

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for Routine Annual Maintenance work in Old Residential Campus area (Zone-B) at IIT Kharagpur for the financial year 2017-18.



INDIAN INSTITUTE OF TECHNOLOGY  
KHARAGPUR, WEST BENGAL

TENDER DOCUMENT  
FOR

Routine Annual Maintenance work in Old Residential Campus area  
(Zone-B) at IIT Kharagpur for the financial year 2017-18.

**PART – I : TECHNICAL BID**

NOTICE INVITING TENDER NO. : SE(C)-IIT-TEN-2017-18\_16  
DATED : 12.04.2017

APRIL 2017

Cost of Tender Document : Rs. 1000.00 (Non-Refundable)  
Last Date & Time of Submission : 27.04.2017 , upto 3:00 pm

CIVIL CONSTRUCTION & MAINTENANCE SECTION  
IIT, KHARAGPUR,  
WEST BENGAL

SUPERINTENDING ENGINEER (CIVIL)  
IIT KHARAGPUR

योग: कर्मसु कौशलम्

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

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Issued on: .....

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

Dated \_\_\_\_\_

# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for Routine Annual Maintenance work in Old Residential Campus area (Zone-B) at IIT Kharagpur for the financial year 2017-18.

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**INDIAN INSTITUTE OF TECHNOLOGY  
KHARAGPUR**

No. SE(C)-IIT-TEN-2017-18\_16

Date: 12.04.2017

**NOTICE INVITING TENDER**

The Executive 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 bonafide agencies meeting the minimum qualification criteria for the following work:

Sl. No.	Name of work	Estimated Amount (Rs.)	Earnest Money Deposit (Rs.)	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
1.	Routine Annual Maintenance work in Old Residential Campus area (Zone-B) at IIT Kharagpur for the financial year 2017-18.	25,00,000.00	50,000.00	12 Months	13.04.2017 05:30 PM	27.04.2017 upto 03:00PM	27.04.2017 at 3:30 PM

Cost of Tender Paper Rs. 1,000.00 (Rupees One Thousand only), **NON REFUNDABLE**, in the form of DD only in favour of **IIT Kharagpur**, payable at **Kharagpur** (validity of DD should be at least 03 months) to be submitted along with the tenders (within Technical Bid). Tender without 'Cost of Tender Document' will be summarily rejected.

The Earnest Money should be deposited along with the tenders (within Technical Bid) in the form of DD only in favour of IIT Kharagpur, payable at Kharagpur. Tender without 'Earnest Money Deposit' will be summarily rejected.

**Eligibility Criteria**

Contractors who fulfill the following requirements shall be considered as eligible bidder:

Agencies should have satisfactorily completed the works as mentioned below during the last 07 (Seven) years ending last day of the March, 2017:

- 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 and Renovation / Annual Maintenance work of Building.***

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. Certificated 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>. *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.*

Tender should be submitted as per the prescribed format within the specified date and time at Office of Civil Construction & Maintenance Section, IIT Kharagpur, and failing to do so, 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 (CC&M)
- 3) Vice Chairman (CC&M)-Civil
- 4) Executive Engineer (Civil)
- 5) Engineer (Civil)
- 6) Asstt./Jr. Engineer (Civil)
- 7) Notice Board
- 8) Office file

# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for Routine Annual Maintenance work in Old Residential Campus area (Zone-B) at IIT Kharagpur for the financial year 2017-18.

## **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 the **Technical Bid**. 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 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 upon executing the Contract Agreement by successful tenderer, 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**

योग: कर्मसु कौशलम्

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 March 2017:

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

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.

# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

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## 7. Submission of Bid

The bids shall be submitted in **Two Parts** in two separate sealed envelopes:

a. **Complete Technical Bid** will comprise of :

- i) EMD of requisite amount in the form of DD only in favour of IIT Kharagpur payable at Kharagpur. Bid without EMD would be summarily rejected.
- ii) 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.
- iii) Original Tender Document – Part-I: Technical Bid. (Stamped & Signed in all pages)
- iv) Statutory registration documents like Trade License, PAN, IT Return of last 3 years and other tax clearance Certificates, if any, etc.

b. **Complete Financial Bid** will comprise of :

- i) Duly filled-up **Form of Tender** as an acceptance to the terms and conditions set in the tender.
- ii) Duly filled-up **Schedule of Quantities**.

Both the envelopes should be duly marked on top with **NIT Number, Name of work and Technical Bid / Financial Bid** as the case may be and both the envelopes to be submitted in another sealed envelope duly marked on top with **NIT Number and Name of work**.

Cost of Tender Paper Rs. 1000.00, NON REFUNDABLE (in the form of DD only) in favour of IIT Kharagpur, payable at Kharagpur (validity of DD should be at least 03 months) to be submitted along with the tenders (within Technical Bid). Tender without 'Cost of Tender Document' will be treated as cancelled. 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. All Rates, Prices, Amounts and Sums quoted by the bidder shall be in Indian currency only. The language used throughout shall be English.
9. All Rates, Amounts & Sums shall have to be quoted in indelible ink and written both in figures and words. If the rate quoted in words does not tally with the rate quoted in figures then the rate which corresponds to the lesser amount shall be considered.
10. Any overwriting / correction / applying correction fluid shall be avoided and in case any correction is made the same must be initialized and stamped.
11. 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.
12. 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.
13. 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.
14. The Rates quoted by the tenderer should be inclusive of all taxes & 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.
15. The tenderer shall have to submit copies of valid PAN, Income tax, Sales Tax / VAT / CST & other statutory tax clearance Certificates along with the tender. The original copies of these Certificates will have to be produced when demanded for verification.
16. Each page of the bid document shall have to be signed and stamped by the Bidder / Authorised Signatory before submission. The bidders have to submit the tender documents and correspondences accompanying the tender with proper sign and stamp on each page along with the bid. The person / officer signing the tender / bid should be delegated with an appropriate **Power of Attorney (duly endorsed by a Notary Public)** by the **Owner / Proprietor / Partner / CEO / MD / Director** of the company to sign such documents.

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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 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.

# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for Routine Annual Maintenance work in Old Residential Campus area (Zone-B) at IIT Kharagpur for the financial year 2017-18.

## 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** wherever 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.

# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for Routine Annual Maintenance work in Old Residential Campus area (Zone-B) at IIT Kharagpur for the financial year 2017-18.

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.
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' representative 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 03 years 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 a particular area, primer and paint to be used should of same make approved by IIT Kharagpur.
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.



# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for Routine Annual Maintenance work in Old Residential Campus area (Zone-B) at IIT Kharagpur for the financial year 2017-18.

## **SCOPE OF WORK & TECHNICAL SPECIFICATION**

**The scope of work includes** – Routine Annual Maintenance work in Old Residential Campus area (Zone-B) at IIT Kharagpur for the financial year 2017-18.

### **APPROVED MAKE LIST OF MATERIALS TO BE USED WHEREVER APPLICABLE**

SL. NO.	ITEM	SUGGESTED BRAND NAME OR SIMILAR (APPROVED BY THE AUTHORITY)
01.	Cement (PSC)	ACC / Ultratech / Ambuja / Lafarge
02.	Reinforcement Steel	TATA / SAIL / RINL
03.	Structural Steel	TATA / SAIL / RINL
04.	Ceramic Tiles	Johnson / Kajaria / Somany
05.	G.I. Pipes	TATA (Medium Duty)
06.	G.I. Fittings	HB / R
07.	Anodised Aluminum fittings	Allen / Metco
08.	P.V.C. Shutters	Sintex / Patton / Raunaq
09.	P.V.C. Pipes	Oriplast / Supreme / Dupal (Schedule-80)
10.	P.V.C. Cistern	Parryware Slimline
11.	P.V.C. Closet Seat Cover	Parryware Slimline
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.	I.P.W.C. / E.P.W.C. / Urinal	Parryware / Nycer / Hindware
17.	Basin / Sink	Parryware / Nycer / Hindware
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	D. N. Sinha / AMC / ALC
24.	Gun Metal Wheel Valve	Zoloto / Alto / Leader
25.	Mirror	Modi Guard / Saint Govin
26.	Synthetic Enamel Paint & Primer	ICI Dulux / Asian / Berger/Nerolac
27.	Distemper & Primer	ICI Dulux / Asian / Berger/Nerolac
28.	APP Membrane	SIKA / PIDILITE / FOSROC
29.	Anti corrosive water proofing paint with aluminium finish	STP Super Silver Shield of Equivalent
30.	Extruded Aluminium Section for Doors, windows, Partitions etc.	HINDALCO/JINDAL or equivalent.

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## INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR, WEST BENGAL

### TENDER DOCUMENT FOR

Routine Annual Maintenance work in Old Residential Campus area  
(Zone-B) at IIT Kharagpur for the financial year 2017-18.

NOTICE INVITING TENDER NO. : SE(C)-IIT-TEN-2017-18\_16  
DATED : 12.04.2017

APRIL 2017

Last Date & Time of Submission : 27.04.2017, upto 3:00 pm

CIVIL CONSTRUCTION & MAINTENANCE SECTION  
IIT, KHARAGPUR,  
WEST BENGAL

SUPERINTENDING ENGINEER (CIVIL)  
IIT KHARAGPUR

योगः कर्मसु कौशलम्

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

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Issued on: .....

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

Dated \_\_\_\_\_

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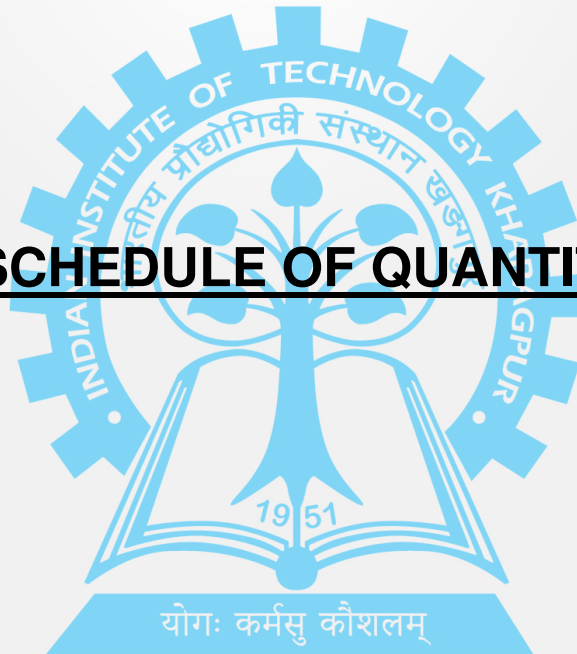


# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for Routine Annual Maintenance work in Old Residential Campus area (Zone-B) at IIT Kharagpur for the financial year 2017-18.



## SCHEDULE OF QUANTITIES



**CIVIL CONSTRUCTION & MAINTENANCE SECTION  
IIT KHARAGPUR**

**Name of Work : Routine Annual Maintenance work in Old Residential Campus area (Zone-B)  
at IIT Kharagpur for the financial year 2017-18**

Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
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.	51.00
	(b) Medium size plant of girth of exposed stem above 75 mm but not exceeding 150 mm lift upto 6 mtr.	Each	R.O.	61.00
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. -at any level and height including roof.	Cum	R.O.	451.00
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. - at any level and height including roof upto 150 mm. thick	Cum	R.O.	949.00
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.	1975.00
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. -at any level and height 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.	28.20
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.	120.47
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.	533.06
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.	445.64
11	Supplying, stacking, spreading & consolidating rubbish to a requisite depth of 100mm at desired density as per instruction of Engg-in-Charge, complete as per specification. (The payment will be made after deduction 1/9th for the shrinkage)	Cum	R.O.	182.00
12	Cement concrete with graded stone ballast (40 mm size excluding shuttering), Pakur Variety, 1:4:8 proportion .	Cum	R.O.	5369.00
13	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.	Cum	R.O.	6019.00
14	Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, at any level and height as per relevant IS codes. Pakur Variety	Cum	R.O.	6759.00
15	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 (at any level ant height). (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)			

Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
	a) 25 mm to 30 mm thick wooden shuttering as per decision & direction of Engineer-in-Charge,	Sqm	R.O.	343.00
	b) 25 mm to 30 mm thick shuttering without staging in foundation	Sqm	R.O.	218.00
	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.	62.00
	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.	97.00
16	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 at any level and floor. Tor steel /Mild Steel			
	I) SAIL/ TATA/RINL	K.G	R.O.	61.79
	II) Other than SAIL/TATA/RINL	K.G	R.O.	51.87
17	R.C. shelves (1:1.5:3) either precast or cast in situ with stone chips and necessary reinforcement unto 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. - 50 mm Thick panels	Sq.M	R.O.	1188.00
18	Brick work with Fly Ash Bricks (230 X 110 X 70 size) set in cement sand mortar (1:6) including raking out joints, curing, scaffolding etc. complete in all respect.			
	(a) - at Ground Floor upto roof	Cum	R.O.	4907.00
	(b) Add extra for each addl. Floor	Cum	R.O.	115.00
19	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 at any level and height	Sqm	R.O.	569.00
	b) Extra for using approved H.B. netting in every third layer in any floor	Sqm	R.O.	46.00
20	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
21	Labour for Chipping of concrete surface before taking up Plastering work.	Sqm	R.O.	21.00
22	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 at any level and height.			
	a) With 1:6 cement mortar 20 mm thick	Sqm	R.O.	166.00
	b) With 1:6 cement mortar 15 mm thick	Sqm	R.O.	144.00
	c) With 1:4 cement mortar 10 mm thick	Sqm	R.O.	132.00
23	Renewing throating, noising or drip course moulding with 15 mm. thick cement plaster(1:4), complete (Cement 0.7 kg/Mtr.)	Mtr	R.O.	19.00
24	Supplying, fitting & fixing 1st quality <b>Ceramic tiles</b> 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 m 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.	828.00
	b) Area of each tile above 0.09 sq.m	Sqm	R.O.	1025.00
	(B) Wall : With sand cement mortar (1:4) 20 m 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.	840.00

Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
25	Supplying and laying true to line and level <b>vitrified tiles</b> 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) - <b>With application slurry</b> @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.	1455.00
26	Supplying, fitting & fixing <b>granite slabs</b> 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.	2675.00
27	18 mm to 22 mm. thick <b>Kota stone slab</b> 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.	1135.00
28	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 -. Slab thickness 20 to 25 mm.	Sqm	R.O.	725.00
29	<b>Polishing only of old marble</b> or terrazo work with oxalic acid powder using 33 gms/sqm by manual labour/machine where necessary	Sqm	R.O.	39.00
30	<b>Washing and cleaning with oxalic acid</b> powder using 33 gms./sq.m, Other than marble	Sqm	R.O.	6.06
31	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. -. 3 mm. thick topping (High polishing grinding on this item is not permitted with ordinary cement).			
	(i) 25 mm thick	Sqm	R.O.	301.00
	(ii) 35 mm thick	Sqm	R.O.	369.00
32	Neat cement punning about 1.5 mm thick in wall, dado, window, sills, floor, drain etc.	Sqm	R.O.	38.00
33	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 -at any level and height, With rabbet on one side 75 mm X 50 mm or 75 mm X 75 mm. section (Cement 3.7Kg/Mtr.)	Mtr	R.O.	76.00
34	(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
	(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

Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
35	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. ( <i>Payment against this item will be made only when this has been done on the specific direction of the Engineer-in-charge</i> ).	Sqm	R.O.	10.39
36	White washing including cleaning and smoothing surface thoroughly. All floors: One coat	Sqm	R.O.	13.58
37	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.	14.96
38	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.	33.33
39	a) Acrylic Distemper to interior wall, ceiling without primer (as per manufacturer's specification) including cleaning and smoothing of surface - Two Coats	Sqm	R.O.	39.24
	b) Distemping with 1st quality acrylic distemper, having VOC (Volatile Organic Compound ) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour - One Coat	Sqm	R.O.	28.50
40	a) Applying Acrylic Emulsion Paint of approved make and brand on walls and ceiling including sand papering in intermediate coats including putty ( <i>to be done under specific instruction of Engineer-in-Charge</i> ) : (Two coats) , Standard Quality	Sqm	R.O.	67.00
	b) Painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound ) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour - (One coat)	Sqm	R.O.	49.25
	c) Applying plastic emulsion of approved make and brand on walls and ceiling including sand papering in immediate coats including putty (to be done under specific instruction). One coats	Sqm	R.O.	30.00
41	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	R.O.	89.65
42	Applying decorative cement based paint of approved quality after preparing the surface including scraping the same thoroughly (plastered or concrete surface) as per manufacturer's specification.			
	(i) One coat on old surface.	Sqm	R.O.	33.00
	(ii) One coat on new surface.	Sqm	R.O.	37.00
	(iii) Two coats.	Sqm	R.O.	53.00
43	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.	34.04
44	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), - Normal Acrylic Emulsion.	Sqm	R.O.	73.00
45	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.	41.00
	(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.	31.00
46	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.	59.00
	b) On timber or plastered surface : Two Coat (with any shade except white)	Sqm	R.O.	89.00
	c) On steel or other metal surface : One coat (with any shade except white)	Sqm	R.O.	55.00
	d) On steel or other metal surface : Two coat (with any shade except white)	Sqm	R.O.	86.00
47	Sealing cracks on roof, wall, chajja etc. with valamoid with similar plastic bitumen compound after cleaning all dust and dirt them filling eth Valamoid using the finger dipped in kerosin oil pressing tightly as fitting completely in level of adjoining greas rate includes supplying of materials and labour charges .	Kg	R.O.	65.11



Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
48	(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.	Sqm	R.O.	97.00
	(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.	Sqm	R.O.	299.00
49	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 prefebricated 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. <b>(Work should be guaranted for 10 years).</b>	Sqm	R.O.	485.00
50	Painting of Oxidised bitumenus anti corrotive water proofing paint with aluminium finish over APP surface.	Sqm	R.O.	51.00
51	Painting roof surface with bitumen 30/40 grade @1.35 kg/sqm including cleaning roof surface and spreading medium sand @ 0.6 cum/ % sqm complete including the cost of sand and cost of bitumen and carriage and labour charges .	Sqm	R.O.	96.56
52	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.	48.09
53	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.	362.00
54	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.	46.51
55	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.	7.01
	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.	14.50
56	(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.	615.00
	(b) Supplying bubble free float glass of approved make and brand conforming to IS: 2835-1987.6mm thick clear glass.	Sqm	R.O.	726.00
57	Renewing worn out putty of glass panes: Panes not exceeding 0.2 Sq.m	Each	R.O.	35.00
58	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 correspondng item to be added.	Sqm	R.O.	17.00
59	Hire and labour charges for providing suitable scaffolding (bhara / ladder or any convenient device and removing the same as per direction of Engineer-In-Charge.	Sqm	R.O.	12.00
60	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.	31.00
	ii) 100mm X 50mm X 1.25mm	Nos	R.O.	48.00
61	Iron catch hook of approved quality fitted and fixed to shutter and chowkat.			
	a) 6mm dia X 100 mm long	Each	R.O.	40.00
	b) 6mm dia x 225mm long	Each	R.O.	73.00

Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
	Iron socket bolt of approved quality fitted and fixed complete.			
62	i) 150mm long X 10mm dia bolt.	Each	R.O.	71.00
	ii) 300mm long X 10mm dia bolt.	Each	R.O.	109.00
63	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.	193.00
64	Iron door handle or approved quality fitted and fixed complete: 100mm X 5mm	Each	R.O.	45.00
65	Brass floor door stopper.	Each	R.O.	134.00
66	Hydraulic door closer of approved quality as per I.S.I. standard fitted and fixed complete. - Medium type (I.S.I. size 2)	Each	R.O.	1562.00
67	Supplying Godrej mortice lock chromium plated with keys 4 levers, including fitting and fixing complete.	Each	R.O.	1223.00
68	Supplying 4 lever mortice lock of any approved make and brand as per direction of the Engineer-in-Charge. 100 mm	Each	R.O.	252.00
69	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.	73.00
	ii) 225mm long X 10mm dia. bolt.	Each	R.O.	98.00
70	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.	270.00
71	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.	111.00
72	Helical door spring hinge of approved quality fitted and fixed complete. 125mm size.	Each	R.O.	135.00
73	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.	2062.00
74	Supplying, Fitting & Fixing Factory made PVC door frame of size 50 mm X 47 mm with a wall thickness of 5 mm, made out of extruded 5 mm, PVC sheet miter cut at two corners and joined with two nos of 1.5 mm long brackets of 15 mm X 15 mm M.S. square tube. The two vertical door profiles are to be reinforced with 19 mm X 19 mm M.S. Sqare tube of 19 gauge, weather seal to be provided through out the frame. The door frame shall be fixed with the wall using 65/100 mm long M.S. Screws through the frame by using P.V.C fasteners. A minimum of 4 Nos of screws to be provided for each vertical member and minimum 2 Nos for horizontal member etc. complete as per Manufacturer's specification and direction of Engineer-in-Charge.	Mtr	R.O.	352.00
75	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 ((± 0.2 mm) will 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 (± 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 (± 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.	2310.00

Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
75	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 ((± 0.2 mm) will 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 (± 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 (± 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.	2149.00
76	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. 35 mm thick shutters (single leaf).	Sqm	R.O.	3142.00
77	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.	83652.00
78	Rough dressed timber planks fitted and fixed with nut bolts excluding framework complete. - 25 mm thick planks Sal local.	Sqm	R.O.	1767.00
79	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. - 35mm thick shutters. Sishu, Gamar, Champ, Badam, Bhola, Mogra, Hallak.	Sqm	R.O.	2895.00
80	Styles and rails of wooden shutters fitted and fixed complete. (Payment to be made on area of new work only). - 35m Thick shutter. Sishu, Gamar, Champ, Badam, Bhola, Mogra, Hallak.	Sqm	R.O.	2433.00
81	Panel (Made of single plank) of door and window shutters to design as directed : - , 19mm Thick panel of 30cm to 45cm width with Sishu, Gamar, Champ, Badam, Bhola, Mogra, Hallak.	Sqm	R.O.	1223.00
82	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.	3144.00
83	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 -. Shutter with 25mm thick planks, 19mm thick battens. Sishu, Gamar, Champ, Badam, Bhola, Morga, Hallak.	Sqm	R.O.	2918.00
84	Fly proof shutters as per design with galvanized netting 256 mesh per sq.inch/22 gauge of approved quality including fitting and fixing shutters in position but excluding the cost of hinges and other fittins,at any level and height - 35 mm thick shutters. Sishu	Sqm	R.O.	1039.50
85	Renewing of netting only of fly-proof shutters with new beads where necessary (netting to be of approved quality)	Sqm	R.O.	189.00
86	Taking old suitable wooden shutter from departmental store and refixing the same after cutting, jointing & making to to requisite size with all necessary fittings at any level & place.	Each	R.O.	190.00

Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
87	Taking out shutter of door and window, dismantling by parts (For repair or replacement of damaged parts), reassembling and refitting and rehangng 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.	128.00
88	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 or doing any other necessary works.	Each	R.O.	100.00
89	Repairing steel window by welding including supplying all materials like hinges, legs, handle plates etc. whatever required for repairing with hire welding set different floor including scaffolding necessary for the work (including the cost of serviers connection charge for the welding).			
	a) Ground floor	Each	R.O.	220.00
	b) 1st floor	Each	R.O.	242.00
	c) 2nd floor	Each	R.O.	264.00
90	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.	82.00
91	Renewing two point steel plated or (oxidised ) handle of steel doors and windows as directed including painting complete.	Each	R.O.	77.00
92	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.	40.00
93	Renewing hinged cleat with old hinge and new screws. Local Sal	Each	R.O.	42.00
94	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 -.			
	(i) Grill weighing above 10 Kg./Sq.Mtr and up to 16 Kg./Sq.Mtr.	Kg	R.O.	90.51
	(ii) Grill weighing above 16 Kg./Sq.Mtr and above	Kg	R.O.	88.57
	(iii) Extra for Grill Gate of Grill weighing above 10 Kg./Sq.Mtr and up to 16 Kg./Sq.Mtr.	Kg	R.O.	13.58
	(iv) Extra for Grill Gate of Grill weighing above 16 Kg./Sq.Mtr and above	Kg	R.O.	13.29
95	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.	2031.00
96	Wall panelling / partition with Melamine faced 3 layered flat pressed wood particle board of approved made and brand as per direction of Engineer- in - Charge of requisite grade bonded with phenol formaldehyde synthetic resin conforming to IS: 848 - 1974 (excluding the cost of supporting frame work and teak wood battens / lipping) , Prelaminated particle board conforming to IS: 3087 - 1985 and IS 12823 - 1990. Both side decorative laminate. Interior grade : 12mm thick.	Sqm	R.O.	1257.00
97	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) with 6mm thick.	Sqm	R.O.	868.00
98	French polishing to wood work including preparing surface (ordinary gloss)			
	(a) On new wood work	Sq.M	R.O.	492.00
	(b) On old French polished surface including complete removal of the old polish.	Sq.M	R.O.	563.00
99	Easing door and windows.	Each	R.O.	17.00
100	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.	121.00
101	Taking out door and window shutters and rehangng the same with old fittings. With new iron screws.	Sqm	R.O.	78.00
102	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.	1201.00

Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
103	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.	383.00
104	Easing and oiling, cleaning collapsible gate and repairing to locking arrangements.	Sqm	R.O.	17.00
105	labour for taking out rolling shutter (only shutter portion) dismantling by parts for repair or (replacement of damaged parts only), rehanging and refitting the same in position after necessary repairs (excluding the cost of supply of new parts).	Sqm	R.O.	286.00
106	Renewing seam pipe for rolling shutter as per existing size and shape fitting, fixing complete.	Mtr	R.O.	213.00
107	Renewing spring of rolling shutter as per existing size and shape including fitting fixing complete.	Each	R.O.	615.00
108	Renewing side split pin for seam pipe for rolling shutter	Each	R.O.	26.00
109	Oiling and greasing of rolling shutter and repair to in side lock.	Sqm	R.O.	74.00
110	Renewing profile of rolling shutter including fitting & fixing complete as per existing size and shape.	Mtr	R.O.	55.00
111	Easing and oiling, cleaning rolling shutters excluding repair to inside locks.	Sqm	R.O.	12.00
112	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) : -. 4mm thick	Sqm	R.O.	681.00
113	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, category 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.	340.00
114	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.	396.10
115	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.	755.00
116	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 mm 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.	1042.00
	ii) Coloured other than natural white or tinted blue	Sqm	R.O.	1133.00
117	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.	721.00
118	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.	514.00
119	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.	191.00
120	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.	1.47

Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
121	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.	27.95
122	Supplying, fitting galvanised 2 ply 12 gauge / 2 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 as necessary.	Mtr	R.O.	25.08
123	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.	848.00
	(ii) 6mm	Sqm	R.O.	1067.00
	(iii) 9mm	Sqm	R.O.	1192.00
	(iv) 12mm	Sqm	R.O.	1504.00
	(v) 19mm	Sqm	R.O.	2182.00
124	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:: 110 mm Dia.	Mtr.	R.O.	291.00
	(b) UPVC Bend 87.5 degree , 110 mm Dial.	Nos	R.O.	162.00
	(c) UPVC Fittings:Plain Tee 110 mm. Dia.	Nos	R.O.	200.00
	(d) Shoe: 110 mm. Dia.	Nos	R.O.	128.00
125	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
126	Taking out rain water down pipe.	Mtr	R.O.	9.04
127	G.I. Rain water spout 75 mm. dial. And 600 to 750 mm. Long supplied fitted and fixed complete with two coats of paint to both exposed portion.	Each	R.O.	143.00
128	Supplying, fitting, fixing C.I Grating (Heavy type). Up to 100 mm Square or 100 mm Dia.	Each	R.O.	80.00
129	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
130	Drain board for sink with brackets supplied , fitted & fixed in position. Mosaic (silver grey colour). 600mm x 450mm	Each	R.O.	189.00
131	Providing and fixing PTMT shelf 440 mm long, 124 mm width and 36 mm height of approved quality, colour and make, weighing not less than 300 gms. ( Prayag or equivalent ) .	Each	R.O.	281.25
132	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality colour and make ( Prayag or equivalent ) . 450 mm long towel rail with total length of 495 mm, 78 mm wide and effective hight of 88 mm, weighin not less than 170 gms .	Each	R.O.	233.45
133	Supplying, fitting and fixing glass shelf with aluminium guard rail . Ordinary type with 5.5mm sheet glass.			
	(a) 450 mm x 125 mm	Each	R.O.	432.00
	(b) 600 mm x 125 mm	Each	R.O.	485.00
134	Supplying, fitting and fixing liquid soap container. PTMT (Prayag or equivalent approved by Engineer-in-Charge)	Each	R.O.	268.00
135	Metallic magic eye of approved quality fitted and fixed complete.	Each	R.O.	61.00
136	Supplying & laying interlocking designer paver block of any shade and of pproved quality as per IS: 1237-1980 laid in pattern as directed in pavement, footpath, driveway, etc including necessary underlay complete in all respect with all labour and material. 40 mm thick block (over 150 mm medium sand bed including cost of sand but excluding cost of earthwork in excavation or dismantling of existing hard surface if necessary) - Grey Colour	Sqm	R.O.	975.00

Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
137	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 thoroughly sprayed with chemical emulsion. (Payment will be made on the basis of outside measurements of doors and windows)	Sq.M	R.O.	62.00
138	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 measurement will be per Sq.m of plan area of plinth treated.)	Sq.M	R.O.	111.00
139	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
140	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.	168.00
141	Making necessary holes on the base slab and walls using drill machine and fixing 12mm dia. threaded nozzle of required length at a spacing of 1Mtr C/C	Sqm	R.O.	8.40
142	Providing and applying pressure grouting operation with compressor pump and injecting cement slurry admixed with NSG compound and injecting each point till refusal. Removal of nozzles and sealing them with cement admixed with acrylic polymer.	Sqm	R.O.	250.00
143	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.	549.00
144	Providing and laying water proofing treatment on roofs/wall of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/ sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/ sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured.	Sq.M	R.O.	390.35
145	Supply of Labour - Mazdoor (Male)	Each	R.O.	245.00
146	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.	31.00
145	Supplying and laying Door mat of approved quality and brand as per decision & direction of Engineer-in-Charge.	Sq.M	R.O.	1619.44

Sl. No.	Description of items	Unit	Qty	Rate (Rs.)
146	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.	19.00
	(b) With Teak wood Beads and Nails	Each	R.O.	37.00
147	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.	90.00
	(b) Block size 250 x 125 x 150 mm.(Cement-2.5 Kg/No.)	Each	R.O.	105.00
	(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.	113.00
	(b) Block size 250 x 125 x 150 mm.(Cement-2.5 Kg/No.)	Each	R.O.	136.00
148	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.	383.00
149	Bituminous filler of approved type in expansion joints of dummy joints including finishing the top surface as directed.	Cu.M	R.O.	54737.00
150	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.	1.29
151	Suppluying Fitting and Fixing Twoel rail with brackets. C.P over brass. 25 mm Dia and 600 mm long.	Each	R.O.	554.00

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 .



Signature of the Contractor with Date & Seal



# INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

Tender Document for Routine Annual Maintenance work in Old Residential Campus area (Zone-B) at IIT Kharagpur for the financial year 2017-18.

## 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**.

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)

**Witness :**

**Name of the Tenderer** \_\_\_\_\_

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

(in Block letters)

Name : \_\_\_\_\_

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

(in block letters)

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

\_\_\_\_\_

\_\_\_\_\_