



INDIAN INSTITUTE OF TECHNOLOGY MADRAS
ENGINEERING UNIT, CHENNAI – 600 036

ENVELOPE – 2 – Financial bid

1. Notice Inviting Tenders

Tender No: 18 / 2014 – 15 / Civil

EXECUTIVE ENGINEER, Indian Institute of Technology Madras, Chennai - 600 036 invites sealed item rate tenders for the following work from the eligible contractors in two cover system.

1. PARTICULARS OF WORK

1.1 Name of Work : Annual maintenance of Carpentry and Aluminium works at IITM for the year 2014-15.

- 1.2. Estimated Cost (For reference only) : **Rs 187.33 Lakhs**
- 1.3. Earnest Money Deposit (EMD) : **Rs 10,000/-**
- :
- 1.4. Cost of Tender Document : Rs 525/- including VAT
- 1.5. Time Period for Completion : **12 months**
- 1.6. Validity of the Tender : 90 days from the date of Opening of the tender
- 1.7. Date of Pre bid Meeting : **04 - 06-2014 – 10.30AM**
- 1.8. Last Date and Time for submission of the Tender : **11 - 06-2014 – 3.00pm**
- 1.9. Date of Opening of the Technical bid : **11 - 06-2014 – 3.10pm**
- 1.10. Place of submission of tenders: : Office of the **Executive Engineer,**
Engineering unit, Administrative Building 3rd Floor
IIT Madras, Chennai – 600 036.

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1.11 Deadline for submission of tender

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

1.12. Address and place for Submission of Tender

The Executive Engineer(Civil)

Engineering Unit, Administrative Building, 3rd floor,
Indian Institute of Technology Madras
Chennai – 600036.

- 1.13. The Employer may extend the deadline for submission of Tenders by issuing an amendment in writing in which case all rights and obligations of the Employer and the Tenderer previously subject to the original deadline will be subject to new deadline.

1.14. LATE TENDER

Tenders received late will not be accepted.

2. TENDER

- 2.1. I/We have read and examined the notice inviting tender, schedules A & B, Specifications applicable, drawings, Conditions of contract and other documents and rules referred to in the conditions of contract and all other contents in the tender documents for the work.
- 2.2. I/We hereby tender for the execution of the work specified for the Indian Institute of Technology Madras, within the time specified in Schedule – 'F' and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in General Rules and Directions and in Clause 11 of Form 8 (General conditions of contract) and with such materials as are provided for, and in all respects in accordance with such conditions applicable.
- 2.3. I/We agree to keep the tender open for Ninety (90) days from the date of opening of tender and not to make any modifications in its terms and conditions
- 2.4. I/We agree that the EMD deposited by me/us be retained by IITM towards Security Deposit to ensure execution of all works referred to in the tender documents on the terms and conditions contained or referred to therein.
- 2.5. If I/We fail to furnish the prescribed performance guarantee as mentioned elsewhere within prescribed period, I/we agree that IITM shall, without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely.
- 2.6. I/we agree that in case of forfeiture of earnest money as aforesaid, I/we shall be debarred from participating in the re-tendering process of the work.
- 2.7. If I/we fail to commence work as specified in clause 3A of the contract, I/we agree that IITM shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely,

2.8. I/We agree to carry out such deviations as may be ordered, up to a maximum percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the contract.

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

2.10. I/We hereby certify that the tender document downloaded is the exact copy of the document published by the IITM and no alterations and additions have been made by me / us in the tender document.

Signature of the Contractor

Dated

Signature of the Tenderer

Postal Address

Witness

Signature

Name

Postal Address

Occupation

3. Acceptance

The above tender is accepted by me for and on behalf of the Board of Governors,

IITM for a sum of

Rs. _____ (Rupees _____

_____)

The letters referred to below shall form part of this contract Agreement:

- a)
- b)
- c)

For & on behalf of the Board of Governors, IITM.

Signature _____

Designation _____

Date _____

4. Conditions of contract

4.1. Definitions

In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-

1. The expression 'works' or 'work' shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed, whether temporary or permanent, and whether original, altered, substituted or additional.
2. The 'Site' shall mean the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
3. The 'contractor' shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
4. The 'Engineer-in-charge' means the Engineer who shall supervise and be in-charge of the work and who shall sign the contract on behalf of IIT as mentioned in Schedule 'F' hereunder.
5. 'Accepting Authority' shall mean the authority mentioned in Schedule.
6. 'Excepted Risks' are riots (other than those on account of contractor's employees), war, acts of God such as earthquake, lightening and unprecedented floods, and other such causes over which the contractor has no control and accepted as such by the Accepting Authority.

7. 'Market Rate' shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Schedule 'F' to cover all overheads and profits.
8. 'Schedules(s)' referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard schedule of Rates of the CPWD mentioned in schedule 'F' hereunder, with the amendments thereto issued up to the date of receipt of the tender.
9. 'Department' means IITM which invites the tenders.
10. 'District specification' means the specifications followed by the state of Tamil Nadu in the area where the work is to be executed.
11. 'Tendered value' means the value of the entire work as stipulated in the letter of award.
12. 'Employer means IITM
13. Where the context so requires, words imparting the singular also include the plural and vice versa. Any reference to masculine gender shall whenever required shall refer to feminine gender and vice versa.
14. Wherever the expression "Divisional Officer" appears in the Clauses, it should be substituted by the expression "EXECUTIVE ENGINEER
15. "Engineer in Charge" means EXECUTIVE ENGINEER, IITM, and the Engineer means the officer representing the Engineer-in-Charge of the Project.

4.2. Authority to sign the tender document

The tender must be signed by the person / persons competent to sign as indicated below. Same stipulations will also apply in the case of Receipt of payments for the work done.

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

4.3 .Instructions for filling the Bill of Quantities (Schedule A)

1. Rate for each item shall be filled in words and figures and there shall be no discrepancy between the rate quoted in figures and words. However, if a discrepancy is found, the rate which corresponds with the amount worked out by the contractor shall unless otherwise proved, be taken as correct.
2. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct.

3. Where the rates quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rates quoted by the contractor, will, unless otherwise proved, be taken as correct and not the amount.
4. If no rate has been quoted for any item(s), leaving space both in figure(s), words(s) and amount, it will be presumed that the contractor has included the cost of this / these item(s) in other items and rate for such items(s) will be considered as zero and work will be required to be executed accordingly.
5. Amount must be quoted in full rupees only.
6. Special care should be taken to write the rates in figures as well as in words and the amount in figures in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the word 'Rs' should be written before the figure of 'Rupees' and the word ' P ' after the decimal figures, eg.' Rs 2.15P' and in case of words the word, "Rupees" should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only', it should invariably be up to two decimal places. While quoting each rate in schedule of tender, the word 'only' should be written closely following the rate and it should not be written in the next line.
7. In the case of item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected
8. Tenders containing proposal for any alteration in the work or in the time allowed for carrying out the work, or which contain any other condition including conditional rebates, will be summarily rejected.
9. The officer inviting tenders shall have the right to reject all or any of the tenders and will not be bound to accept the lowest or any other tender.

10. The tender for the work shall not be witnessed by a Contractor or Contractors who himself / themselves has/have tendered for the same work. Failure to observe this condition would render tenders of the Contractor tendering, as well as witnessing the tender, liable to summary rejection.
11. In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such tender is liable to be rejected.
12. The tenderers shall sign a declaration under the Official Secret Act, 1923, for maintaining secrecy of the tender documents, drawings or other records connected with the work given to them.

4.4. Refund / forfeiture of EMD

1. In the event of a tender being accepted, a receipt for the Earnest Money forwarded therewith shall thereupon be given to that Contractor.
2. In the event of a tender being rejected, the Earnest Money forwarded with such unaccepted tender shall thereupon be returned to the Contractor remitting the same, without any interest.
3. Tender for the work shall remain open for acceptance for a period of 90 days from the date of opening of the Tender.
4. If any tenderer withdraws his tender before the said period or issue of acceptance, whichever is earlier or makes any modification in the terms and conditions of the tender which are not acceptable to the Institute, then IITM, shall without prejudice to any other right or remedy, be at liberty to forfeit 50 % of the said earnest money.

4.5 Documents to be submitted upon acceptance of the tender.

1. On acceptance of the tender, the name of the accredited representative(s) of the Contractor who would be responsible for taking instructions from the Engineer in Charge shall be communicated in writing to the Engineer in Charge.
2. The Contractor shall give a list of IITM employees related to him.

4.6 Signing of Agreement.

1. The successful contractor on acceptance of his tender shall within 14 days from the stipulated date of start of the work, sign the contract.
- 2. Documents constituting the contract**
 - a. Non judicial stamp paper for value not less than Rs.100 containing the brief description of the contract duly signed by both parties to the contract.
 - b. The notice inviting tender, the financial bid and all other the documents including drawings, if any, forming the tender as issued at the time invitation of tender and acceptance thereof together with any correspondence leading thereto.
 - c. Decisions taken in the Pre-bid meeting if conducted.
 - d. Letter of acceptance
 - e. Letter of award (After submission of Performance Guarantee)

4.7 Special conditions

1. Child Labour is strictly prohibited.
2. Construction labour shall not be permitted (except staff for watch and ward) to stay inside the campus and no labour camp shall be allowed to be set up inside the campus.
3. The construction activities and storage of materials shall be restricted within the area earmarked around the proposed building, which shall be barricaded with materials approved by IITM.
4. The contractor shall abide by the restrictions imposed by the security wing of the Institute on the working and on movement of labour, materials etc. and nothing extra shall be payable on this account. The contractor shall arrange for necessary photo identity passes for the labour for entry into the campus. Advance action for obtaining such passes shall be taken by the contractor and no claim on this account shall be entrained.
5. Movement of labour should be restricted to the areas where work is carried out. Workers should be made to confine themselves to the work areas and should not wander into the near by areas / buildings/ forest.
6. The work should be executed during day time only. If the work is required to be carried out in the night, necessary permission of the Engineer-in-charge shall be obtained. Contractor will make his own arrangement for lighting the area and no extra amount for carrying out the work during night is payable. To the extent possible engaging women labour in the night shift should be avoided

7. The work shall be carried out with least hindrance to the adjoining buildings and offices and the contractor will be responsible for any damage, caused to the existing fixtures, electric fittings, cables, roads, pipelines etc. in the course of execution and the contractor shall make good any such damages for which nothing extra is payable.
8. Water for construction shall be arranged by the contractor. The contractor will not be allowed to use any of the water resources available within the campus nor will be permitted to dig any bore well inside the campus.
9. No plot rent shall be charged for materials stocked in the institute land during the course of construction with the prior approval the Engineer. All such materials shall be removed at the time of completion of the work.
10. The contractor shall make his own arrangement for electricity required during the construction period.
11. Tenderers shall inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the site and shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not. Submission of a tender implies that the tenderer has read the complete contract documents and is aware of the conditions, specification of the work to be done and of the local conditions and other factors having a bearing on the execution of work. Any claim either for extra amount or for additional time for execution due to ignorance about the site and working condition is not payable.
12. All documents forming the contract shall be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scaled.
13. In the case of discrepancy between the schedule of Quantities, the specifications and/or the Drawings, the following order of precedence shall be observed.
 - i. Description of item in the Schedule of Quantities.
 - ii. Particular Specifications and special conditions, if any
 - iii. Drawings.
 - iv. C.P.W.D Specifications
 - v. Specifications of B.I.S.
14. If there are varying or conflicting provisions made in any one document forming part of the contract, the Engineer-in-charge shall be the deciding authority with regard to the interpretation of the documents and his decision shall be final and binding on the contractor.
15. Any error in description, quantity or rate in schedule of Quantities or any omission there from shall not vitiate the contract or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from

any of his obligations under the contract. All such variations, errors additions, substitutions etc shall be decided as per the terms of the contract

16. The building work shall be carried out complying in all respects with the requirements of relevant bye-laws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-Charge and nothing extra will be paid on this account.
17. The work of water supply, internal sanitary installations and drainage work etc. shall be carried out as per the local body bye-laws and the contractor shall produce necessary completion certificate from such authorities after completion of the work, if required.
18. Where CPWD specifications are not available for fittings and fixtures, the same should conform to bye-laws and specification of the local Body. The contractor should engage skilled carpenters for the work.
19. The contractor shall comply with all legal orders and directions of the local or public authority or municipality and abide by them.
20. The contractor shall give a performance test of the installation(s) as per specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.
21. Any cement slurry added over base surface (or) for continuation of concreting to obtain better bond between old and new concrete is deemed to have been included in the items and nothing extra shall be payable or extra cement considered in consumption on this account
22. The Rate for RCC works includes cost of concreting in sloped & curved roof, chajjas & beams and no extra rate shall be payable for concreting in such situations.
23. The rate for Centering & shuttering under concrete items will be the same for Centering & shuttering in curves & arches also unless specified otherwise in the BOQ.
24. The contractor should construct proper mortar bands of lean mix with adequate depth & size over the roof for flooding with water & proper curing. In case of Arches, wet gunny bags shall be used for a period of two weeks.
25. Holes and chase for water supply and drainage, etc, shall be provided as directed during progress of work without any claim for extra for finishing
26. The rate quoted for tiling on walls shall include providing the bevel edges for the corners or the PVC corner strips. No additional payment shall be payable on this account.

27. Sample of all materials, fixtures, flooring tiles, wall tiles, doors, windows, sanitary fittings, roofing sheets electrical fittings etc, shall be got approved in advance from the Engineer-in-Charge before taking up the respective work. The contractor shall produce all the materials in advance so that there is sufficient time for testing and approving the materials and clearance of the same before their use in work.
28. The contractor shall be furnished, free of cost one certified copy of the contract documents except Standard Specifications, Schedule of Rates and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract
29. For any dispute arising out of this agreement, the legal jurisdiction will be at Chennai in Tamil Nadu only.
30. It is not binding on the competent authority to accept the lowest or any other tender and any or all the tenders received can be rejected without assigning any reason.
31. Canvassing whether directly or indirectly, in connection with tender is strictly prohibited and the tenders of the contractors who resort to canvassing will be liable to rejection.
32. The competent authority reserves the right to accept part of the tender and the tenderer shall be bound to perform the same at the rates quoted.
33. The contractor shall associate an Electrical contractor of the appropriate class to carry out the electrical works. But it is the principal contractor who is responsible for completion of the Electrical work also as per contract. No agreement is created between the Electrical contractor associated by the tenderer and IITM in this regard.
34. Other agencies related to this project will also simultaneously execute their part of works and the contractor shall cooperate and allow smooth working of all such agencies. The contractor shall leave such holes, openings etc, for laying / burying of pipes, cable, conduits, clamps, boxes and hooks for fans etc. as may be required for other agencies. Conduits for electrical wiring shall be laid in such a way that they leave enough space for concreting and do not adversely affect the structural members. The rates quoted for the items of work are deemed to include charges for coordinating with all such agencies and nothing extra is payable on this account.
35. The following events will take place in the Campus which may hinder the progress of work.

The duration of the events are

- a. Shaastra and Saarang - 10 days (normally in January)
- b. Convocation - 2 days (normally in July)

The completion time stipulated in the contract is deemed to have included the above, if they happen during the duration of the contract.

4.8 General Conditions:

1. The particular specification for certain items in the Financial bid – Volume – II – Part 1 – Civil work - Bill of Quantity (BOQ) is enclosed as Annexure 1 and the same shall be read in conjunction with the corresponding specification given in the BOQ.
2. Site barricading details and material yard layout is enclosed as Annexure 2.
3. Spillover of any construction materials / earth on the road surface should be cleared immediately.
4. The contractors are requested to inspect the site before submission of tender documents. After prebid meeting, the Site and material yard location will be shown to interested contractors.
5. IIT Madras will not supply water for construction and domestic requirements.
6. Electricity / power requirement shall be arranged by the contractor. Necessary temporary connections from local authority / DG set will be arranged by the contractor. No extra claim will be entertained for the same.
7. No trees and vegetation shall be cut by the contractor.
8. All construction activities and labour movements should be restricted within the area earmarked for these purpose.
9. No labour camp is allowed inside IIT Madras campus.
10. Firewood collection is strictly prohibited.
11. Site yard shall be barricaded as per the drawing approved by IIT Madras. No additional payment will be made for the same.
12. All debris generated in the site premises / material yard should be removed and disposed outside IIT Madras campus. Necessary approval from local authority shall be obtained by the contractor. No additional charges will be paid for the same.
13. IIT Madras traffic regulation and speed limit should be followed without any violation.

14. In case of violation of any rules by the contractor, penalty will be levied by IIT Madras at the following rate.

SI.No	Operations	Penalty per day
1	Construction labour shed without approval from Engineer-in-charge	Rs5000/- per shed per day
2	Labour wanders in to the nearby areas / buildings / forests.	Rs500/- per person
3	Thrown food items / waste / package item inside or outside the site premises	Rs1000 per day
4	If water stagnation inside the construction site.	Rs500 per day
5	Dumping of debris and storage of Rs25000 outside the barricaded area.	Rs25000 per day
6	Improper maintenance of barricade.	Rs5000 per day
7	Improper sanitation of labour toilets	Rs1000 per day
8	Collection of firewood	Rs2500 per day

5. SCHEDULES

Schedule 'A' - The Bill of Quantities enclosed in this document.

Schedule 'B' - Schedule of materials proposed to be issued to the tenderer

NO MATERIAL SHALL BE ISSUED TO THE TENDERER BY IITM

Schedule 'C'- Schedule of tools and plants proposed to be hired to the tenderer

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

Schedule 'D' - Extra schedules for specific requirements / documents for the work, if any.

Schedule 'E'- Price escalation Clause – 10C only applicable to this contract.

Schedule 'F'

Name of work	: Annual maintenance of Carpentry and Aluminium works at IITM for the year 2014-15
Estimated cost of work	: Rs 187.33 Lakhs
Earnest money	: Rs.10,000/-
Performance Guarantee	: 5% of the tendered value
Security Deposit	: 5% of the tendered value

General Rules and Directions:

Officer inviting tender **EXECUTIVE ENGINEER (Civil), IITM**

Maximum percentage for quantity of items work
to be executed beyond which rates are to be
determined in accordance with clause 12.2 and 12.3. } See below

Definition

Engineer-in-charge **EXECUTIVE ENGINEER(Civil)**

Accepting authority Director, IIT Madras

Percentage on cost of material and
labour to cover all overheads and profit 15%

Standard schedule of rates **CPWD DSR 2013**

Department IIT Madras

Standard CPWD contract form

CPWD form 8 with upto date
Modification and correction

Clause 1

- i.) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance in days. 7 (seven)_Days
- (ii) Maximum allowable extension beyond the period provided above 7(Seven) Days.

Clause 2

Authority for levying compensation under clause 2. EXECUTIVE ENGINEER(Civil)

Clause 2a

Whether clause 2a shall be applicable : Yes applicable.

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning the date of start : 14 Days

Time allowed for execution of work : 12 months

Authority to give fair and reasonable

Extension of time for completion of work : EXECUTIVE ENGINEER(Civil), IITM

Clause 6, 6A : Clause 6A shall be applicable.

Clause 7

Gross work to be done with net

payment after adjustment of advances for material

collected, if any, since the last such payments: Rs. 1.00 Lakh

for being eligible to interim payment.

Clause 10A - List of Testing equipments to be provided as listed in this

document - NOT APPLICABLE

Whether Clause 10B (ii) shall be applicable

:

Yes

Clause 10 CA and 10C

Clause 10C only applicable

Clause 10 CA **NOT** applicable to this work.

Clause 10C shall be applicable for the extended period of contract if the extension so granted is without levy of compensation

Clause 10CC : Not applicable.

Clause 11

Specification to be followed for execution of work

CPWD Specifications 2009 Volume I to II and revised CPWD Specifications up to date, general specifications for electrical works part – I 2004, general specifications for electrical works part-IV Sub Station 2007.

Clause 12

Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building work 50% (Excluding foundation)

Deviation limit beyond which Clauses 12.2 & 12.3 shall apply for foundation work. } 100%

Clause 16

Competent Authority for deciding reduced rates for items which are not as per specification EXECUTIVE ENGINEER(Civil) IITM

Clause 36(i) Technical Personnel to be employed at site.

- Not applicable

16.0 LIST OF APPROVED MAKE / BRAND

16.1 IITM reserves the right to select any of the make/brand shown below and only those makes/brands will be allowed to be used in the work. Nothing extra is payable even if there is cost difference between one make/brand and another.

16.2 Civil Works

SI no	MATERIAL	BRAND / MANUFACTURER NAME
BUILDING MATERIALS		
1	Cement OPC 53 grade / PPC super grade	ACC / Ramco / Ultra Tech / Chettinad/Zuari/Birla Ambuja
2	Steel Fe 500 grade	TATA / SAIL / TISCO / RINL
3	Fly ash concrete block	Confirming to IS 2185
4	Wood	First class red padak / Kongu/ Second class teak
JOINERY		
1	Paneled single door shutters	Century ply board, Bajaj, Archid Ply, Green ply - eco tech products
2	Flush Door	Jackson/Green ply/Kenwood
2	Particle board exterior grade	Novapan, Ecoboard, Bhutan board Archidply, Green ply
	Veneer	Jackson/Archid ply/Century Ply

	BWR Ply wood	Century ply/Archid ply/Century Ply
3	Stainless steel butt hinges	Godrej, ISI Appd brand
4	MS Piano hinges	ISI marked, IS 3818
5	Stainless steel Tower bolts	Godrej, ISI Appd brand
6	Brass mortice lock and other brass fittings	Godrej, ISI Appd brand
7	Satin nickel door lock	Godrej LKUDWICN ultra twin bolt / ISI Appd brand
8	Stainless steel cylindrical keyed door lock with knob	Godrej, ISI Appd brand
9	Multi purpose round lock	Godrej, ISI Appd brand
10	Brass hanging type floor door stopper / Casement stays and other brass fittings	Godrej / Imax
11	Aluminium fittings	Jal /crown / classic
12	Aluminium extrusions	Indal / Jindal
13	Glass	Saintgobain / Modifloat/ Pilkington
14	Door closer	Everite / Hardwyn / Dorma
15	Floor stopper	Godrej / Everite/Dorma
16	Rubber wood	RUBCO / ISI Appd brand
17	PVC Rigid foam sheet	M/s Rajshri / ISI appd Brand
PAINTS		
1	Water proofing cement paint	Snowcem plus / Durocem, White Cement -

		Birla white / J.K.White/ Asian white/Nippon
2	Interior emulsion paint	Berger - Bison, ICI - Supercote, Shalimar, Nippon & Jenson & Nicholson.
3	Weather seal matt finish paint (Exterior)	Berger - Weather coat all guard, ICI - Weather shield, Shalimar, Nippon & Jenson & Nicholson.
4	Synthetic enamel paint	Dulux ICI, Berger, Shalimar, Nippon & Jenson & Nicholson
5	Acrylic putty	Altek / Asian / ICI / Berger
6	French polish	Sheenlac / Asian/ Berger
FLOORING MATERIALS		
1	Rectified ceramic floor tile	Nitco /Jhonson / Kajaria/ Somany
2	Ceramic glazed floor tile	Nitco / Jhonson / Kajaria/ Somany
3	Ceramic glazed wall tile	Johnson , Kajaria, Burma Walnut, Nitco Johnson , Kajaria
4	Granite for urinal partition	Jet black/ Black galaxy/ Tiger brown/ Ruby red
5	Granite for computer table top	Jet black/ Black galaxy/ Tiger brown/ Ruby red
WATERPROOFING		
1	Water proofing material	Impermo – Snowcem / Roff / Fosroc /BASF/ CICO
STEEL MATERIALS		

1	Stainless steel pipe	IS 304 Grade Salem Stainless steel/ Vizag
2	G.I Pipe	TATA / APPOLO
3	C.I./D.I Pipes	Lanco or equivalent
4	Pipe Fitting	R brand / Unique
5	Valves & Fixtures	Kirloskar / Audco / Leader

NOTE

The Successful tenderer shall submit test reports for all the materials / equipments. If any make is not in accordance with the tender specification it will not be accepted even if the make is indicated in the above List.

INDIAN INSTITUTE OF TECHNOLOGY MADRAS

Bill of Quantities

Name of the work: “Annual maintenance of Carpentry and Aluminium works at IITM for the year 2014-15.”

Tender No : 18 / 2014 – 15 / Civil.

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
1	662.00	Plaster repair to damaged plaster surface after making necessary chipping, cleaning the surface and plastering with CM 1:4 (1 Cement: 4 Coarse sand) of 20mm thick at all level. The surface will be painted after necessary repair works to match the existing finish such as OBD /Plastic emulsion/ Water proof cement paint (As per existing surface) after suitable surface preparation using putty, primer etc complete. The necessary scaffolding, curing etc shall be arranged by the contractor. No additional payment will be made for scaffolding, curing etc complete. Upto 1 Sq.m	each		
2	47.00	Arresting seepage of water from wall surface, from the junction of chujjas, weather shade, cantilever ends, corbels and wall at sill level of windows, jambs of windows etc complete including necessary Grouting, grooving, applying sealant to the openings near Door/window frames plastering, painting etc complete including charges for necessary water proofing sealant 10mm to 20mm depth in concrete slab by power cutter and fixing the SBS membrane in the groove by using SONA elastic sealant or thioflex 600 gun grade as per the direction of the Engineer in charge.	Rm		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
3	106.00	Providing opening for fixing window type air conditioner at all floors and levels in the existing windows by cutting and removing the steel grills, wooden frame (Padaak wood)etc to the required size of AC, welding additional steel flats, bar to strengthen the grills that have been cut, providing BWR ply wood 6mm thick around the AC to obtain air tight surface, including necessary painting, reducing the size of window shutters by removing the styles, rails, glass panes and re-fixing the same after due modification masonry work, etc wherever needed complete and making good with adjoining. (Rates should include cost of all material and labour. No material shall be supplied by institute). For Providing new AC opening in the existing window. Size opening 26"x17"	Each		
4	107.00	Alteration to the existing A.C opening to the surface the required new size of opening	each		
5	1960.00	Renewing glass panes in wooden, steel and aluminum windows/ doors/ ventilators with necessary PVC Neoprine gaskets or wooden fillets / beading or fixing putty for steel windows or matching with existing joineries - Glass panes weighing 10 Kg / Sqm (4.5 mm thick) - Area up to 0.1 Sqm	Each		
6	562.00	Renewing glass panes in wooden, steel and aluminum windows/ doors/ ventilators with necessary PVC Neoprine gaskets or wooden fillets / beading or fixing putty for steel windows or matching with existing joineries - Glass panes weighing 10 Kg / Sqm (4.5 mm thick) - Area 0.1 Sqm to 0.5 Sqm.	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
7	141.00	Renewing glass panes in wooden, steel and aluminum windows/ doors/ ventilators with necessary PVC Neoprene gaskets or wooden fillets / beading or fixing putty for steel windows or matching with existing joineries - Glass panes weighing 10 Kg / Sqm (4.5 mm thick) - Area 0.5 Sqm to 1.5 Sqm.	Each		
8	34.00	Renewing glass panes in wooden, steel and aluminum windows/ doors/ ventilators with necessary PVC Neoprene gaskets or wooden fillets / beading or fixing putty for steel windows or matching with existing joineries - Glass panes weighing 13.75 Kg / Sqm (5.5 mm thick) - Area up to 0.1 Sqm	Each		
9	74.00	Renewing glass panes in wooden, steel and aluminum windows/ doors/ ventilators with necessary PVC Neoprene gaskets or wooden fillets / beading or fixing putty for steel windows or matching with existing joineries - Glass panes weighing 13.75 Kg / Sqm (5.5 mm thick) - Area 0.1 Sqm to 0.5 Sqm.	Each		
10	134.00	Renewing glass panes in wooden, steel and aluminum windows/ doors/ ventilators with necessary PVC Neoprene gaskets or wooden fillets / beading or fixing putty for steel windows or matching with existing joineries - Glass panes weighing 13.75 Kg / Sqm (5.5 mm thick) - Area 0.5 Sqm to 1.5 Sqm.	Each		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
11	7964.00	Easing of windows / doors for smooth operation including removal and re-fixing if required after planning the edges etc, necessary painting of the planned surface with matching paint over a coat of primer, necessary hinges, screws etc complete. (rate for one shutter)	Each		
12	47.00	Removal and replacing SS / Aluminum powder coated door fittings such as damaged tower bolts (upto a size of 300x10mm), handle (75mm to 125 mm), Hinges (Upto a 125x75x 4mm) hook and eye, catch, cupboard locks upto 75mm etc., complete of various sizes and material using necessary screws. The material like tower bolt, necessary screws have to be arranged by the contractor (the sizes indicated for fittings are maximum).	Each		
13	109.00	Removal and replacing SS / Aluminum powder coated door fittings such as damaged sliding door bolts (Aldrop) upto a size of (300 x 16mm) etc complete of various sizes and material using necessary screws. The material like sliding door bolts, necessary screw has to be arranged by the contractor (the sizes indicated for fittings are maximum).	Each		
14	104.00	Replacement of wire mesh in doors, windows and ventilators using M.S/G.I mesh of 2" x 1", 1/2" x 1/2", 1" x 1" (minimum 1.6mm dia wire) etc. The charges inclusive of labour, material such as country wood beading, nails, screws, putty etc complete. Area upto 1sqm	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
15	37.00	Replacement of weld mesh in doors, windows and ventilators using mesh of 3" x 1" (Heavy type). The charges inclusive of labour, material such as teak wood beading, nails, screws, putty etc., complete (dia of wire mesh 1.6mm).	Sqm		
16	530.00	Replacement of weld mesh in doors, windows and ventilators using mesh of 2"x2", 2" x1", 1/2"x1/2", 1"x1/2. The charges inclusive of labour, material such as teak wood beading, nails, screws, putty etc., complete (dia of wire mesh 1.6mm).	Sqm		
17	86.00	Repairs to Gates: Repairing the existing gates of fencing including replacing of corroded sections / pipes with new sections / pipes, repairing the aldrop, repairing the hinges, clamps, welding, painting, re-fixing the same etc complete. (All materials required for the work shall be arranged by the contractor). Area of gate opening up to 5.0sqm.	Each		
18	131.00	Repairing the damaged / decayed styles, rails and panels of door / windows shutters, Cupboard shutter including charges for removing and refixing after repairing / replacing the damaged styles, rails and panels including painting the replaced portions with necessary matching paint over a coat of approved wooden primer including necessary fittings such as hinges, tower bolts, handle with necessary screws etc complete. (The rate includes cost of all material and labour. No material shall be supplied by institute. All material removed from the doors / windows should be returned to the AEE Concerned).	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
19	22.00	Repairs to Rolling Shutters / Collapsible shutter: Repairing the existing rolling shutter / collapsible shutter of all type including repairs to shutters, frames, hood cover such as removing the corroded portion and replacing the same with new material, removing dents and other damages and re fixing the same after repair and repainting with synthetic enamel paint over a coat of zinc chromate primer, replacing the bearing, bracket, etc This items includes charges for repairs to mechanical devices such as shaft, gears, bearing, roller and charges for scaffolding if necessary etc and also to lubricating the parts etc complete. (No material will be issued by IITM) - Area up to 5 Sq.m	Each		
20	22.00	Repairs to Rolling Shutters / Collapsible shutter: Repairing the existing rolling shutter / collapsible shutter of all type including repairs to shutters, frames, hood cover such as removing the corroded portion and replacing the same with new material, removing dents and other damages and re fixing the same after repair and repainting with synthetic enamel paint over a coat of zinc chromate primer, replacing the bearing, bracket, etc This items includes charges for repairs to mechanical devices such as shaft, gears, bearing, roller and charges for scaffolding if necessary etc and also to lubricating the parts etc complete. (No material will be issued by IITM) - Area up to 5 - 10 Sq.m	Each		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
21	102.00	Repairs to Aluminum Joineries: Repairing the aluminum doors, windows and ventilators including charges for replacing damaged sections, pivots, hinges, tower bolts, door stopper, handles, rubber beading, aluminum clips, PVC/ Neoprene felts hooks and eyes, CP brass / SS screws, aluminum snap beading for glazing/ paneling etc complete including charges for lubricating the same after repairs works. (No material will be issued by IITM)	Each		
22	210.00	Replacing the Door closer: (Everite/Hardwyn) Replacing the damaged / unserviceable door closer with new including charges for labour for fixing in Aluminum/Glass Door and other material required. (No material will be issued by IITM)	Each		
23	32.00	Replacing the Floor spring: (Everite/Hardwyn) Replacing the damaged / unserviceable floor spring with new including charges for labour for fixing in Aluminum/Glass Door and all other material required etc complete.	Each		
24	5.00	Replacing the Floor spring: (Dorma/stanley/HAFFLE) Replacing the damaged / unserviceable floor spring with new including charges for labour for fixing in Aluminum/Glass Door and all other material required etc complete.	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
25	70.00	Repairs to Vertical Blinds: Repairs to vertical blinds with 100 / 89 mm wide imported superior polyester base fabric vanes with Scotch guard application including replacement of damaged blind. Repairs to head rail of extrude anodized high strength aluminum alloy of size 25mmx 50mm high or equivalent with wall thickness of 1.2mm. This item includes repair / replacement of end control units consist of reduction gearbox having the reduction ratio of 3.5:1 for a very smooth operation of the blind if needed. This repairs work includes repairs to planetary gear in the outer housing, four small transmission gears fitted in the middle assembly and a end receiving gear attached to central sprocket Unit, Tilter chain is made of 4.5mm plastic beads moulded on 2.2mm thick polyester card if needed, pitch of the beads is 6mm , end control unit has the facility to rotate the louver by 180 degrees, Tilt rod is made of extruded aluminum having 3 keyways and the average dia shall be 5.8 mm carrier (Runner) is made of moulded plastic.	Sqm		
26	102.00	Replacing of damaged Novopan Boards of all types: Replacing the damaged / decayed novopan / Ply wood of thickness up to 18mm for doors and partitions, furniture's including cost of material such as fevicol, nails, screws etc complete. For the ply wood work surface shall be made to match with existing surface finish such as mica of 1mm thick or enamel paint - Upto 0.5 Sq.m	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
27	37.00	Replacing of damaged Novopan Boards of all types: Replacing the damaged / decayed novopan / Ply wood of thickness up to 18mm for doors and partitions, furniture's including cost of material such as fevicol, nails, screws etc complete. For the ply wood work surface shall be made to match with existing surface finish such as mica of 1mm thick or enamel paint - Upto 0.5 to 1.5 Sq.m	Each		
28	32.00	Replacing of damaged Novopan Boards of all types: Replacing the damaged / decayed novopan / Ply wood of thickness up to 18mm for doors and partitions, furniture's including cost of material such as fevicol, nails, screws etc complete. For the ply wood work surface shall be made to match with existing surface finish such as mica of 1mm thick or enamel paint - Upto 1.5 to 2.5 Sq.m	Each		
29	260.00	Repairing damaged furniture's like benches in class rooms, tables, stools, chairs etc: Replacing the damaged / decayed novopan / Ply wood of thickness up to 20mm/ bushes etc complete for furniture's including cost of material such as fevicol, nails, screws etc complete. For the ply wood work surface shall be made to match with existing surface finish such as mica of 1mm thick or enamel paint or French spirit polishing.	Each		
30	30.00	Canning the chairs with plastic wire to match the existing design and standards. The rate inclusive of labour material etc complete. (Measurement will be taken for each face of chair to be canned)	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
31	425.00	Dismantling doors, windows & clerestory windows shutter including chowkhats, of area 3 sqm and below	Each		
32	42.00	Dismantling doors, windows & clerestory windows shutter including chowkhats, of area beyond 3 sqm	Each		
33	276.00	Providing and Fixing CP towel rail of size 20x600mm long	Each		
34	1474.00	Providing and Fixing special quality bright finished brass cupboards locks.	Each		
35	14.50	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position. for first class padauk / kongu wood.	Cum		
36	3.40	Providing wood work in frames of doors, windows, clerestory windows for second class teak wood.	Cum		
37	699.00	Providing and Fixing 19mm thick waterproof plywood of Kitply or Archidply for cupboard shutters door with necessary 25 x 4 or 20 x 6 mm thick teak wood beading, screws, nails etc as per direction of Engineer in charge	Sqm		
38	658.00	Providing and Fixing the Sunmica / laminated sheet 1mm thick for cupboard shutter & cupboard the rate inclusive of Labour and Materials etc. complete	Sqm		
39	18.00	Providing and Fixing the 4mm thick OST for cupboard shutter & partition etc. The rate inclusive of labour and materials etc. as per the direction of Engineer in Charge	Sqm		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
40	174.00	Providing and Fixing Aluminum Tower bolt ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 200x10mm. (JAL / CLASSIC / CROWN)	Each		
41	2328.00	Providing and Fixing Aluminum Tower bolt ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 150x10mm. (JAL / CLASSIC / CROWN)	Each		
42	1914.00	Providing and Fixing Aluminum Tower bolt ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 100x10mm. (JAL / CLASSIC / CROWN)	Each		
43	258.00	Providing and Fixing Aluminum Tower bolt ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 300x10mm. (JAL / CLASSIC / CROWN)	Each		
44	121.00	Providing and Fixing Aluminum Tower bolt ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 250x10mm. (JAL / CLASSIC / CROWN)	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
45	1371.00	Providing and Fixing Aluminum Handles ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 100mm. (JAL / CLASSIC / CROWN)	Each		
46	168.00	Providing and Fixing Aluminum Handles ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 75mm. (JAL / CLASSIC / CROWN)	Each		
47	586.00	Providing and Fixing Aluminum Handles ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 125mm. (JAL / CLASSIC / CROWN)	Each		
48	47.00	Providing and Fixing Aluminum Handles ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 150mm. (JAL / CLASSIC / CROWN)	Each		
49	68.00	Providing and Fixing door bottom with pauddak / kongu country wood frame of size: 25x40mm. Up to 1.05m length for Threshold etc	Each		
50	350.00	Providing and Fixing Aluminum sliding door bolts ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 250x16mm. (JAL / CLASSIC / CROWN)	Each		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
51	26.00	Providing and Fixing Aluminum sliding door bolts ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 300x16mm. (JAL / CLASSIC / CROWN)	Each		
52	90.00	Providing and Fixing of 4 levers mortice lock of (Godrej) including removing the existing lock and etc. complete..	Each		
53	35.00	Providing and Fixing of 6/7 levers Night latch lock of (Godrej) including removing the existing lock and etc. complete..	Each		
54	3909.00	Labour charge for repairing the existing wooden door / window frame shutters including repairs to the existing frames / shutters after removing from the original position and re-fixing the same after repairing. . The rate inclusive of cost of wooden pieces, screws etc but excluding cost of fittings. The rate shall be applicable to area of opening up to 3.00sqm. The Payment will be made for each shutter of door / window.	Each		
55	105.00	Providing and Fixing ISI marked MS pressed butt hinges bright finished with necessary screws etc., complete: 125x65x2.12mm.	Each		
56	450.00	Providing and Fixing ISI marked MS pressed butt hinges bright finished with necessary screws etc., complete: 100x58x1.90mm.	Each		
57	438.00	Providing and Fixing ISI marked MS pressed butt hinges bright finished with necessary screws etc., complete: 75x47x1.70mm.	Each		
58	325.00	Providing and Fixing nickel plated M.S.pipe curtain rods with nickel plated brackets:20mm dia (heavy type)	Rm		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
59	46.00	Providing and Fixing nickel plated M.S.pipe curtain rods with nickel plated brackets:25mm dia (heavy type)	Rm		
60	130.00	Providing and fixing MS round or square bars with MS flats at required spacing in wooden frames of windows and clerestory windows.	Kg		
61	362.00	Providing 40x5 mm flat iron hold fast 40cm long including fixing to frame with 10mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm using Cement concrete1:3:6 mix (1 cement :3 coarse sand : 6 graded stone aggregate 20mm nominal size).	Each		
62	85.00	Providing and Fixing Stainless steel butt hinges with stainless steel screws etc., complete as per IS:12817 : 150x65x1.90mm.	Each		
63	2021.00	Providing and Fixing stainless steel butt hinges with stainless steel screws etc., complete as per IS:12817: 100x58x1.90mm.	Each		
64	14.00	Providing and Fixing bright finished brass tower bolts(barrel type) with necessary screws etc., complete: 100x10mm.	Each		
65	197.00	Providing and Fixing bright finished brass hanging type floor door stopper with necessary screws etc., complete.	Each		
66	81.00	Providing and tying 18 gauge G.I wires to the existing windows to protect entry of monkeys - size of window up to - 1.5m x 1.5m	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
67	543.00	Providing and fixing paneled or paneled and glazed shutters for doors, windows and clerestory windows including ISI marked M.S black enameled butt hinges with necessary screws excluding paneling which will be paid for separately. First class padauk / kongu wood 30mm thick.	Sqm		
68	44.00	Providing and fixing paneling or paneling and glazing in paneled or paneled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Paneling for paneled or paneled and glazed shutters 25mm to 40mm thick - Padauk wood/Good quality kongu wood.	Sqm		
69	20.00	Providing and Fixing flat pressed 3 layer particle board medium density exterior grade (Grade I) or graded wood particle board IS:3087 marked to frame, backing or studding with screws etc., complete.(Frames, backing or studding to be paid separately):18mm thick. (Novopan / Bhutan)	Sqm		
70	2.00	Providing and Fixing flat pressed 3 layer particle board medium density exterior grade (Grade I) or graded wood particle board IS:3087 marked to frame, backing or studding with screws etc., complete.(Frames, backing or studding to be paid separately):12mm thick. (Novopan / Bhutan)	Sqm		
71	10.00	Supplying and fixing Door eye piece including providing required hole in the door and fixing the eye piece of standard size	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
72	40.00	Providing and Fixing pre-laminated flat pressed 3 layer (medium density) particle board or graded wood particle board IS:3087 marked with one side decorative and other side balancing lamination Grade I, Type II exterior grade IS : 12823 marked in shelves with screws and fittings wherever required, edges to be painted with polyurethane primer (fittings to be paid separately) - 18mm thick.	Sqm		
73	504.00	Providing and Fixing ISI marked flush door shutters conforming to IS:2202(Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters. 30mm thick including ISI marked Stainless Steel butt hinges with necessary screws. (Kutty / Anchor / Western India)	Sqm		
74	648.00	Extra for Providing lipping with 2nd class teak wood battens 25mm minimum depth on all edges of shutters- 30mm to 40mm thick (over all area of door shutter to be measured)	Sqm		
75	23.00	Extra for Providing vision panel not exceeding 0.1 Sqm in all type of flush doors (cost of glass excluded) (over all area of door shutter to be measured): Rectangular or square	Sqm		
76	758.00	Providing and Fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc., complete: 2nd class teak wood- 50x12mm.	Rm		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
77	20.00	Cutting holes upto 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement :2coarse sand :4 graded stone aggregate 20mm nominal size) including finishing complete so as to make it leak proof.	Each		
78	736.00	Providing and Fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete: Kongu / padauk wood - 50x12mm.	Rm		
79	20.00	Providing and Fixing ISI marked oxidized MS Tower Bolts black finish, (Barrel type) with necessary screws etc., complete: 250x10mm.	Each		
80	20.00	Providing and Fixing ISI marked oxidized MS Tower Bolts black finish, (Barrel type) with necessary screws etc., complete: 200x10mm.	Each		
81	24.00	Providing and Fixing ISI marked oxidized MS Tower Bolts black finish, (Barrel type) with necessary screws etc., complete: 150x10mm.	Each		
82	20.00	Providing and Fixing ISI marked oxidized MS Tower Bolts black finish, (Barrel type) with necessary screws etc., complete: 100x10mm.	Each		
83	21.00	Providing and Fixing ISI marked 85x42mm oxidized MS pull bolt lock conforming to IS: 7534 with necessary screws bolts, nut and washers etc., complete	Each		
84	24.00	Providing and Fixing ISI marked oxidized MS Door Latches conforming to IS: 5930 with necessary screws etc., complete: 300x20x6mm.	Each		
85	24.00	Providing and Fixing ISI marked oxidized MS Door Latches conforming to IS: 5930 with necessary screws etc., complete: 250x20x6mm.	Each		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
86	20.00	Providing and Fixing ISI marked oxidized MS Handles conforming to IS: 4992 with necessary screws etc., complete: 125mm.	Each		
87	20.00	Providing and Fixing ISI marked oxidized MS Handles conforming to IS: 4992 with necessary screws etc., complete: 100mm.	Each		
88	32.00	Providing and Fixing ISI marked oxidized MS Handles conforming to IS: 4992 with necessary screws etc., complete: 75mm.	Each		
89	20.00	Providing and Fixing oxidized MS Casement stays (straight peg type) with necessary screws etc., complete: 300mm weighing not less than 200gms.	Each		
90	20.00	Providing and Fixing oxidized MS Casement stays (straight peg type) with necessary screws etc., complete: 250mm weighing not less than 150gms.	Each		
91	20.00	Providing and Fixing oxidized MS Casement stays (straight peg type) with necessary screws etc., complete: 200mm weighing not less than 120gms.	Each		
92	22.00	Providing and Fixing bright finished brass door latch with necessary screws etc., complete: 300x16x5mm.	Each		
93	18.00	Providing and Fixing bright finished brass door latch with necessary screws etc., complete: 250x16x5mm.	Each		
94	109.00	Providing and Fixing bright finished brass 100mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screw etc., complete (Best make of approved quality). (Godrej/Lakshmi or equivalent)	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
95	91.00	Providing and Fixing bright finished brass handles with screws etc., complete: 125mm.	Each		
96	277.00	Providing and Fixing bright finished brass handles with screws etc., complete: 100mm.	Each		
97	72.00	Providing and Fixing bright finished brass handles with screws etc., complete: 75mm.	Each		
98	23.00	Providing and fixing bright brass furniture handles up to 50mm length including necessary brass screws etc. complete.	Each		
99	152.00	Providing and fixing 150 mm bright finished floor brass door stopper with rubber cushion, screws etc. to suit shutter thickness complete.	Each		
100	361.00	Providing and Fixing bright finished brass hard drawn hook and eyes 300mm	Each		
101	114.00	Providing and Fixing bright finished brass hard drawn hook and eyes 250mm	Each		
102	53.00	Providing and Fixing bright finished brass hard drawn hook and eyes 200mm	Each		
103	442.00	Providing and Fixing bright finished brass hard drawn hook and eyes 150mm	Each		
104	468.00	Providing and Fixing bright finished brass hard drawn hook and eyes 100mm	Each		
105	20.00	Providing and Fixing Chromium plated brass butt hinges 125x70x4mm with necessary screws etc., complete (Ordinary type)	Each		
106	24.00	Providing and Fixing Chromium plated brass butt hinges 100x70x4mm with necessary screws etc., complete (Ordinary type)	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
107	20.00	Providing and Fixing Chromium plated brass butt hinges with necessary screws etc., complete 75x65x4mm (Heavy type)	Each		
108	20.00	Providing and fixing 85x42mm chromium plated brass pull bolt lock with necessary screws, nuts, bolts and washers etc. complete.	Each		
109	20.00	Providing and Fixing Chromium plated brass handles with necessary screws etc., complete: 125mm.	Each		
110	23.00	Providing and Fixing Chromium plated brass handles with necessary screws etc., complete: 100mm.	Each		
111	22.00	Providing and Fixing Chromium plated brass handles with necessary screws etc., complete: 75mm.	Each		
112	70.00	Providing and Fixing ISI marked Aluminum butt hinges anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 125x75x4mm.	Each		
113	22.00	Providing and Fixing ISI marked Aluminum butt hinges anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 125x63x4mm.	Each		
114	302.00	Providing and Fixing ISI marked Aluminum butt hinges anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 100x75x4mm.	Each		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
115	12.00	Providing and Fixing ISI marked Aluminum butt hinges anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 100x63x4mm.	Each		
116	213.00	Providing and Fixing ISI marked Aluminum butt hinges anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 100x63x3.2mm.	Each		
117	191.00	Providing and Fixing ISI marked Aluminum butt hinges anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 75x63x4mm.	Each		
118	84.00	Providing and Fixing Aluminum handles ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 125mm.	Each		
119	651.00	Providing and Fixing Aluminum handles ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 100mm.	Each		
120	15.00	Providing and Fixing Aluminum handles ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: 75mm.	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
121	291.00	Providing and Fixing Aluminum hanging floor door stopper ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: Single rubber stopper.	Each		
122	85.00	Providing and Fixing Aluminum hanging floor door stopper ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete: Twin rubber stopper.	Each		
123	22.00	Providing and Fixing Aluminum casement stays 200mm - ISI marked anodized (anodic coating not less than Grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete.	Each		
124	23.00	Renewing bottom rail or top rail of collapsible gate including making good all damages and applying priming coat of zinc chromate yellow primer of approved brand and manufacturer.	Kg		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
125	13.00	<p>Providing and Fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate Z sections and other sections of approved make conforming to IS :733 and IS 1285, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC / neoprene felt etc. Aluminium sections shall be smooth, rust free straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling, C.P brass / Stainless steel screws, all complete as per architectural drawings and the directions of Engineer - in- charge. (Glazing and paneling to be paid for separately) For fixed portion Anodized aluminium (anodized transport or dyed to required shade according to IS 1868, Minimum anodic coating of grade AC 15)</p>	Kg		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
126	143.00	<p>Providing and Fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections / appropriate Z sections and other sections of approved make conforming to IS :733 and IS 1285, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC / neoprene felt etc. Aluminium sections shall be smooth, rust free straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing / paneling, C.P brass / Stainless steel screws, all complete as per architectural drawings and the directions of Engineer - in- charge. (Glazing and paneling to be paid for separately) For shutter of doors windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of PVC / neroprene gasket required (Fittings shall be paid for separately).Anodized aluminium (anodized transport or dyed to required shade according to IS 1868, Minimum anodic coating of grade AC 15)</p>	Kg		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
127	5.00	Providing and fixing openable cupboard shutter using first quality padaak wood size 50mm x50mm @ 600 mm frame and shutter using 19mm commercial plywood and 1mm thick laminate sheet and finishing other surfaces with two coats of enamel paint over a priming coat and including hardware fittings and labour charge etc., complete.	Sqm		
128	35.00	Providing and Fixing openable cupboard shutter using first quality padaak wood size 75mmx40mm frame and shutter using 19mm commercial plywood and 1mm thick laminate sheet and finishing other surfaces with two coats of enamel paint over a priming coat and including hardware fittings and labour charge etc., complete.	Sqm		
129	11.00	Providing and Fixing sliding type cupboard shutter with all-round frame using country wood of size 70x30mm frame and shutter using 19mm commercial plywood and & 1mm thick laminate sheet and finishing other surfaces with two coats of enamel paint over a priming coat and including hardware fittings and labour charge etc., complete.	Sqm		
130	378.00	Labour charge for repairing / servicing the aluminum door and window (openable / sliding) by removing & replacing the damaged section. Up to 3sqm	Each		
131	125.00	Labour charge for repairing/ servicing the aluminum window (openable / sliding window) by removing & replacing the damaged section. Above 3sqm area	Each		
132	654.00	Providing and fixing of Aluminum Sheet 0.80mm thick for Toilet flush door with necessary screws, nails and etc. complete	Sqm		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
133	234.00	Providing and fixing of PVC moulded Box type Mirror 600 x 450mm with CP brass screws etc. complete	Each		
134	738.00	Providing and fixing fly proof galvanized MS wire mesh to windows, ventilators and doors using MS galvanized MS wire gauge with average width of aperture more than 0.67mm in both directions including country wood frame of size 30mm x 12mm and painting etc complete as per the direction of the Engineer in Charge.	Sqm		
135	90.00	Providing and fixing rigid foam sheet 1mm thick manufactured by M/s RAJSHRI or equivalent	Sqm		
136	1480.00	Painting with synthetic enamel paint of approved brand and manufacture of required color to give an even shade on new work two or more coats (ICI / Asian) - Upto 1.5 Sqm	Sqm		
137	1431.00	Painting with synthetic enamel paint of approved brand and manufacture of required color to give an even shade one or more coats (ICI / Asian) - 1.5 to 2.5 Sqm	Sqm		
138	2550.00	Painting with synthetic enamel paint of approved brand and manufacture of required color to give an even shade one or more coats (ICI / Asian) - More than 2.5 Sqm	Sqm		
139	538.00	Varnishing on wood work of approved brand and manufacture of required to give an even shade one or more coats (ICI / Asian)	Sqm		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
140	682.00	Supplying and erection of double Scaffolding for carrying out of Miscellaneous work at all level and etc complete (this item will be operated wherever absolute requirement for the safety with prior approval of the Executive Engineer).	Sqm		
141	316.00	Providing and fixing M.S. grills of required pattern in frames of windows, etc. with M.S. flats, square or round bars etc. all complete - Fixed to openings / wooden frames with rawl plugs, screws, etc.	Kg		
142	305.00	Providing and fixing fly proof galvanized SS wire mesh to windows, ventilators and doors using galvanized MS wire gauge with average width of aperture 0.67mm in both directions including country wood beading of size 30x12mm., painting etc., complete as per the direction of Engineer in-charge.	Sqm		
143	215.00	Providing and fixing 4mm thick BWR plywood using necessary screws and hardware's etc complete.	Sqm		
144	43.00	Providing and Fixing bright finished brass / SS finish cylindrical lock of godrej make with necessary screw etc., complete (Best make of approved quality).	Each		
145	119.00	Providing and fixing 6mm thick BWR plywood using necessary screws and hardware's etc. complete..	Sqm		
146	107.00	Providing and fixing 12mm thick BWR plywood using necessary screws and hardware's etc. complete..	Sqm		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
147	70.00	Repairs to false ceiling mineral false ceiling / Gypsum. The rate inclusive of labour and material for painting gypsum false ceiling, changing grids in mineral and gypsum false ceiling etc complete.	Sqm		
148	60.00	Replacing drawer wheels (Telescopic wheel type) with new one, the rate inclusive of labour and material.	Each		
149	8.00	Supplying and fixing of Pivots (Top & Bottom) to Aluminum doors by removing the door including fixing with necessary screws etc complete.	Each		
150	10.00	Supplying and fixing of "U" rubber for aluminum doors including necessary screws and fittings etc complete.	Rm		
151	26.00	Supplying and fixing of Aluminum beading in glazed portion in aluminum doors including removing the existing beading with necessary screws and fittings etc complete.	Rm		
152	7.00	Repairs to Aluminum doors by supplying and fixing of a new Aluminum handles of butterfly type etc complete.	Each		
153	160.00	Supplying and fixing of glass beading in glazed portion in Aluminum doors including removing the existing beading with necessary screws & fittings etc complete	Each		
154	20.00	Removing and re-fixing of Aluminum windows including servicing the damaged fixing and re-fixing the same etc complete.	Each		
155	20.00	Supplying and fixing of Aluminum door closers (Hardwny / Dorma / or equaling make), necessary screws etc complete	Each		
156	30.00	Supplying and fixing of Aluminum Aldrops for Aluminum doors including removing the existing damaged with necessary screws & fittings etc complete, 300mm size	Each		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
157	10.00	Supplying and fixing of Floor spring Hardwyn or equaling make (Heavy duty) including fixing to Aluminum doors and glass door etc complete	Each		
158	20.00	Supplying and fixing of PVC gasket including fixing to sliding Aluminum windows etc complete.	Each		
159	10.00	Supplying and fixing of float glass 5mm thick for glazed portion in Aluminum doors including removing the damaged with necessary fittings etc complete	Sqm		
160	10.00	Alteration for Aluminum doors including removing of damaged channels, Supplying and fixing of Aluminum doors including the existing damaged with necessary screws & fittings etc complete	Each		
161	10.00	Supplying and fixing of Tinted glass 5mm thick for glazed portion in Aluminum doors including removing the damaged with necessary fittings etc complete	Sqm		
162	10.00	Providing and fixing glazing in aluminum door, windows, ventilator shutters and partitions etc., With PVC/Neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge (cost of aluminum snap beading shall be paid in basic item) with glass panes of 5.5mm thickness (Weight not less than 13.75Kg/Smq) (SAINT GOBIAN/MODIFLOAT)	Sqm		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
163	10.00	Providing and fixing aluminum ornamental grill of size 50mm X 50mm or lesser size of approved design colour and shade (Powder coated to a minimum thickness of 65 microns) to the windows and ventilators with all necessary fixtures, C channels i.e., Aluminum clamps screws, rawl plugs etc,. Including all labour etc,. all complete. All the necessary filling up of gaps at top, bottom and sides should be made with an approved water sealant like silicon sealant etc.	Sqm		
164	10.00	Providing and fixing 9mm thick Particle board of both side Ivory Novapan make for aluminum door including necessary screws and labour etc,. all complete.	Sqm		
165	10.00	Providing and fixing 12mm thick Particle board of both side Ivory Novapan make for aluminum door including necessary screws and labour etc,. all complete.	Sqm		
166		Repairs to false ceiling of various type such as Gypsum, Mineral board or any type including necessary repairs to grids, the rate inclusive of labour, material, scaffolding etc complete.			
166a	35.00	Area up to 1 Sqm.	Job		
166b	35.00	Area up to 2 Sqm.	Job		
167	25.00	Supplying and fixing of "U" rubber for Aluminum windows including necessary screws and fittings etc complete.	Each		
168	25.00	Repairs to Aluminium doors by supplying and fixing of new Aluminium handles butterfly type etc complete	Each		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
169	25.00	Repairs to Aluminium doors by removing the existing cylindrical lock, supplying and fixing of new locks etc complete	Each		
170	50.00	Supplying and fixing of Door stoppers for Aluminium doors including removing the existing damaged with necessary screws & fittings etc complete	Each		
171	50.00	Supplying and fixing of glass beading in glazed portion in Aluminium doors including removing the existing beading with necessary screws & fittings etc complete	Each		
172	25.00	Removing and re-fixing of Aluminum windows including servicing the damaged fixing and re-fixing the same etc complete.	Each		
173	25.00	Supplying and fixing of Pivots (Top & Bottom) to Aluminum doors by removing the door including fixing with necessary screws etc complete.	Each		
174	25.00	Supplying and fixing of Aluminium Aldrops for Aluminium doors including removing the existing damaged with necessary screws & fittings etc complete, 300mm size	Each		
175	25.00	Supplying and fixing of Hinges 100mm for Aluminium doors including removing the existing damaged with necessary screws & fittings etc complete	Each		
176	20.00	Supplying and fixing of PVC gasket including fixing to sliding Aluminum windows etc complete.	Each		
177	10.00	Alteration for Aluminum doors including removing of damaged channels, Supplying and fixing of Aluminum doors including the existing damaged with necessary screws & fittings etc complete	Each		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
178	5.00	Supplying and fixing of Tinted glass 5mm thick for glazed portion in Aluminum doors including removing the damaged with necessary fittings etc complete	Each		
179	2.00	Providing and fixing glazing in aluminum door, windows, ventilator shutters and partitions etc,. With PVC/Neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge (cost of aluminum snap beading shall be paid in basic item) with glass panes of 5.5mm thickness (Weight not less than 13.75Kg/Smq) (SSINT GOBIAN/MODIFLOAT)	Each		
180	2.00	Providing and fixing aluminium ornamental grill of size 50mm X 50mm or lesser size of approved design colour and shade (Powder coated to a minimum thickness of 65 microns) to the windows and ventilators with all necessary fixtures, C channels i.e., Aluminium clamps screws, rawl plugs etc,. Including all labour etc,. all complete. All the necessary filling up of gaps at top, bottom and sides should be made with an approved water sealant etc.	Each		
181	2.00	Providing and fixing 9mm thick Particle board of both side Ivory Novapan make for aluminium door including necessary screws and labour etc,. All complete.	Each		
182	2.00	Providing and fixing 12mm thick Particle board of both side Ivory Novapan make for aluminium door including necessary screws and labour etc,. All complete.	Each		

Sl.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
183	5.00	Replacement of PVC wire mesh in doors, windows and ventilators using mesh o1/2"x1/2", 1"x1". The charges inclusive of labour, material such as teak wood beading, nails, screws, putty etc., complete (dia of wire mesh 1.6mm).	Sqm		
184	8.00	Providing and Fixing of Six/Seven levers Night latch lock of (Ultra or equivalent) including removing the existing lock and etc. complete.	Each		
185	120.00	Providing and Fixing of door magnet of size 63x50mm (eagle or equivalent) including necessary screws etc., complete.	Each		
186	240.00	Providing and Fixing of cupboard magnet of size 25x20mm (eagle or equivalent) including necessary screws etc., complete.	No		
187	2.00	Supplying and fixing "Daiken" Acoustical ceiling with regular grid system at all levels. Providing and fixing Daiken mineral fiber ceiling tiles, false ceiling with hot dipped galvanized steel grid work of 25 x 25mm 'L' section and 25 x 38mm 'T' section. Surface chemicals cleaned capping pre-finished in baked polyester paint main tiles of size 600 x 600mm as per manufacturer specification. etc. complete.	Sqm		
188	250.00	Providing and fixing aluminium channel (E) or (H) section of size 20x12mm with necessary screws etc complete	Rm		
189	280.00	Providing and Fixing of wheel of size 50mm for glass shutters in cupboard/racks	No		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
190	5.00	Towards charges for inter-carting the waste debris such as rusted iron mesh, glass pieces ,old damage wooden pieces etc complete (other than dismantled items mentioned in this agreement) taken away from the campus as directed by Engineer in-charge. (Voids 20% will be deducted from the body measurement of the vehicle)	Cum		
191	90.00	Providing and Fixing SS pipe Handles (Godrej or Equivalent) of 20mm dia with 200mm long for replacing to the handle in the existing door	Each		
192	20.00	Replacing the damaged Bison Boards / plywood or newly providing Bison board for partitions or door opening etc by using 6 mm bison board including required screws / nails, fevicol cutting to the required sizes labour charges for fixing the same in position etc complete as directed. The rate is inclusive of cost, conveyance, all material charges and labour charges etc. complete	Sqm		
193	20.00	Replacing the damaged Bison Boards / plywood or newly providing Bison board for partitions or door opening etc by using 8 mm bison board including required screws / nails, fevicol cutting to the required sizes labour charges for fixing the same in position etc complete as directed. The rate is inclusive of cost, conveyance, all material charges and labour charges etc. complete	Sqm		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
194	30.00	Replacing the damaged Bison Boards / plywood or newly providing Bison board for partitions or door opening etc by using 12 mm bison board including required screws / nails, fevicol cutting to the required sizes labour charges for fixing the same in position etc complete as directed. The rate is inclusive of cost, conveyance, all material charges and labour charges etc. complete	Sqm		
195	10.00	Providing and fixing weld mesh paneled shutters for the monkey menace in the doors, windows, clerestory windows, ventilator, including providing and fixing ISI marked M.S black enameled butt hinges with necessary screws using First class padak / kongu wood 30mm thick and with style width of 65 to 70 mm. The paneling consists of weld mesh of size 2" x 2", 2" x 1" & 1" x 1" or 1/2" x 1/2" . The rate is inclusive of cost of shutter and weld mesh panel, hinges but excluding cost of other furniture fittings such as Tower bolt, handle, etc. which will be paid separately. Measurements will be of size of the shutters provided by length and width nearest to one centimeter	Sqm		

SI.No	Qty	Description	Unit	Rate Rs in words & figures	Amount
II		Deduction items			
196	163.00	Deduct the cost of damaged flush door shutter removed will be permitted to taken by the contractor by making payment to the Institute as directed. The items will consists of with or without frame including furniture fittings available in the door shutter. this items will be permitted to taken by the contractor as per the direction by the engineer in charge area up to 3.00 sqm	Each		
197	115.00	Deduct the cost of damaged paneled or Glazed door / window shutter is removed while replacement .The paneled shutter will be permitted to taken by the contractor with / without frame inclusive of furniture fittings as per the directed by the Engineer in Charge by making payment to the Institute for an area up to 3.00 sqm	Each		
198	90.00	Deduct cost of old aluminum section	kg		
		Total for Carpentry work			

Total Amount in Rs. (In words)

Signature of the Contractor

Executive Engineer (Civil)