

BID DOCUMENT

SECTION – I

TECHNICAL BID

for

Renovation and modification for installing the GCMS instrument behind DBS room at AAC building.



**INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH
KOLKATA (IISER Kolkata)**

Mohanpur – 741 246

Tel. No: 033 6634 0051

NOTICE INVITING TENDER

ANNEXURE - I

भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान कोलकाता
INDIAN INSTITUTE OF SCIENCE EDUCATION & RESEARCH (IISER) KOLKATA
Mohanpur Campus, Mohanpur – 741246
Dist. Nadia, West Bengal

No. : IISER-K/Civil/22-23/38

Date: 13.02.2023

TENDER DOCUMENT

1. The Superintendent Engineer on behalf of the Director, IISER Kolkata, invites single **bids** through our website portal from eligible contractors for the work mentioned below.

Name of work: Renovation and modification for installing the GCMS instrument behind DBS room at AAC building.

NIT NUMBER : IISER-K/Civil /22-23/38

Estimated Cost : Rs.1,05,051.00

Cost of Tender paper : Rs. 500.00

Earnest Money : Rs.2200.00

Stipulated period of work : 21 days

Date and Schedule

SL No.	Particular	Date	Time
1	Publishing date	13.02.2023	After 17.00Hrs.
2	Document Sale Start Date	13.02.2023	After 17.00Hrs.
3	Document Sale End Date	24.02.2023	Up to 17.00 Hrs.
4	Bid Submission End Date	24.02.2023	Up to 17.00 Hrs.
5	Bid Opening Date	27.02.2023	After 11.00 Hrs.

2. Tender documents may be downloaded from the Institute website (<http://www.iiserkol.ac.in/announcements/tenders>) w. e. f. 13/02/2023 to 24/02/2023. Tender should be submitted online along with valid documents of eligibility criteria within the date mentioned above.
3. The Bidders shall submit the tender documents duly filled in and digitally signed and stamped by the authorized signatory on each and every page. **Tenders not submitted in the prescribed form and as per the terms and conditions stated in the Annexure – I shall be liable for rejection.**
4. The Director, Indian Institute of Science Education & Research, Kolkata shall be the “Accepting Authority” hereinafter referred to as such for the purpose of this Contract.

भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान कोलकाता
INDIAN INSTITUTE OF SCIENCE EDUCATION & RESEARCH (IISER) KOLKATA
Mohanpur Campus, Mohanpur – 741246
Dist. Nadia, West Bengal

TERMS AND CONDITIONS OF THE TENDER

1. COST OF TENDER FORM

The Bidder should deposit the cost of tender paper through NEFT/RTGS separately in the Bank Account number given below and obtain acknowledgment of the transactions. A self signed copy of these acknowledgments should be submitted with the tender documents. Tenders not accompanied by **Cost of Tender in the prescribed form shall be summarily rejected.**

NAME OF THE ACCOUNT HOLDER: IISER KOLKATA
ACCOUNT NUMBER: 089301000011530
IFS CODE OF THE BRANCH: IOBA0000893
BANK NAME: INDIAN OVERSEAS BANK, SALT LAKE CITY

2. BIDDERS ELIGIBILITY

2.1 Credential:

- Those who have completed three civil works of value not less than 40% of the estimated cost put to tender, or
- Those who have completed two civil works of value not less than 50% of the estimated cost put to tender, or
- Those who have completed one civil works of value not less than 80% of the estimated cost put to tender, all amounts rounded off to a convenient figure, in the last Five year ending of the last day of the month previous to the one in which the tenders are invited.
- The Bidders are supposed to fulfil the terms and conditions given in the Tender Form. **Bidders not fulfilling the said requirement shall not be considered.**

3. EARNEST MONEY DEPOSIT

The Bidder should deposit the EMD through NEFT/RTGS separately in the Bank Account number given below and obtain acknowledgment of the transactions. A self signed copy of these acknowledgments should be uploaded with the online Bid.

NAME OF THE ACCOUNT HOLDER: IISER KOLKATA
ACCOUNT NUMBER: 089301000011530
IFS CODE OF THE BRANCH: IOBA0000893
BANK NAME: INDIAN OVERSEAS BANK, SALT LAKE CITY BRANCH

4. SECURITY DEPOSIT

10% of the value of the Bill quantity as Security Deposit will be deducted from the bill during payment and the same will be return after successful completion of maintenance guaranty period of one year or as mentioned in the work order from the date of completion.

5. DEADLINE FOR RECEIPT OF THE TENDER

Unless otherwise specified in the Tender Form, your Tender copy with relevant documents must reach this office before **Bid opening date and time as mentioned above.**

6. VALIDITY PERIOD OF TENDERS

- a) The Tenders submitted shall remain valid for acceptance for a period of 120 days from the date of opening of the Tender. If any Bidders withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the IISER, Kolkata, then the IISER, Kolkata shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. In that case Bidders shall not be allowed to participate in the re-tendering process of the work.
- b) The rates quoted in the tender shall remain valid for acceptance for 120 days from the date of submission of tender. The accepted rate shall remain valid during currency of contract. No escalation of price in any event and manner shall be allowed during the contractual period.
- c) In case the Bidders fail to meet the requirement/ quality of works for IISER Kolkata, earnest money/security deposit shall be liable to be forfeited. Thereafter, IISER Kolkata shall have right to get the required quantities of materials from any other Bidders or source without any notice.

7. PRICES

- a) The rate must be quoted for each item separately as shown in the BOQ (Schedule of Items) inclusive of education cess, excise duty and any other expenses and cash discount, if any. The GST and carriage rate, if any, may also be included in the rates. The rates quoted in any other form shall not be considered. If no rate is specified, it will be treated as nil. If the Bidder wants to offer any discount, the same should be included in the basic rates. The cash discount offered separately shall not be considered.
- b) The Tender form and other document, if any, may be filled in **English** and all entries must be typed or hand-written in ink clearly readable. Overwriting of rates is not permitted. The corrections, if any, should be attested by the Bidders with their signatures.
- c) The IISER Kolkata shall not entertain any increase in the rates during the validity period of Tender stated at Para-6. However, in the event there is a reduction in Government levies/duties during the period of order, corresponding benefit of reduction shall be passed on to the IISER Kolkata. Accordingly in case of any increase in levies/duties during the period of order, the payment of such increase shall be made to the Bidders.

8. SUBMISSION OF TENDER

Bidders are required to submit the hard copy of the Tender documents. Tender documents duly filled in and signed and stamped by the authorized signatory on each and every page with his offer in one Cover. The Cover shall consist of following:

- i) **Cost of Tender Form** – As mentioned in the item No.1
- ii) **Earnest Money** – As mentioned in the item No.3.
- iii) **Annexure I and II** – Each page of the Annexure shall be signed and stamped by the authorized signatory.

iv) **Other Documents** –

- a) Photo copy of GST Registration Certificate.
 - b) Photo copy of PAN Card.
 - c) Photo copy of IT Return for the last three financial years.
 - d) Photo copy of Trade licence
 - e) Photo copy of Credential certificate as mentioned in the item No. 2
 - f) Photo copy of ESI and PF registration certificate
 - g) They should have been active business in the last three years.
- v) BOQ (Schedule of Items) duly typed or clearly filled, signed and stamped by the authorized signatory.

ALL DOCUMENTS SUBMITTED SHOULD HAVE THE SIGNATURE, DATE AND SEAL OF THE AUTHORISED SIGNATORY.

Bid duly sealed and super scribed as **Bid for “Renovation and modification for installing the GCMS instrument behind DBS room at AAC building.”**Duly sealed Bid Documents may be sent also to the **Despatch Section, Administrative cum Academic Complex, IISER Kolkata, Mohanpur – 741246** before the Bid opening date and time. Institute will not be liable or responsible for any postal delay.

Bids not submitted in the prescribed manner and without the desired documents shall be summarily rejected.

9. OPENING AND EVALUATION OF TENDER

- a) The Bidders or their authorized representatives may, if they so desire, be present at the opening of the Tenders at the time and date specified in the open tender.
- b) In the event of the specified date for the opening of Tender is declared a holiday or due to any circumstances, if the Tenders could not be opened on the specified date by the IISER Kolkata, the Tenders will be opened at the appointed time and location on the next working date.
- c) The envelope containing the Bid shall be opened on the prescribed date after opening the seal of outer cover. Eligibility related documents shall be evaluated and parties qualified/disqualified by the competent authority. Financial bid of qualified bidders shall then be opened at notified time, date and place in presence of bidders or their representatives.
- d) Incomplete, ambiguous and Conditional tender shall be rejected. If any Tender does not contain earnest money in the manner prescribed in the tender documents, then that tender will be rejected and the Bidders will be informed accordingly. All other valid Tenders shall be considered for further process.

10. RIGHT OF ACCEPTANCE

- a) The Institute is not bound to accept the lowest quoted rate of any item, because the quality of works vis-a-vis quoted rates shall be the main criteria in the selection of works by the competent authority.
- b) Canvassing in any form at any stage shall be a disqualification and the Institute reserves the right to reject the Tender of such party without assigning any reason.

NOTICE INVITING TENDER



- c) The IISER Kolkata reserves the right to either accept or reject any or all the Tenders and accept the whole or any part of any Tender without assigning any reason. The competent authority on behalf of the Director, IISER-KOLKATA reserves to himself the right of accepting the whole or any part of the tender and the bidders shall be bound to perform the same at the rate quoted.
- d) Submission of a tender by a Bidders implies that he/she has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be executed and local conditions and other factors having a bearing on the execution of the works
- e) Any addendum so issued shall be part of the tender documents as well as Contract document and shall be communicated in writing or by email / fax to all the purchasers of the tendering documents. Prospective Bidders shall acknowledge receipt of each addendum by email / fax to the IISER, Kolkata. Original addendum issued by IISER, Kolkata duly signed should be submitted along with tender documents

11. COMMUNICATION OF ACCEPTANCE

Acceptance of terms and conditions of Tender by the Bidder shall be conveyed to IISER Kolkata by the way of signing and stamping the letter as per the format given in Annexure II. In the case of successful Bidders, acceptance of order shall be given to understand that the Bidders is willing and agree to execute the required quantity and quality of works during the validity period of Tender. No separate contract shall be signed.

12. TERMS OF EXECUTION

- a) Bidders have to ensure that the complete stock of materials, used in the work as per the standard laid down by the IISER Kolkata and BIS.
- b) The Bidders shall be responsible for all losses and damages from any cause whatsoever while the work is going on or are in the course of transact to the IISER Kolkata. The Bidders shall alone be responsible to make claim against transportation carrier or loss or damage of the goods. The cost of the transit insurance should be borne by the Contractor.
- c) Before Bidding, the Bidder(s) may visit the site, at their own cost, to satisfy themselves about the local conditions and constraints and other matters. The Bidder shall be presumed to have carefully examined Drawings, General Conditions, Technical Specifications, IS Specifications, BOQ etc. and to have fully acquainted themselves with all details of site location, work front, site constraints, communications, underground utility services, materials, labours, water supply position, electricity and any other general information pertaining to and needed for the work to be completed within stipulated period, and shall quote accordingly taking all these factors into account. No claim whatsoever on the ground of insufficient knowledge about the work site or local condition will be entertained.
- d) The time allowed for carrying out the work will be **21 days** from the date of start from the first date of handing over of the site.

13. INSPECTION OF PAPER

- a) The work made by the Bidders shall be physically verified as per the set norms by the Competent Authority of the IISER Kolkata. The decision of the Competent Authority of the IISER Kolkata shall be final and binding.
- b) The Bidder or their representative should also be present at the time of physical verification of materials. At the same time, materials shall be taken out at random for the testing.

- c) In case of any variation in quality or specifications in the supply, the complete stock of materials to be used in the work may be liable for rejection. In case of minor variations, IISER Kolkata may consider to accept the supplies after imposing appropriate penalties to be decided by the Director, IISER Kolkata.
- d) Bidders shall have to lift the rejected stock of materials at his own cost on “as is where is basis” within a period of 07 days. The Bidders shall have no claim on the rejected materials if the same is not lifted within a period of 07 days and thereafter.

14. PAYMENT

- a) Payment shall be made on Work Order basis only on satisfactory compliance of all the tender conditions stipulated and performance of the job satisfactorily and submission of bill by the firm.
- b) Proportionate amount from the bill shall be deducted if the contractor fails to comply with any of the responsibilities under the work order/ contract. Such amounts shall be decided by the IISER Kolkata and shall be binding on the contractor.

15. LIQUIDATED DAMAGE

For any delay in completion of the work beyond the stipulated period, liquidated damages @1% per week on contract sum shall be recovered from your bill subject to a maximum of 10% of contract sum.

16. ANNUAL TURN-OVER

They should have been active business in the last three years.

18. ARBITRATION CLAUSE:

- a. All disputes or differences arising between the parties out of or relating to the construction, meaning and operation or effect of this contract or the breach thereof shall be settled by arbitration in accordance with the rules of Arbitration of the Indian Council of Arbitration and the award, made in pursuance thereof shall be binding on the parties.
- b. In event of any dispute the arbitration sitting shall be in Kolkata only. The courts of West Bengal only shall have jurisdiction to entertain the matter and not in any other place. The expenditure of arbitration if any will be equally borne by both the parties. However, the expenses incurred by each party in connection with the preparation, presentation etc. of its case prior to during and after the arbitration proceedings shall be bare by each itself

NOTICE INVITING TENDER



ANNEXURE – II

ACCEPTANCE OF TERMS AND CONDITIONS BY THE BIDDER

To
The Director
IISER Kolkata
Mohanpur – 741246

Sub: Submission of Tender for the work of “**Renovation and modification for installing the GCMS instrument behind DBS room at AAC building.**”

NIT No. IISER-K/Civil/22-23/38 Date. 13.02.2023

Dear Sir,

With reference to your notice inviting tender, I/We hereby agree to the complete work detailed in the Annexure III or such portion thereof as you may specify in the acceptance of Tender at the price given in the Annexure III and agree to hold this offer open as per terms and conditions stated in Annexure I. I/We have understood the terms and conditions of the Tender as given in the Annexure-I (Clause 1 to 18) and accept the same. I/We have thoroughly examined the specifications quoted in the Schedule hereto and am/are fully aware of the nature and quality of the work required and my/our offer is to execute the work strictly in accordance with the requirements.

It is certified that we have not been black-listed in any of the Government Department.

A NEFT/RTGS (No. _____) dated _____ drawn on _____
(Rupees _____) for _____ Rs. _____
) as **Earnest Money** is enclosed.

The following pages have been added to and form part of this Tender.

Signature with stamp

Date : _____

Place : _____

[SIGNATURE OF THE BIDDER]

Name of the firm: _____

Address: _____

DECLARATION FOR EXEMPTION OF EMD

**To
The Director
IISER Kolkata
Mohanpur - 741246**

Sub: Submission of Tender for the work of “Renovation and modification for installing the GCMS instrument behind DBS room at AAC building.”

NIT No. IISER-K/Civil/22-23/38 Date: 13.02.2023

Dear Sir,

I/we shall be suspended for one year and shall not be eligible to bid for IISER Kolkata tenders from date of issuance of suspension order, in the following instances:

1. If after the opening of the tender, I/we withdraw or modify the bids during the validity period of tender specified in the tender document.
2. If, after the award of work, I/we fail to sign the contract, or to submit the performance security before the deadline in the NIT documents.

Signature with stamp

Date : _____

Place : _____

[SIGNATURE OF THE BIDDER]

Name of the firm: _____

Address: _____

**Format for Self Certification under preference to “MAKE IN INDIA”
policy**

Certificate

In line with Government Public Procurement Order No. P-45021/2/2017-PP (BE-II) dated 04.06.2020 and its amendments, we hereby certify that we M/Sare local supplier meeting the requirement of minimum local content i.e., ...50....% as defined in above orders for the material against IPR Enquiry / Tender No. ...IISER-K/Civil/22-23/38..... dated 13.02.2023.... Details of location at which local value addition will be made as follows: -NA-----.

We also understand, false declarations will be in breach of the code of integrity under rule 175(1)(i)(h) of General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

Thanking You,

Signature with date:

Name:

Designation:

Official Seal:

OFFICE MEMORANDUM

Subject: Additional Performance Security in case of Abnormally Low Bids (ALBs).

The Government is in receipt of many representations that on account of slowdown in economy due to the pandemic, there is acute financial crunch among many commercial entities and contractors, which in turn is affecting timely execution of the contracts. It has also been represented that this may affect the ability of contractors to bid in tenders and hence reduce competition. Requests are being received for reduction in quantum of Security Deposits in the Government contracts.

2. In this context, it is noted that Additional Performance Security in case of Abnormally Low Bids (ALBs) is being taken from the contractors by various Ministries/ Departments though there is no provision for the same in General Financial Rules (GFRs) 2017 or the Manuals for Procurement issued by this Department.

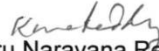
3. As per para 7.5.7 of the Manual for Procurement of Goods 2017 issued by this Department, *an Abnormally Low Bid is one in which the bid price, in combination with other elements of the Bid, appears so low that it raises material concerns as to the capability of the bidder to perform the contract at the offered price. Procuring Entity may in such cases seek written clarifications from the bidder, including detailed price analyses of its bid price in relation to scope, schedule, allocation of risks and responsibilities, and any other requirements of the bids document. If, after evaluating the price analyses, Procuring Entity determines that the bidder has substantially failed to demonstrate its capability to deliver the contract at the offered price, the Procuring Entity may reject the bid/ proposal. However, it would not be advisable to fix a normative percentage below the estimated cost, which would be automatically be considered as an abnormally low bid. Due care should be taken while formulating the specifications at the time of preparation of bid document so as to have a safeguard against the submission of abnormally low bid from the bidder.*

4. In view of above, **it is reiterated that no provisions should be kept in the Bid Documents regarding Additional Security Deposit/ Bank Guarantee (BG) in case of Abnormally Low Bids.**

5. Wherever, there are compelling circumstances to ask for Additional Security Deposit/ Bank Guarantee (BG) in case of ALBs, the same should be taken only with

the approval of the next higher authority to the authority competent to finalise the particular tender, or the Secretary of the Ministry/ Department, whichever is lower.

6. These instructions will be applicable for all kinds of procurements viz. Goods, Consultancy, Works, non-consulting Services etc.


(Kotluru Narayana Reddy)
Deputy Secretary to the Govt. of India
Tel: 24621305
Email: kn.reddy@gov.in

To,

All the Secretaries and Financial Advisers to Government of India

Copy to: Secretary, Department of Public Enterprises with a request to issue the same instructions to Central Public Sector Undertakings (CPSUs).

B.O.Q

Name of work :- Renovation and modification for installing the GCMS instrument in room no -15 AHU room at Admin ground floor.

It. No.	Sub-heads and items of work	Qty	Unit	Rate (Rs.)	Amount (Rs.)
1	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	22	sqm		
2	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
	(a) In cement mortar	1.00	cum		
3	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.				
	(a) Size of Tile 600x600 mm	15	sqm		
4	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
	(a) Water thinnable cement primer	46	sqm		
5	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:				
	(a) One or more coats on old work	46	sqm		

It. No.	Sub-heads and items of work	Qty	Unit	Rate (Rs.)	Amount (Rs.)
6	<p>Providing and fixing of false ceiling with powder coated exposed G.I. grid suspension system (E-Grid T 2430 or equivalent load carrying capacity with mid span deflection not exceeding 1/360 span with hanger spacing of 1200mm c/c) consisting of Main Runner 3600 mm long, Cross Tee 1200 mm / 600 mm long and Wall Angle. The Wall Angle shall be fixed on PVC Dash Fasteners on the perimeter of the wall by steel screws with distance 300mm c/c. The Main Runners to be placed @ 1200 mm. The Cross Tee 1200mm will be inserted in the pre-cut slots of Main Runner at a regular interval of 600 mm to form a modular grid of 1200mm X 600mm. Additional Cross Tees of 600 mm shall be placed perpendicular to the Cross Tee 1200 mm long to finally form a grid of 600 mm X 600 mm. Grid of module size 600 mm X 600 mm shall be supported by 6 mm dia G.I. wire from purlins / soffit. 6 mm thick High Pressure Steam Cured Non Asbestos Fibre Cement Standard Ceiling Board (Density > 1300 Kg/m³) of size 595 mm X 595 mm, conforming IS 14862 & Type B Category III of ISO 8336, tested as per AS-1530 part 3 & BS-476 Part 4,5,6,7 & 8, should be placed in the Grid module to form a False Ceiling. All complete as per the drawing & directions of Engineer-in-charge. In ground floor.</p>				
	False Ceiling (with 6mm thick Fibre Cement Designer Board and E-Grid T-2430).	20	sqm		
7	<p>Providing and fixing PVC Door Frame of size 50x47 mm with a wall thickness of 5 mm (± 0.2 mm), made out of single piece extruded PVC profile, with mitred cut joints and joint with 2 nos of PVC bracket of size 190 mm x 100 mm long arms of cross section size 35 x 15 mm & self-driven self-taping screws, the vertical door profiles to be reinforced with 40x20 mm M.S. rectangular tube of 0.8 mm, including providing EPDM rubber gasket weather seal throughout the frame, including jointing 5mm PVC frame strip with PVC solvent cement on the back of the profile. The door frame to be fixed to the wall using 8 x 100 mm long anchor fasteners complete, all as per manufacturer's specification and direction of Engineer-in-charge.</p>	20	mtr		

It. No.	Sub-heads and items of work	Qty	Unit	Rate (Rs.)	Amount (Rs.)
8	<p>30 mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/ galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness . The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.</p>	6	sqm		
9	<p>Providing and fixing partition upto ceiling height consisting of G.I. frame and required board, including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/sqm(both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre, and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm), joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete.</p>				

It. No.	Sub-heads and items of work	Qty	Unit	Rate (Rs.)	Amount (Rs.)
	66mm overall thickness Partition with 8mm thick double skin Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process with Compressive Strength 225 kg/sq.cm, Bending Strength 100 kg./ sq.cm	8	sqm		
10	Providing and fixing thermal insulation with Resin Bonded rock wool conforming to IS: 8183, having density 48 kg/m ³ , 50 mm thick, wrapped in 200 G Virgin Polythene Bags fixed to wall with screw, rawel plug & washers and held and in position by criss crossing GI wire etc. complete as per directions of Engineerin- Charge.	8	sqm		
11	Providing and fixing colour anodised aluminium work for door shutter, frame made up with 1.5 mm thick aluminium tubular section 45 mm x 45 mm as vertical member, top and middle section - 50 mm x 45 mm, bottom section 100 mm x 45 mm, glass thickness should be 6 mm and panel covered with 9 mm thick both side laminated particle board including rubber gasket, aluminium snap bidding and taper clip, with decorative aluminium handle, hydraulic door closer, neoprene gasket including locking arrangement, stainless steel hinge, screw etc all complete, anodisation coating grade should be AC-15 as per IS:1868-1996, shade as per instruction of the Engineer-in-charge.				
	i) Door shutter supplied by the institute and other fittings door closer etc arranged by the contractor	2.50	sqm		

