded with M.S., W.I Flats and bars of windows, railing etc. fitted and fixed with necessary screws and lugs in ground floor.   |      |          |          |
|         | (i) Grill weighing above 10 Kg./Sq.Mtr and up to 16 Kg./Sq.Mtr.   | Kg   | R.O.     | 72.38    |
|         | (ii) Grill weighing above 16 Kg./Sq.Mtr and above   | Kg   | R.O.     | 70.46    |
| 90      | Supplying, fitting and fixing windows and ventilators with or without integrated grills conforming to IS 1038-1975 and manufactured from rolled steel sections conforming to IS 7452-1974 with non friction projecting type, box type hinges, glazing clips, lungs locking bracket, handle plate etc, including hoisting in position. straightening if required. fixing lungs in cement concrete (1:2:4) with stone chips 20 mm down cutting holes and mending good damages to match with existing surface complete in al respect excluding glazing. Openable steel windows as per IS sizes with side hung shutters and horizontal glazing bars with /without fixed type ventilators. | Sqm  | R.O.     | 1663.00  |
| 91      | Partition of Commercial ply as per design fitted and fixed complete (excluding the supporting framework but including necessary teak wood battens of size 40mm X 25 mm).  |      |          |          |
|         | 4 mm thick ply  | Sqm  | R.O.     | 589.00   |
|         | 6 mm thick ply  | Sqm  | R.O.     | 746.00   |
| 92      | French polishing to wood work including preparing surface (ordinary gloss)  |      |          |          |
|         | (a) On new wood work  | Sq.M | R.O.     | 467.00   |
|         | (b) On old French polished surface including complete removal of the old polish.  | Sq.M | R.O.     | 538.00   |
| 93      | Easing door and windows.  | Each | R.O.     | 17.00    |
| 94      | Labour for taking out door and window frame including shutter for repair or replacement of different parts of the frame & prefixing the same including mending good all damages complete. (Concrete and brick work for mending damage will be paid separately) Upto area 2.5 Sq.m   | Sqm  | R.O.     | 119.00   |
| 95      | Taking out door and window shutters and rehangng the same with old fittings. With new iron screws.  | Sqm  | R.O.     | 78.00    |
| 96      | Supplying 1.5 mm thick M.S. sheet fitted and fixed one or both faces of M.S./ W.I. gate etc. with point welding at not more than 150 mm apart complete in all respect as per design including cost of all labour and materials.   | Sq.m | R.O.     | 977.00   |
| 97      | Repairing collapsible gate by cutting out all rivets as necessary re-assembling all members including welding pieces of channels, straightening bent bars and rivetting with new rivets and fitting in position and painting two coats.   | Sqm  | R.O.     | 379.00   |



| Sl. No. | Description of items   | Unit | Quantity | Rate (₹) |
|---------|--|------|----------|----------|
| 98      | Easing and oiling, cleaning collapsible gate and repairing to locking arrangements.  | Sqm  | R.O.     | 17.00    |
| 99      | labour for taking out rolling shutter (only shutter portion) dismantling by parts for repair or (replacement of damaged parts only), rehangng and refitting the same in position after necessary repairs (excluding the cost of supply of new parts).  | Sqm  | R.O.     | 283.00   |
| 100     | Renewing seam pipe for rolling shutter as per existing size and shape fitting, fixing complete.  | Mtr  | R.O.     | 210.00   |
| 101     | Renewing spring of rolling shutter as per existing size and shape including fitting fixing complete.   | Each | R.O.     | 609.00   |
| 102     | Renewing side split pin for seam pipe for rolling shutter  | Each | R.O.     | 26.00    |
| 103     | Oiling and greasing of rolling shutter and repair to in side lock.   | Sqm  | R.O.     | 73.00    |
| 104     | Renewing profile of rolling shutter including fitting & fixing complete as per existing size and shape.  | Mtr  | R.O.     | 54.00    |
| 105     | Easing and oiling, cleaning rolling shutters excluding repair to inside locks.   | Sqm  | R.O.     | 12.00    |
| 106     | Partition of Commercial ply as per design fitted and fixed complete (excluding the supporting framework but including necessary teak wood battens of size 40mm X 25 mm): In Ground floor. 4mm thick  | Sqm  | R.O.     | 589.00   |
| 107     | Supplying, fitting & fixing High Pressure steam Cured Non Asbestos fibre cement standard ceiling board (Density > 1300Kg per Cu.m.) of size 595mmX595mm conforming IS 14862 and type B, catagory III of ISO 8336, tested as per AS-1530 Part 3 and BS-476 Part 4,5,6,7 & 8, should be placed in the Grid module to form a false ceiling all complete as per drawing & direction of Engineer - in- Charge. False ceiling with: 6mm thick Fibre Cement Standard ceiling board. | Sqm  | R.O.     | 296.00   |
| 108     | Providing high impact Polypropylene reinforced cement 6 mm thick corrugated sheets (as per IS: 14871) roofing up to any pitch and fixing with polymer coated J, or L hooks, bolts and nuts 8 mm dia. G.I. plain and bitumen washers or with self drilling fastener and EPDM washers etc. complete (excluding the cost of purlins, rafters and trusses), including cutting sheets to size and shape wherever required.  | Sqm  | R.O.     | 367.85   |
| 109     | Galvanised corrugated iron sheet work (excluding the supporting frame work) fitted and fixed with 10 mm dial J or L hook-bolts, limpet and bitumen washers and putty complete with 150 mm. end lap and one corrugation minimum side lap. (Payment to be made on area of finished work) (GCI sheet to be supplied by contractor) In Roof With 0.63 mm thick sheet   | Sq.M | R.O.     | 644.00   |
| 110     | Supplying, fitting and fixing glass reinforced polyester translucent fiber glass sheet to match with GCI Corrugation as per IS: 12866-1989 in roof fitted and fixed with 10 m dial "J" or "L" hook, bolts and nuts, limpet and bitumen washers and putty with 150 mm end lap and one corrugation minimum side lap complete. 2.0 mm +/- 0.2 mm thick sheet (3.25 kg/ Sq.m) with   |      |          |          |
|         | i) Natural white or tinted blue colour   | Sqm  | R.O.     | 883.00   |
|         | ii) Coloured other than natural white or tinted blue   | Sqm  | R.O.     | 959.00   |
| 111     | Supplying, fitting and fixing glass reinforced polyester translucent ridging 450 mm long each way as per IS 2866-1989 fitted and fixed with bolts J hooked screws and bitumen washers complete.1.6 mm +/- 0.2 mm thick sheet., Coloured other than natural white or tinted blue  | Mtr  | R.O.     | 832.00   |
| 112     | Supplying at site or stackyard or as directed PCC (1:2:4) Fencing Post 215 cm 150 mm X 150 mm section at bottom 100 mm X 100 mm section at top with T-Base 300mm X 150 mm X 100 mm, having 4 nos 6 mm dial vertical M.S reinforcement and 6 mm dial binders @ 200 mm centres finished smooth etc. complete.  | Each | R.O.     | 448.00   |

| Sl. No. | Description of items  | Unit | Quantity | Rate (₹) |
|---------|---|------|----------|----------|
| 113     | Fixing post of iron or precast concrete by digging hole in the ground (in all sorts of soil) and embedding the same by packing the hole with cement concrete (1:3:6) (with jhama khoa. For Purulia, Bankura and Darjeeling Hill by Pakur Variety, local black Hard Stone & Bazree respectively) and finishing the top surface to regular shape (as directed) with 15 cm cement plaster (1:6) complete, including the cost of concrete, plaster etc. but excluding the cost of the post: Average dial. Of the hole 200 mm to 300 mm. Depth 450 mm to 500 mm. | Each | R.O.     | 158.00   |
| 114     | Labour for repairs to snapped line of wire by jointing snapped ends with links of new wire as necessary, stretching and refixing the line in taut condition (excluding the cost of new materials) Barbed wire   | Mtr. | R.O.     | 1.45     |
| 115     | a) Supplying, fitting galvanised 3 ply 12 gauge / 4 points line of barbed wire in fencing (holes already made in the body of the post) or fixed by staples tightening and fixing the wires in taut condition with straining bolts including the cost of cutting and of lapping joints in the wire as necessary but excluding the cost of galvanised staples straining bolt and binding wire where necessary.  | Mtr  | R.O.     | 27.68    |
| 116     | Supplying, fitting and fixing boiling water resistant ply conforming to IS: 303-1989 bonded with phenol formaldehyde synthetic resin of approved make and brand fitted and fixed as per design as per approval and direction of Engineer-in-Charge.[excluding the cost of supporting frame work and teak wood batten/Lipping].  |      |          |          |
|         | (i) 4mm   | Sqm  | R.O.     | 923.00   |
|         | (ii) 6mm  | Sqm  | R.O.     | 1122.00  |
|         | (iii) 9mm   | Sqm  | R.O.     | 1290.00  |
|         | (iv) 12mm   | Sqm  | R.O.     | 1709.00  |
|         | (v) 19mm  | Sqm  | R.O.     | 2420.00  |
| 117     | Supplying, fitting & fixing UPVC pipes A - Type and fittings conforming to IS: 13592-1992 with all necessary clamps nails including making holes in walls, floor etc. cutting trenches in any soil through masonry concrete structures etc if necessary and mending good damages including joining with jointing materials (Spun Yarn, Valamoid/Bitumen/M-Seal etc) complete.   |      |          |          |
|         | a) UPVC Pipes:: 75 mm Dia.  | Mtr. | R.O.     | 188.00   |
|         | b) UPVC Pipes:: 110 mm Dia.   | Mtr. | R.O.     | 251.00   |
|         | c) UPVC Bend 87.5 degree,75 mm. Dia.  | Nos  | R.O.     | 95.00    |
|         | d) UPVC Bend 87.5 degree, 110 mm Dial.  | Nos  | R.O.     | 160.00   |
|         | (e) UPVC Fittings:Plain Tee 110 mm. Dia.  | Nos  | R.O.     | 172.00   |
|         | (f) Shoe: 110 mm. Dia.  | Nos  | R.O.     | 111.00   |
| 118     | Taking out rain water down pipes, removing chokages and prefixing the same in position including mending good damages (of taking out and refixing)  | Mtr  | R.O.     | 12.00    |
| 119     | Taking out rain water down pipe.  | Mtr  | R.O.     | 8.95     |
| 120     | Supplying, fitting, fixing C.I Grating (Heavy type). Up to 100 mm Square or 100 mm Dia.   | Each | R.O.     | 69.00    |
| 121     | Providing & fixing of 600 x 450mm mirror of superior glass (of approved) complete with 6mm thick hard board ground fixed to wooden cleats with CP brass screws & washers complete.  | Each | R.O.     | 619.00   |
| 122     | Metallic magic eye of approved quality fitted and fixed complete.   | Each | R.O.     | 54.00    |

| Sl. No. | Description of items   | Unit | Quantity | Rate (₹) |
|---------|--|------|----------|----------|
| 123     | Supplying & laying as per IRC-SP:063-2004 paver unit of any shade of approved quality as per relevant IS code, laid in pattern as irected in pavement, footpath, driveway (paver block only), etc including necessary underlay complete in all respect with all labour and material. [Border concrete if necessary to be paid separately]. Note: Sub-grade CBR should not be less than 5.50 mm thick interlocking designer concrete paver block M- 30 grade for non- raffic zone,buiding premises,garden,parks,domestic drive as per IS: 15658-2006(over 20-30 mm medium sand bed on 200mm thk bound gnular /granular base course including cost of sand for sand bed but excluding cost of base course & subgrade preparation.) Grey  | Sqm  | R.O.     | 901.00   |
| 124     | Anti-termite treatment to the junction of wood work and masonry walls with chemical emulsion by admixing chloropyrofos emulsifiable concentrates (1% concentration) with water by weight including spraying at the points of contact with the adjoining masonry by drilling 6m. dia holes at a downward angle of about 45 degree at the junction of woodwork and masonry and squirting chemical emulsion into these holes at the rate of half litre per hole. The entire work is to be carried out as per specification of Code I.S.- 6313 (Part-III)-1981. The shutters are to be sprayed with emulsion. on both sides. All wooden fixtures like almirahs, racks etc. are also to be throughly sprayed with chemical emulsion. (Payment will be made on the basis of outside measurements of doors and windows) | Sq.M | R.O.     | 61.00    |
| 125     | Anti termite treatment to the top surface of the consolidated earth within plinth walls with chemical emulsion by admixing chloropyrofos emulsifiable concentrates (1% concentration) with water by weight at the rate of 5 Litres per sq. m. of the surface before sand bed or sub-grade is laid. Holes upto 50 mm. to 75 mm. deep at 150 mm. centre to centre both ways shall be made with 12 mm, diameter mild steel rod on the surface to facilitate saturation of the soil with the chemical emulsion. The work shall be carried out as per specification described in para 6.4 of code IS-6313 (part -II) 1981. (Mode of measurment will be per Sq.m of plan area of plinth treated.)  | Sq.M | R.O.     | 110.00   |
| 126     | Spot application for insecticides using Aqua base spray for pest (for bugs, cockroaches, silverfish, spider, termites, mosquitoes) to walls and ceiling etc. with chemical emulsion by admixing chloropyrofos emulsifiable concentrates (1% concentration) with water by weight including spraying the emulsified chemical @ 0.5 litres per sq.m. by a hand operated pressure pump on wall surfaces, ceiling, electrical fixture,electrical lines including drilling holes inplaces where source of termite is detected squirting chemical solution into the holes and sealing the holes with cement grout. (Rate is per sq.m. of the floor area while actual work will be all walls ceiling, rack, partition and furniture).  | Sq.M | R.O.     | 49.00    |
| 127     | Removal of rubbish,earth etc. from the working site and disposal of the same beyond the compound, in conformity with the Municipal / Corporation Rules for such mdisposal, loading into truck and cleaning the site in all respect as per direction of Engineer in charge.   | Cum  | R.O.     | 166.00   |

| Sl. No. | Description of items  | Unit  | Quantity | Rate (₹) |
|---------|---|-------|----------|----------|
| 128     | Providing and fixing 15mm dia. Specially traded nozzles in a grid pattern at a spacing not exceeding 1.2 Mtr. C/C on the entire raft and walls and also along the construction joints and regular intervals not exceeding 1.5 Mtr injecting non- shrink grouting compound mixed with neat cement slurry through the nozzles under pressure by pumps till refusal and sealing of the nozzles after the completion of the injection operation is completed and as per direction of the EIC. | Sqm   | R.O.     | 345.68   |
| 129     | Asbestos corrugated (Trafford or similar approved quality) sheet (6 mm thick) work (excluding the supporting framework) fitted and fixed with 9.5 mm. dia. J or L hook-bolt and nuts limpet and bitumen washers and putty with 150 mm end lap & one corrugation minimum side lap complete. (Payment should be made on area of finished work). In Roof   | Sqm   | R.O.     | 471.00   |
| 130     | Supply of Labour - Mazdoor (Male)   | Each  | R.O.     | 269.50   |
| 131     | Filling up the joints of marble or granite stone etc. of statues after chiselling out joints including grouting with cement mortar (1:3) with white cement carefully (with cement gun) and matching colour with necessary pigment.  | Metre | R.O.     | 30.00    |
| 132     | Supplying and laying Door mat of approved quality and brand as per decision & direction of Engineer-in-Charge.  | Sq.M  | R.O.     | 1619.44  |
| 133     | Taking out carefully from shutter existing broken glass panes, cutting the same to smaller and utilising the same, small pane including cost of fitting and fixing.   |       |          |          |
|         | (a) Putty and Nails   | Each  | R.O.     | 18.00    |
|         | (b) With Teak wood Beads and Nails  | Each  | R.O.     | 33.00    |
| 134     | Stitching crack in brick wall by carefully cutting out face brick 125 mm. deep into the wall, cleaning the gap and filling up the same with precast cement concrete block carefully set in cement mortar (1:3) including mending good damages and finishing the surface to match with adjacent areas complete as per direction.   |       |          |          |
|         | (i) With plain cement concrete blocks(1:1½:3) with stone chips.   |       |          |          |
|         | (a) Block size 250 x 125 x 75 mm.(Cement-1.85 Kg/No.)   | Each  | R.O.     | 85.00    |
|         | (b) Block size 250 x 125 x 150 mm.(Cement-2.5 Kg/No.)   | Each  | R.O.     | 99.00    |
|         | (ii) With reinforced cement concrete blocks (1:1½:3) with stone chips and nominal reinforcement.  |       |          |          |
|         | (a) Block size 250 x 125 x 75 mm.(Cement-1.85 Kg/No.)   | Each  | R.O.     | 105.00   |
|         | (b) Block size 250 x 125 x 150 mm.(Cement-2.5 Kg/No.)   | Each  | R.O.     | 125.00   |
| 135     | Expansion joint in floor roof etc. formed with V strips made of 22.5 cm wide strips of 24 gauge aluminium sheets with anchor arm projecting on each side (and end turned) embedded in adjacent cement concrete, including shaping and finishing the edges on either side of the joint (including the cost of bituminous filler if any) complete as per direction of Engineer-in-Charge.   | Mtr.  | R.O.     | 325.00   |
| 136     | Bituminous filler of approved type in expansion joints of dummy joints including finishing the top surface as directed.   | Cu.M  | R.O.     | 46603.00 |
| 137     | Labour for taking out (from fencing) line of wire (galvanised, strand or barbed) including the cost of taking out staples (by cutting or otherwise, as necessary).  | Mtr.  | R.O.     | 1.28     |
| 138     | Supplying, fitting, fixing G.I chain link fencing 75 mm x 75 mm mesh 12 g wire to the R.C.C or wooden posts with galvanised hooks or staples etc. complete as per direction.  | Sq.M  | R.O.     | 169.00   |
| 139     | Taking out carefully G.C.I. or C.I. or asbestos sheets (including ridges etc.) from roof or wall after unscrewing bolts, nuts, screws etc.and stacking the material at site as directed   | Sq.M  | R.O.     | 41.00    |

| Sl. No. | Description of items  | Unit | Quantity | Rate (₹) |
|---------|---|------|----------|----------|
| 140     | Labour for scrapping and picking up old dilapidated mortar / plaster (Cement / Surki / Lime mortar) from the surface of old Brick faces including cleaning the frog without damaging the Brick and stacking the Bricks at Site / Stacking yard as per direction of Engineer-in-charge including removing all debris rubbish from site complete. | Nos  | R.O.     | 0.95     |
| 141     | Repairing cracks in floor with cement mortar (1:2) with necessary pigment to match with existing works, including prior cutting and cleaning the cracks as directed.  | Mtr. | R.O.     | 6.82     |
| 142     | Labour for setting tiles in floor / pavement in cement mortar (1: 4) joints finished with white cement.   | Sq.M | R.O.     | 98.00    |
| 143     | Labour for repairs to snapped line of wire by jointing snapped ends with links of new wire as necessary, stretching and refixing the line in taut condition (excluding the cost of new materials).Barbed wire   | Mtr. | R.O.     | 1.45     |
| 144     | Taking out door shutter and rehangng the same by fixing aluminium sheet [0.457 mm] with proper nail etc.  | Sq.M | R.O.     | 603.00   |
| 145     | Supplying, fitting and fixing glass shelf with aluminium guard rails.Ordinary type with 5.5 mm sheet glass  |      |          |          |
|         | (a) 450 mm X 125 mm   | Each | R.O.     | 341.00   |
|         | (b) 600 mm X 125 mm   | Each | R.O.     | 480.00   |
| 146     | Supplying, fitting and fixing PTMT Smart Shelf of approved make of size 300 mm.   | Each | R.O.     | 223.00   |
| 147     | Supplying, fitting and fixing towel rail with two brackets.C.P. over brass. 25 mm dia. and 600 mm long  | Each | R.O.     | 430.00   |
| 148     | PTMT - Towel Rail (450 mm)  | Each | R.O.     | 141.00   |
| 149     | PTMT - Towel Rail (600 mm)  | Each | R.O.     | 169.00   |
| 150     | 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.   | Each | R.O.     | 573.30   |

I agree to execute the work at \_\_\_\_\_ % [ in figure] ABOVE/BELOW/AT PAR ( \_\_\_\_\_ percent) [in words] ABOVE / BELOW/AT PAR Department estimated amount / item rates.

योग: कर्मसु कौशलम्

Signature of Contractor with date and seal

# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for "Routine maintenance work at Old Residential Campus (Zone-A) for 2018-19 at IIT Kharagpur."

## FORM OF TENDER

(To be filled by the Tenderer with sign & stamp and submitted within the Financial Bid envelope)

**To**  
**The Superintending Engineer (Civil)**  
**Civil Construction & Maintenance Section**  
**Indian Institute of Technology**  
**Kharagpur, West Bengal**

I/We, \_\_\_\_\_ Son/Daughter of Sri \_\_\_\_\_  
Proprietor/Partner/CEO/MD/Director of M/s. \_\_\_\_\_ of  
(Address) \_\_\_\_\_

having examined the site of works, carefully read and understood the Specifications, General Conditions of Contract and Conditions of the Tender, hereby tender and undertake to execute and complete all the works required to be performed in accordance with the Specifications, Bill of Quantities, General Conditions of Contract, the rates and prices set out in the annexed Bill of Quantities within \_\_\_\_\_ days / weeks / months from the seventh day of the date of receiving work order.

I agree to execute the work at \_\_\_\_\_ % (in figure) ( \_\_\_\_\_  
percent) (in words) **ABOVE / BELOW / AT PER** the Departmental Estimated Rates.

I/We have submitted Account Payee Demand Draft No. \_\_\_\_\_ dated \_\_\_\_\_ in favour of IIT  
**Kharagpur** payable at **Kharagpur** for Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_  
\_\_\_\_\_) with the tender as **Cost of Tender Document**.

I/We have submitted Account Payee Demand Draft No. \_\_\_\_\_ dated \_\_\_\_\_ in favour of IIT  
**Kharagpur** payable at **Kharagpur** for Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_  
\_\_\_\_\_) with the tender as **Earnest Money Deposit**.

I also declare that the information / documents furnished along with the application and tender are true and authentic to the best of my knowledge and belief. I am well aware of the fact that furnishing of any false information / fabricated document would lead to rejection of my tender / termination of contract at any stage besides liabilities towards prosecution under appropriate law. Each page of the tender document and papers submitted by my Company are authenticated, sealed and signed, and I take full responsibility for the entire documents submitted with this tender.

I/We agree that the period for which the tender shall remain open for acceptance shall not be less than **90 Days** from date of opening of tender.

Signature of the Tenderer / Authorised person

(Seal of the Tenderer)

Name of the tenderer \_\_\_\_\_

(In Block letters)

Address: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_