

INDIAN INSTITUTE OF TECHNOLOGY DELHI <u>HAUZ KHAS, NEW DELHI – 110016</u> NOTICE INVITING E-TENDER

IITD/WORKS (SP-706)/2016

Executive Engineer [Electrical], Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 100016 [Phone No. 011-26591742] on behalf of Board of Governors invites online Item Rate Tender from Firms / Contractors Registered in appropriate class And category with CPWD, MES, BSNL and Railways dealing with composite work for the following work:

1	Name of Work		Renovation work of Various Laboratories and Rooms
			in academic area at IIT Delhi in year 2016-2017
		•	(Phase-1). Sub Head: Composite works (Civil and
			Electrical works).
2	NIT No.	:	67(Composite work) 2016-2017/EE(E), IITD.
3	Estimated cost	:	Rs. 1,37,66,580.00
4	Earnest Money	:	Rs. 2,75,400.00
5	Period of completion	:	11 Months
6	Last date & time of bid submission	:	14-12-2016 5:00 PM
7	Performance Bank Guarantee	:	5% of the tendered amount

The bid forms and other details may be downloaded from Central Public Procurement Portal http://eprocure.gov.in/eprocure/app. Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website http://eprocure.gov.in/eprocure/app. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission '.

Bidders can access Quotation / tender documents on the website (For searching in the NIC site, kindly go to Quotation Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Delhi Quotations). Select the appropriate Quotation / tender and fill them with all relevant information and submit the completed Quotation / tender document online on the website http://eprocure.gov.in/eprocure/app as per the schedule given in the next page.

No manual bids will be accepted. All bids (both Technical and Financial should be submitted in the E-procurement portal).

Executive Engineer [E], For & on Behalf of BOG, IIT Delhi

CH. Head PLN - 05 Work code (W02833)

C....Nil I....Nil O....Nil



Copy to: -

- 1. Institute Engineer
- 2. D.A. (Works Accounts) for opening of tenders in the office of D.R. [SPS]
- 3. A.E.E. (E) Plg.
- 4. A.E (E) Renovation.
- 5. A.E.E (C) Renovation.
- 6. D.R. (A/Cs)
- 7. D.R. [SPS]
- 8. Notice Boards.
- 9. Office Copy
- 10. Web site Administrator, IITD



INDEX

SR. NO.	DESCRIPTION	PA	GE
		From	To
1	SCHEDULE	4	4
2	INSTRUCTION FOR ONLINE BID	5	7
	SUBMISSION		
3	INFORMATION & INSTRUCTION TO	8	10
	BIDDERS		
4	IITD 6	11	14
5	INTEGRITY PACT	15	21
6	IITD – 7 / 8	22	23
7	PROFORMA OF SCHEDULE	24	28
8	8 Form of Earnest Money Deposit Bank		29
	Guarantee Bond		
9	DECLARATION [ANNEXURE – I]	30	30
10	Commercial & Additional Conditions	31	35
11	Submittals To Bemade By The Contractor		36
	During The Execution of Work.		
12	SPECIAL CONDITIONS	37	38
13	ACCEPTED MAKE OF MATERIALS	39	41
14	BID SUBMISSION CHECK LIST	42	42
15	IITD 2010 CORRECTION SLIPS	43	49
16	SCHEDULE OF QUANTITY Civil	50	63
17	SCHEDULE OF QUANTITY Electrical.	64	69

C....Nil I....Nil O....Nil



SCHEDULE

1	Name of Organisation	:	Indian Institute of Technology Delhi.
2	Tender / Quotation Type [open / limited / EOI / auction / single]	:	Open
3	Tender / Quotation Category [services / goods / works]	:	Goods & Works
4	Type / Form of Contract [work / supply / auction / service / buy / empanelment / sell]	:	Work & Supply
5	Product Category [civil works / electrical works / fleet management / computer systems]	:	Civil &Electrical Works
6	Is Multi Currency Allowed?	:	No
7	Date of issue / publishing /start	:	24-11-2016 6:00 PM
8	Document download start date	:	24-11-2016 6:00 PM
9	Document download end date	:	14-12-2016 5:00 PM
8	Last date & time of uploading of bids	:	14-12-2016 5:00 PM
9	Date & time of opening of Technical Bids	:	16-12-2016 11:00 AM
10	Tender fee	:	Rs. 1,000.00
11	EMD	:	Rs. 2,75,400.00 [For EMD] (To be paid through RTGS/NEFT. IIT Delhi Bank details are as under: Name of the Bank A/C : IITD Revenue Account SBI A/C No. : 10773572622 Name of the Bank : State Bank of India, IIT Delhi, Hauz Khas, New Delhi-110016 IFSC Code : SBIN0001077 MICR Code : 110002156 Swift No. : SBININBB547 (This is mandatory that UTR Number is provided in the on-line quotation/bid. (Kindly refer to the UTR Column of the Declaration Sheet at Annexure-I)
12	No. of covers [1/2/3/4]	:	02
13	Bid Validity days	:	90 Days
14	Address for communication	:	Executive Engineer [Electrical], Works Organization, Hauz Khas, IIT Delhi, New Delhi – 110016
15	Contact No.	:	011- 2659 1742, 1779, 1458
16	E-mail address	:	a26339@admin.iitd.ac.in; a25228@admin.iitd.ac.in a26335@admin.iitd.ac.in

C....Nil I....Nil O....Nil



INSTRUCTIONS FOR ONLINE BID SUBMISSION

As per the directives of Department of Expenditure, this Quotation / tender document has been published on the Central Public Procurement Portal (URL:http://eprocure.gov.in/eprocure/app). The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at:

http://eprocure.gov.in/eprocure/app

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL:http://eprocure.gov.in/eprocure/app) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their userID / password and the password of the DSC / e-Token.

SEARCHING FOR QUOTATION / TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active Quotations / Tender by several parameters. These parameters could include Quotation ID, organization name, location, date, value, etc. There is also an option of advanced search for Quotations, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a Quotation published on the CPP Portal.
- 2) Once the bidders have selected the Quotations they are interested in, they may download the required documents / Quotation schedules. These Quotations can be moved to the respective 'My Quotations' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the Quotation document.
- 3) The bidder should make a note of the unique Quotation ID assigned to Nos. Quotation / Tender, in case they want to obtain any clarification / help from the Helpdesk.

C....Nil I....Nil O....Nil



PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the Quotation document before submitting their bids.
- 2) Please go through the Quotation / Tender advertisement and the Quotation / Tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of Nos. of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the Quotation document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the Quotation document.
- 3) Bidder has to select the payment option as "offline" to pay the Quotation fee / EMD as applicable and enter details of the instrument.
- 4) A standard BoQ format has been provided with the Quotation document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

OR

In some cases Financial Bids can be submitted in PDF format as well (in lieu of BOQ).

5) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

C....Nil I....Nil O....Nil



- 6) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- 7) The uploaded Quotation documents become readable only after the Quotation opening by the authorized bid openers.
- 8) Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9) Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the Quotation document and the terms and conditions contained therein should be addressed to the Quotation Inviting Authority for a Quotation or the relevant contact person indicated in the Quotation.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 233 7315.

GENERAL INSTRUCTIONS TO THE BIDDERS

- 1) The Quotations will be received online through portal http://eprocure.gov.in/eprocure/app. In the Technical Bids, the bidders are required to upload all the documents in .pdf format.
- Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through https://eprocure.gov.in/eprocure/app. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://eprocure.gov.in/eprocure/app under the link "Information about DSC".

Bidders are advised to follow the instructions provided in the 'Instructions to the Bidder for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app

C....Nil I....Nil O....Nil



INFORMATION AND INSTRUCTIONS TO BIDDERS FOR E-TENDERING

Executive Engineer [Electrical], Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 100016 [Phone No. 011-26591742] on behalf of Board of Governors invites online Item Rate Tender from Firms / Contractors Registered in appropriate class And category with CPWD, MES, BSNL and Railways dealing with composite work for the following work:

SI. No.	N.I.T. No.	Name of work & Location	Estimated cost put to bid	Earnest Money	Period of completion	Last date & time of submission of bid (online mode)	Time & date of opening of Technical Bid	Time & date of opening of Financial Bid
[1]	[2]	[3]	[4]	[5]	[O]	[7]	[8]	
1	67(Composite work) 2016-2017/EE(E), IITD.	Renovation work of Various Laboratories and Rooms in academic area at IIT Delhi in year 2016-2017 (Phase-1). Sub Head: Composite works (Civil and Electrical works).	Rs. 1,37,66,580.00	Rs. 2,75,400.00	11 Months	14 -12-2016 5:00 PM	16-12-2016at 11:00 AM	To be intimated after assessing technical bid.

1. The successful bidders shall be required to submit a performance guarantee of 5% of the tendered amount in the form of Bank Guarantee or F.D.R. from a Nationalized / Scheduled Bank within 15 days of issue of letter of intent before award of work. In case of failure by the Contractor to submit the performance guarantee within the specified period, full earnest money will be forfeited and the tender shall be treated as null and void. The performance guarantee shall be initially valid up to the stipulated date of completion plus 60 (Sixty) days beyond that.

C....Nil I....Nil O....Nil



- **2.** Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.
 - i) **Earnest Money of Rs. 2,75,400.00**to be deposited on-line as indicated in Schedule.
 - ii) Firms/Contractors should have satisfactorily completed one similar work of value not less than **Rs. 1,10,13,300.00** or two similar works Nos. of value not less than **Rs. 82,60,000.00** or three similar works Nos. of value not less than **Rs. 55,06,700.00** during last 7 years ending on 31-10-16.
- 3. Similar works means Civil or Electrical works.
- 4. The intending bidder must read the terms and conditions [both commercial & Additional] & IITD 6 carefully which will be the part of the Contract. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- 5. Information and Instructions for bidders posted on website shall form part of bid document.
- **6.** The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website e-procure.gov.in.
- 7. But the bid can only be submitted after depositing requisite tender fee and EMD as specified in the schedule.
- **8.** Copy of enlistment order and certificate of work experience and other documents as specified in the Press Notice / web notice shall be scanned and up-loaded to the e-Tendering website within the period of bid submission. However, certified / original copy of all the scanned and up-loaded documents as specified in press notice web / notice shall have to be submitted by the lowest bidder only within a week physically in the office of e-tendering authority.
- **9.** Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited requisite tender fee and EMD and other documents scanned and uploaded are found in order.
- **10.** Completion certificates are required to be got issued by an officer not below the rank of Executive Engineer of similar works completed by the Firm. The work experience certificates submitted by the bidders shall clearly indicate that:
 - a. The similar work executed shall be as '3' above
 - b. The completed cost of the work
 - c. Actual date of completion of the work
- 11. Attested copy of registration certificates to be submitted. Registration of firms/ Contractors must be valid on the day of submission of Tenders or extended date of submission of Tenders whichever is later.
- 12. Work means only work under Government/ Public Sector Undertaking / Central Autonomous bodies.
- 13. The value of executed work shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to last date of submission of financial bid.
- **14.** IITD is committed to follow the principle of transparency, equity and competitiveness in public procurement. Before submission of bid, **each bidder should sign integrity pact at respective places** and submit the bid. If duly signed integrity pact is not submitted by bidder, such bid shall not be considered.

C....Nil I....Nil O....Nil



- **15.** Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website.
- **16.** When bids are invited in two / three stages systems and if it is desired to submit revised financial bid it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.
- 17. The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.

18. The bid submitted shall become invalid if:

- a. The bidder is found ineligible.
- b. The bidder does not upload all the documents (including service tax registration / VAT registration / Sales Tax registration) as stipulated in the bid document including the undertaking / declaration.
- c. EMD not deposited as specified
- 19. The firm shall be registered with EPFO & ESIC

List of Documents to be scanned and uploaded within the period of bid submission:

- 1. Annexure I duly filled in and got signed.
- 2. Enlistment order of contractor.
- 3. Certificate of Registration for Sales Tax / VAT and acknowledgement of up to date filed return.
- 4. Affidavit as per Notice Inviting Tender Condition [IITD-6] 1.2.2 [To be submitted on stamp paper].
- 5. Self attested certificate of work experience as desired.
- 6. Acceptance to execute INTEGRITY PACT [see integrity pact].
- 7. IITD 7 / 8 duly signed (At page 22–23).
- 8. EPF & ESI Registration proof.
- 9. Any other document as specified in the NIT.

Executive Engineer [Electrical] For & on Behalf of BOG, IIT Delhi

C....Nil I....Nil O....Nil



IITD-6

INDIAN INSTITUTE OF TECHNOLOGY DELHI NOTICE INVITING E-TENDER

- 1.0 Executive Engineer [Electrical], Indian Institute of Technology Delhi, Hauz Khas, New Delhi 100016 [Phone No. 011-26591742] on behalf of Board of Governors invites online Item Rate Tender from Firms / Contractors Registered in appropriate class And category with CPWD, MES, BSNL and Railways dealing with compositework for the following work: of Renovation work of Various Laboratories and Rooms in academic area at IIT Delhi in year 2016-2017 (Phase-1). Sub Head: Composite works (Civil and Electrical works).
 - 1.1 The work is estimated to cost **Rs. 1,37,66,580.00.** This estimate, however, is given merely as a rough guide
 - 1.1.1 The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids. For composite bid, besides indicating the combined estimated cost put to tender, should clearly indicate the estimated cost of Nos. component separately. The eligibility of bidders will correspond to the combined estimated cost of different components put to bid.
 - 1.2 Intending bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below:

Criteria of eligibility for submission of bid documents.

- i) Firms/Contractors should have satisfactorily completed one similar work of value not less than **Rs. 1,10,13,300.00**or two similar works Nos. of value not less than **Rs. 82,60,000.00** or three similar works Nos. of value not less than **Rs. 55,06,700.00**during last 7 years ending up to 31-10-2016.
- ii) Similar works means Civil or Electrical works.
- 1.2.1 Criteria of eligibility for CPWD as well as non-CPWD contractors.

As per CPWD guideline for registration for composite work.

1.2.2 To become eligible for issue of bid, the bidders shall have to furnish an affidavit as under:-

"I / We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I / we shall be debarred for bidding in IIT Delhi in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee (Scanned copy to be uploaded at the time of submission of bid)"

2. Agreement shall be drawn with the successful bidders on prescribed Form No. IITD 7/8 which is available as IIT Delhi Publication. Bidders shall quote their rates as per various terms and conditions of the said form which will form part of the agreement.

C....Nil I....Nil O....Nil



- 3. The time allowed for carrying out the work will be 11 Months from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- **4.** The site for the work is available.
- 5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from the web Site e-procure.gov.in.
- **6.** After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified.
- 7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
- **8.** If it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the tender submitted earlier shall become invalid.
- **9.** Earnest Money as specified to be paid through RTGS / NEFT.

IIT Delhi Bank details are as under:

Name of the Bank A/C : IITD Revenue Account

SBI A/C No : 10773572622

Name of the Bank : State Bank of India, IIT Delhi,

: Hauz Khas, New Delhi-110016

IFSC Code : SBIN0001077 MICR Code : 110002156 Swift No : SBININBB547

(This is mandatory that UTR Number is provided in the on-line quotation/bid. Kindly refer to the UTR Column of the Declaration Sheet at Annexure-II)

Interested contractors who wish to participate in the bid has also to make following payments within the period of bid submission:

- (i) Copy of Enlistment Order and certificate of work experience and other documents as specified in the press notice shall be scanned and uploaded to the e-tendering website within the period of bid submission.
- **10.** The bid submitted shall become invalid, if:
 - a) The bidder is found ineligible.
 - b) The bidder does not upload all the documents (including VAT registration/ Sales Tax registration/Technical bid) as stipulated in the bid document.
 - c) EMD not deposited as specified
- 11. The contractor whose bid is accepted will be required to furnish **performance guarantee of 5%** (**Five Percent**) of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of Deposit at Call receipt of any scheduled bank / Banker' cheque of any scheduled bank / Demand Draft of any scheduled bank/Pay order of any Scheduled Bank (in case guarantee amount is less than Rs.1,00,000/-) or Government Securities or Fixed Deposit Receipts or irrevocable Bank Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F' including the extended period if any, the

C....Nil I....Nil O....Nil



- Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.
- 12. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation theymay require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at hisown cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 13. The competent authority on behalf of the Board of Governors does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
- 14. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
- 15. The competent authority on behalf of the Board of Governors reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
- 16. The contractor shall not be permitted to bid for works in the IITD responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazette officer in the IIT Delhi. Any breach of this condition by the contractor would render him liable to be debarred from bidding process in future in IIT Delhi.
- 17. No Engineer of Gazette rank or other Gazette Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract liable to be cancelled, if, either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
- 18. The bid for the works shall remain open for acceptance for a period of **ninety [90] daysfrom the date of opening of financial bids**, if any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the IIT Delhi shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as

C....Nil I....Nil O....Nil



aforesaid. Further the bidder shall not be allowed to participate in the re-bidding process of the work.

- 19. This notice inviting bid shall form a part of the contract document. The successful bidder / contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
- a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid andthe rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
- b) Standard IITD Form –7/8 or other Standard IITD Form as applicable.
- 20. In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid online and hard copies as to be submitted physically in IIT Delhi, if so desired by the accepting authority, then the bid submitted shall become invalid and the IIT Delhi shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the bidding process of the work.

C....Nil I....Nil O....Nil





INTEGRITY PACT

То	
	,
Vario us	Γ No.67(Composite work) 2016-2017/EE(E), IITD. for the work of Renovation work of Laboratories and Rooms in academic area at IIT Delhi in year 2016-2017 (Phase-1). Subsomposite works (Civil and Electrical works).
Dear S	Sir,
and co	It is here by declared that IITD is committed to follow the principle of transparency, equity empetitiveness in public procurement.
failing	The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that idder will sign the Integrity Agreement, which is an integral part of the tender/bid documents, g which the tender/bidder will stand disqualified from the tendering process and the bid of the r would be summarily rejected.
shall l	This declaration shall form part and parcel of the Integrity Agreement and signing of the same be deemed as acceptance and signing of the Integrity Agreement on behalf of the IITD.
	Yours faithfully,
	Executive Engineer

C....Nil I....Nil O....Nil



[TO BE SUBMITTED DULY SIGNED BY THE BIDDER ALONGWITH BID DOCUMENTS]

To

Executive Engineer (Elect.), IIT Delhi, Hauz Khas, New Delhi – 110016

<u>Subject:</u> Submission of Bid for the work of Renovation work of Various Laboratories and Rooms in academic area at IIT Delhi in year 2016-2017 (Phase-1). Sub Head: Composite works (Civil and Electrical works).

Dear Sir.

I / We acknowledge that IITD. is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I / We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I / We will sign the enclosed integrity Agreement, which is an integral part of tender / bid documents, failing which I / We will stand disqualified from the tendering process. I / We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I / We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by IITD. I / We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I / We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, IITD shall have unqualified, absolute and unfettered right to disqualify the tenderer /bidder and reject the tender/bid is accordance with terms and conditions of the tender/bid.

Yours faithfully,

(Duly authorized signatory of the Bidder)

C....Nil I....Nil O....Nil





[To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of IITD]

INTEGRITY AGREEMENT

~ .	Agreement is made at on this day of
	BETWEEN
(Elect.), IIT Delhi	nors, IIT Delhi, HauzKhas, New Delhi - 16 represented through Executive Engineer , (Hereinafter referred
,	dress of Division) which expression shall unless repugnant to the meaning or context hereof include its
Through	(Name and Address of the Individual/firm/Company)
(D) to as the " Bidder	

Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No. 67(Composite work) 2016-2017/EE(E), IITD.) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for "Renovation work of Various Laboratories and Rooms in academic area at IIT Delhi in year 2016-2017 (Phase-1). Sub Head: Composite works (Civil and Electrical works)." (Name of work) hereinafter referred to as the "Contract".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

C....Nil I....Nil O....Nil



Article 1: Commitment of the Principal / Owner

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - (a) No employee of the Principal / Owner, personally or through any of his / her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
 - (c) The Principal/Owner shall Endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PoC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.
- 3) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PoC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s) / Contractor(s)

- It is required that Nos. Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of **fraud or corruption or coercion or collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.

C....Nil I....Nil O....Nil



- c) The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/PoC Act. Further the Bidder(s) / Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal / Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d) The Bidder(s) / Contractor(s) of foreign origin shall disclose the names and addresses of agents / representatives in India, if any. Similarly Bidder(s) / Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practices means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- 5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal /Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of Breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.

C....Nil I....Nil O....Nil



- 2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal / Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
- 3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6: Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 11 Months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority of IITD.

C....Nil I....Nil O....Nil



Article 7: Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Head Quarters of the Division of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by Board Resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement / Pact or interpretation thereof shall not be subject to arbitration.

Article 8: LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

(For and on behalf of Principal / Owner)
(For and on behalf of Bidder / Contractor)
WITNESSES:
1
(Signature, name and address)
2. (Signature, name and address)
Place:
Dated:

C.....Nil I..... Nil O..... Nil



IITD - 7/8

INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI - 110016

Percentage Rate Tender / Item Rate Tender & Contract for Works

Tender for the work of "Renovation work of Various Laboratories and Rooms in academic area at IIT Delhi in year 2016-2017 (Phase-1). Sub Head: Composite works (Civil and Electrical works)."

- (A) (I) To be submitted online by **14 -12-2016 5:00 PM**
 - (II) To be opened on 16 -12-2016 11:00 AM online

e-TENDER

I / We have read and examined the Notice Inviting Tender, schedule, A, B, C, D, E & F, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, Clauses of Contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I / We hereby tender for the execution of the work specified for the Board of Governors, IIT Delhi within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for ninety (90) days from the due date of its opening / ninety days from the date of opening of financial bid in case tenders are invited on 2/3 envelop system (**strike out as the case may be**) and not to make any modification in its terms and conditions.

A sum of **Rs. 2,75,400.00**is hereby deposited in IIT Delhi Revenue Account No. 10773572622as earnest money. If I / We fail to furnish the prescribed performance guarantee within prescribed period I / We agree that the said The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 16 or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I / We fail to commence the work as specified, I / We agree that The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 16 or the successors in office 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, otherwise they said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to 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 tender form. Further, I / We agree that in case of forfeiture of Earnest Money & Performance Guarantee as aforesaid I / We shall be debarred for participation in the re-tendering process of the work.

I / We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I / we shall be debarred for tendering in IIT Delhi in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

C....Nil I....Nil O....Nil



information/derived there from to any per	et/confidential documents and shall not communicate son other than a person to whom I / We am/are authorized to ion in any manner prejudicial to the safety of the State.			
Dated:				
	Signature of Contractor			
Witness:				
Address:	Postal Address			
Occupation:				
	ACCEPTANCE			
by me for an on behalf of The Board of Go	The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for an on behalf of The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 110016 for a sum of (Rupees).			
	orm part of this contract agreement:-			
(a)				
(b)				
(c)				
	For & on behalf of Board of Governors, IIT Delhi			
	Signature			
Dated:	Designation			
CNil I Nil O Nil				

I / We hereby declare that I / We shall treat the tender documents drawings and other records



PROFORMA OF SCHEDULES

[Operative Schedules to be supplied separately to Nos. intending tenderer]

SCHEDULE 'A'

Schedule of quantities (enclosed)

SCHEDULE 'B'

Schedule of materials to be issued to the contractor

S.No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue
—	Nil			+

SCHEDULE 'C'

Tools and plants to be hired to the contractor

S.No.	Description	Hire charges per day	Place of Issue
+	Ni l		

SCHEDULE 'D'

Extra schedule for specific requirements/document for the work, if any.



C....Nil I....Nil O....Nil



SCHEDULE 'E'

Reference to General Conditions of contract [GCC]

1	Name of work	:	Renovation work of Various Laboratories and Rooms in academic area at IIT Delhi in year 2016-2017 (Phase-1). Sub Head: Composite works (Civil and Electrical works).
2	Estimated cost of work	:	Rs. 1,37,66,580.00
3	Earnest Money	:	Rs. 2,75,400.00
4	Performance Guarantee	:	5 percent of tendered value
5	Security Deposit	:	5 percent of tendered value

SCHEDULE 'F'

GENERAL RULES & DIRECTIONS

: Officer inviting tender

Maximu	um percentage for quantity of items of work to be executed	:	See below
beyond	which rates are to be determined in accordance with		
Clauses 12.2 & 12.3			
Definiti	ons:		
2[v]	Engineer – in - charge	:	Executive Engineer [Elect]
2[vi]	Accepting Authority	:	Institute Engineer
2[x]	2[x] Percentage on cost of materials and labour to		25 percent
Cover all overheads and profits			
2[xi] Standard schedule of rates			DSR 2014 + Market Rate
2[xii]	Department	:	Works organization.
9[ii] Standard IITD Contract Form		:	General Conditions of
			Contract 2010,IITD Form 7/8-
			2010 modified & Corrected up to
			date of submission of tender

Clau	ise 1:		
[i]	Time allowed for submission of Performance Guarantee		
	from the date of issue of letter of acceptance	••	15 days
[ii]	Maximum allowable extension with late fees @ 0.1% per		
	day of performance guarantee amount beyond the period	:	1 to 15 days
	provided in (i) above		-
Claus			
	ority for fixing compensation under clause 2	:	Institute Engineer
Claus	ee 2 A:		
Wheth	ner Clause 2A shall be applicable	:	No
Claus	e 5:		
	per of days from the date of issue of letter of for reckoning date of start	:	10 [ten] days

C....Nil I....Nil O....Nil



Milestone(s) as per table given below:-

Sl. No.	Description of Milestone (Financial)	Time allowed in days (from date of start)	Amount to be with-held in case of non-achievement of mile stone
1	1/8th (of the whole work)	1/4th(of the whole work)	In the event of not achieving
2	3/8th (of the whole work)	1/2th (of the whole work)	the necessary progress as assessed from the running
3	3/4th (of the whole work)	3/4th (of the whole work)	payment, 1% of the Tender
4	FULL	FULL	value of work will be withheld for failure of each milestone.

Time allowed for execution of work	:	11 Months
Authority to decide:		
Extension of time	:	InstituteEngineer
Rescheduling of mile stones	:	Institute Engineer
Clause Applicable 6 or 6A:	:	Clause 6A Applicable
Clause 7:		
Gross work to be done together with net payment /	:	Not Applicable
adjustment of advances for material collected, if any,		
since the last such payment for being eligible to interim		
payment		
Clause 10 A:		
List of testing equipment to be provided by the	:	As desired by the Engineer-in-charge
contractor at site lab		relating to the work
Clause 10B(ii):		
Whether Clause 10 B (ii) shall be applicable	:	No
Clause 10C:		
Component of labour expressed as percent of value of	:	25 percent
work		

Clause 10CA:

S.N.	Nearest Materials (other than cement, reinforcement bars and the structural steel) for which All India Wholesale Price Index to be followed	Materials covered under
1		
2		
3		
4		

^{*} Base price of all the materials covered under clause 10 CA is to be mentioned at the time of approval of NIT.

C....Nil I....Nil O....Nil



Clause 10CC

Clause 10 CC to be applicable in contracts with stipulated	:	11 Months
period of completion exceeding the period shown in next		
column		
Schedule of component of other Materials, Labour, POL etc. for		
price escalation		
Component of civil (except materials covered under clause	:	Nil.
10CA)/ Electrical construction Materials expressed as percent		
of total value of work		
Component of Labour expressed as percent of total value of	:	Y: 25 percent
work		
Component of P.O.L. expressed as percent of total value of	:	Not Applicable
work		
Clause 11		

Specifications to be followed for execution of work	:	CPWD General specifications for Civil
		&Electrical work with upto date correction
		slips.

Clause 12

Clause 12		
Type of work	:	Maintenance works including works of
		upgradation, aesthetic, special repair, addition/
		alteration
Clause 12.2. & 12.3		
Deviation Limit beyond which clauses 12.2 & 12.3 shall apply	:	30 percent
for building work		
Clause 12.5		
Deviation Limit beyond which clauses 12.2 & 12.3 shall apply	:	100 percent
for foundation work		

Clause 16

Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site:

1	2	3
4	5	6
7	8	9

Clause 36 (i)

Requirement of Technical Representative(s) and recovery Rate

S.	Minimum	Discipline	Designation	Minimum	Number	Rate at whi	ich recovery shall be
No.	Qualification of		(Principal	Experience		made from	the contractor in the
	Technical		Technical/	(Years)		event of no	t fulfilling provision
	Representative		Technical			of	clause 36(i)
			Representative)				
						Figures	Words
	Graduate Engineer		Principal Technical	02 years			Rupees
	Or	Civil	Representative	or	01	Rs 15000/-	Fifteenthousand only.
	Diploma Holder			05 years		Each.	

Assistant Engineers retired from Government services that are holding diploma will be treated at par with Graduate Engineers

C....Nil I....Nil O....Nil



(b)

Clause 42

- Schedule/statement for determining theoretical quantity of cement & bitumen on (i) (a) the basis of Delhi Schedule of Rates 2014printed by C.P.W.D.
- Variations permissible on theoretical quantities: (ii)
 - Cement (a)

For works with estimated cost put

to tender not more than Rs. 5 lakh.

For works with estimated cost put to

tender more than Rs.5 lakh.

Bitumen All Works

2% plus/minus.

2.5% plus only & nil on minus side.

3% plus/minus.

Steel Reinforcement and structural steel sections for each diameter, section and category 2% plus/minus

Nil (d) All other materials.

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S.No.	Description of Item	Rates in figures and words at which recovery shall be made from the Contractor		
		Excess beyond permissible variation	Less use beyond permissible variation	
1.	Cement			
2.	Steel Reinforcement			
3.	Structural Sections	As per CPW	D Specification 2014	
4.	Bitumen issued free			
5.	Bitumen issued at stipulated fixed price			

C....Nil I..... Nil O..... Nil



Form of Earnest Money Deposit Bank Guarantee Bond

KNOW ALL PEOPLE by these presents that we	contr	EREAS, contractor
(Name and division of Executive Engineer) (Hereinafter called "the Engineer-in-Charge") in the sum of Rs	regist	tered office at
the said Engineer-in-Charge the Bank binds itself, his successors and assigns by these presents. SEALED with the Common Seal of the said Bank this	(Nam	ne and division of Executive Engineer) (Hereinafter called "the Engineer-in-Charge") in the sum of Rs
SEALED with the Common Seal of the said Bank this		
(including extended validity of tender) specified in the Form of Tender; (2) If the contractor having been notified of the acceptance of his tender by the Engineer-in-Charge: (a) Fails or refuses to execute the Form of Agreement in accordance with the Instructions to contractor, if required; OR (b) Fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor, OR (c) Fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor, OR (d) Fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract. We undertake to pay to the Engineer-in-Charge up to the above amount upon receipt of his first writter demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date*	SEAI	LED with the Common Seal of the said Bank thisday of
(a) Fails or refuses to execute the Form of Agreement in accordance with the Instructions to contractor, if required; OR (b) Fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor, OR (c) Fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor, OR (d) Fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract. We undertake to pay to the Engineer-in-Charge up to the above amount upon receipt of his first writter demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date*	(1)	
required; OR (b) Fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor, OR (c) Fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor, OR (d) Fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract. We undertake to pay to the Engineer-in-Charge up to the above amount upon receipt of his first writter demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date*	(2)	If the contractor having been notified of the acceptance of his tender by the Engineer-in-Charge:
(b) Fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor, OR (c) Fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor, OR (d) Fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract. We undertake to pay to the Engineer-in-Charge up to the above amount upon receipt of his first writter demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date*	(a)	· · · · · · · · · · · · · · · · · · ·
document and Instructions to contractor, OR (c) Fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor, OR (d) Fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract. We undertake to pay to the Engineer-in-Charge up to the above amount upon receipt of his first writter demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date*	(L)	
OR (c) Fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor, OR (d) Fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract. We undertake to pay to the Engineer-in-Charge up to the above amount upon receipt of his first writter demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date*	(b)	
contractor, OR (d) Fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract. We undertake to pay to the Engineer-in-Charge up to the above amount upon receipt of his first writter demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date*		
(d) Fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract. We undertake to pay to the Engineer-in-Charge up to the above amount upon receipt of his first writter demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date*	(c)	contractor,
Security Deposit after award of contract. We undertake to pay to the Engineer-in-Charge up to the above amount upon receipt of his first writter demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date*	(4)	
demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions. This Guarantee will remain in force up to and including the date* after the deadline for submission of tender as such deadline is stated in the Instructions to contractor or as it may be extended by the Engineer in-Charge, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date. DATE	(u)	
of tender as such deadline is stated in the Instructions to contractor or as it may be extended by the Engineer in-Charge, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date. DATE SIGNATURE OF THE BANK WITNESS SEAL (SIGNATURE, NAME AND ADDRESS) *Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.	dema Engir	and, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the neer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or
SIGNATURE OF THE BANK WITNESS SEAL (SIGNATURE, NAME AND ADDRESS) *Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.	of ter in-Ch	nder as such deadline is stated in the Instructions to contractor or as it may be extended by the Engineer-narge, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this
WITNESS SEAL (SIGNATURE, NAME AND ADDRESS) *Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.	DAT	
(SIGNATURE, NAME AND ADDRESS) *Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.	WITI	
*Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.	(OTO)	
CNil INil ONil		
	CN	lil I Nil O Nil



ANNEXURE - I

<< Organization Letter Head >> **DECLARATION**

I / We,			hereby declare that all the information and	
furnished by our organization with regard to this tender specification are true and complete to the best of				
our knowledge. I / we have gone through the specification, conditions and stipulations in details and agree				
to comply with the requirements and intent of specification.				
1	Name & Address of the bidder	:		
2	Phone	:		
3	E-mail	:		
4	Contact person name	:		
5	Mobile number	:		
6	TIN number	:		
7	PAN number	:		
8	UTR no. [for payment of EMD]	:		
	BANK DETAILS			
9	Bank name	:		
10	Branch address	:		
11	Branch telephone no.	:		
12	MICR Code of the bank	:		
13	IFSC code	:		
14	Bank Account no.	:		
15	Type of account	:		
We further declare that our organization has not been blacklisted / delisted or put to any holiday by any Institutional agency / Govt. Department / Public Sector Undertaking in the last three years. [Signature of the bidder] Name:				
CNil INil ONil				
D'Man /J.E.			A.E.E / A.E.	E.E.



Seal of the bidder

COMMERCIAL AND ADDITIONAL CONDITIONS

1 General

1.1 This specification covers manufacture, testing as may be necessary before dispatch, delivery at site, all preparatory work, assembly and installation, final testing, commissioning, as per the CPWD General Specification for Electrical work Part-I, II & IV for the following works.

Name of work & location: Renovation work of Various Laboratories and Rooms in academic area at IIT Delhi in year 2016-2017 (Phase-1). Sub Head: Composite works (Civil and Electrical works).

1.2 The work shall be executed as per CPWD General Specifications for Electrical works as amended up to date and as per directions of Engineer-in-charge. These additional specifications and conditions are to be read in the Additional specifications and conditions shall apply. However, nothing extra shall be paid on account of these as the same are to be read along with schedule of quantities for the work.

2 COMMERCIAL CONDITIONS

- **2.1** Type of contract
 - The work to be awarded by this tender shall be treated as indivisible works contract.
- **2.2** Submission of Tender:-
 - Bidder shall submit the cost of tender documents, if any, e-tendering processing fee and earnest money, other documents, price bid in prescribed manner as indicated in "INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR e-TENDERING FORMING PART OF NIT AND TO BE POSTED ON WEBSITE"
- 2.3 The tenderers are advised not to deviate from the technical specifications / items, commercial terms and conditions of NIT like terms of payment, guarantee, arbitration clause, escalation etc.
- 2.4 The department reserves the right to reject any or all the price bids and call for fresh price tenders as the case may be without assigning any reason.

2.0 Validity

Tenders shall be valid for acceptance for a period of 90 days from the date of opening of price bid.

4.0 Completion period

The completion period indicated in the tender documents is for the entire work of planning, designing, supplying, installation, testing, commissioning and handing over of the entire job to the satisfaction of the Engineer-in-charge.

5.0 SAFETY CODES AND LABOUR REGULATIONS

(i) In respect of all labour employed directly or indirectly on the work for the performance of the contractor's part of work, the contractor at his own expense, will arrange for the safety provisions as per the statutory provisions, B.I.S. recommendations, factory act, workman's compensation act, CPWD code and instructions issued from time to time. Failure to provide such safety requirements would make the tenderer liable for **penalty as specified in applicable clause.** In

C....Nil I....Nil O....Nil



addition the Engineer-In-Charge shall be at liberty to make arrangements and provide facilities as aforesaid and recover the cost from the contractor.

(ii) The contractor shall provide necessary barriers, warning signals and other safety measures while laying pipelines, cables etc. or wherever necessary so as to avoid accident. He shall also indemnify IITD against claims for compensation arising out of negligence in this respect. Contractor shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause. The department shall not be responsible for any accident occurred or damage incurred or claims arising there from during the execution of work. The contractor shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the contractor due to the above provisions thereof.

6.0 Payment Terms

6.1 Unless otherwise specified, in the additional conditions of the contract, the payment shall be made as per the relevant clauses of form PWD 7/8 forming a part of the tender documents.

7.0 Security Deposit

Security deposit shall be deducted from Nos. running bill and the final bill to be the extent of 10 percent of the gross amount payable. However the maximum amount of security deposit will be 5 percent of the tendered value. The earnest money deposited shall be adjusted against this security deposit. The security deposit shall be released on the expiry of guarantee period stipulated in the contract. Bank guarantee will not be accepted as security deposit.

8 Performance Guarantee

The successful tenderer shall submit an irrevocable performance guarantee of 5% of the tendered amount in addition to other deposits mentioned elsewhere in the contract in the contract for his proper performance of the contract agreement within 12 Months. Of issued of letter of acceptance of tender. This guarantee shall be in the form of Demand draft/ Pay order or irrevocable bank guarantee bond of any scheduled bank or the State Bank of India in the specified format or in the form of Government security, fixed deposit pledged in favour of Executive Engineer or as specified in the letter of acceptance of tender. **The performance guarantee shall be initially valid up to the stipulated date of completion plus 60 Days beyond**. This bank guarantee shall be kept valid till the recoding of completion certificate for the work by the competent authority.

9. Rates

- 9.1 The rates quoted by the tenderer, shall be firm and inclusive of all taxes (i/c works contract taxes), duties & levies, octroi etc. and all charges for packing forwarding, insurance, freight and delivery, installation, testing, commissioning etc. at site i/c temporary construction of storage, risk, overhead charges, general liabilities / obligations and clearance from concerned authority.
- 9.2 Octroi duty shall not be paid separately but octroi exemption certificate can be furnished by the department on demand. However the department is not liable to re-imburse the octroi duty in case exemption certificates are not honored by the concerned authorities.

10. COMPLETION PERIOD

The completion period of 11 Months indicated in the tender documents is for the entire work of planning, designing, installation, testing, commissioning and handing over of the entire system to the satisfaction of the Engineer – in – charge.

C....Nil I....Nil O....Nil



11. COMPLETENESS OF TENDER

All sundry equipment, fittings, unit, assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections, cable glands, junction boxes and all other items which are useful and necessary for efficient assembly and installation of equipment and components of thework shall be deemed to have been included in the tender irrespective of the fact whether such items are specifically mentioned in the tender documents or not.

12. STORAGE AND CUSTODY OF MATERIALS

The existing Sub Station LT Panel room may be used for storage of materials and equipments. No separate storage accommodation shall be provided by the department. Watch and ward of the stores and their safe custody shall be the responsibility of the contractor till the final taking over the installation by the department.

13. CARE OF THE BUILDING

Care shall be taken by the contractor while handling and installing the various equipments and components of the work to avoid damage to the building. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste material arising out of the installation from the site of work.

14. WORKS TO BE DONE BY THE TENDERER

Following works shall be done by the contractor and therefore, their cost shall be deemed to be included in their tendered cost-whether specifically indicated in the schedule of work or not:-

- i) Sealing of all floor slab/wall openings with PCC if, provided by the Department or contractor for pipes and cables, from fire safety point of view, after laying of the same.
- ii) Sealing of all wall openings left for duct crossing with brick machinery with plaster.
- iii) Painting of all exposed metal surface of equipments and components with appropriate colour.
- iv) Making opening in the walls/floors/slabs or modification in the existing openings wherever provided for carrying pipe line, ducts etc.
- v) Providing wooden/metallic frames for fixing grills/ diffusers.
- vi) Making good all damages caused to the structure during installation and restoring the same to their original finish.

Any other minor building work required for the successful execution of the system and its operation.

16. Power supply, water supply and Draining

It is clarified that electricity will be provided from the existing connection near building and necessary arrangement for tapping and termination of supply will be done by the contractor. The

C....Nil I....Nil O....Nil



charges for electricity may be recovered from the running account bill of the contractor as per the bill raised by IIT Delhi authorities.

17. Data manual and Drawings to be furnished by the tenderers:

With Tender: The tenderer shall furnish along with the tender, detailed technical literature, pamphlets and performance data for appraisal and evaluation of the offer.

17.2 After Award of work

The successful tenderer would be required to submit the drawings as per para 1.18.2 within 3 days of award of work for approval before commencement of installation.

18.0 Data Manual and Drawings to be furnished by the Tenderers:

18.1 After Award of work the contractor shall prepare & submit three sets of following drawings and get them approved from the Engineer-in-charge before the start of the work. The approval of drawings however does not absolve the contractor not to supply the equipments/ materials as per agreement, if there is any contradiction between the approved drawings and agreement.

Any other drawings relevant to the work

18.2 **Completion Drawings**

18.2.1 Three sets of the following laminated drawings shall be submitted by the contractor while handing over the complete site to the Department. In addition one set will be given on compact disc.

19. Extent of Work

- 19.1 The work shall comprise of entire labour including supervision and all materials necessary to make a complete installation and such tests and adjustments and commissioning as may be required by the department. The term complete installation shall not only mean major items of the plant and equipments covered by specifications but all incidental sundry components necessary for complete execution and satisfactory performance of installation with all layout charts whether or not those have been mentioned in details in the tender document in connection with this contract.
- 19.2 Minor building works necessary for installation of making of opening in floors or in walls and restoring to their original condition, finish and necessary grouting etc. as reqd.
- 19.4 Any item required for completion of the project but left inadvertently shall be executed with-in the quoted rate.
- 19.5 Contractor has to create PCC platform outside the building for fabrication and assembling of duct etc. as no fabrication will be allowed inside the building to avoid the damages and hindrance to other works
- 19.7 Contractor has to construct his own temporary store outside the building till the plant room is not ready and make watch and ward arrangement of the store. The location of the store shall be get approved from Engineer-in-charge.
- 19.8 Contractor has to provide technical assistance as and when required for approval of drawings etc.

C....Nil I....Nil O....Nil



Inspection and testing: Initial inspection at works and final inspection and testing at site shall be carried out as per chapter 17 of CPWD General Specification for HVAC works 2004 as amended to date may be read along with 17(22) of technical specifications.

21 Validity

Tenders shall be valid for acceptance for a period of 90 days from the date of opening of price bid.

- 22 Compliance with Regulations and Indian Standards, Indemnity & Insurance.
- All works shall be carried out in accordance with relevant regulation, both statutory and those specified by the Indian Standards as detailed in Para 1.21& 1.22 of CPWD General Specifications for Electrical Work 2005 amended upto date.
- 23 Mobilization Advance:
- 23.1 No mobilization advance will be given.

24. Insurance and Storage:

All consignments are to be duly insured up to the destination from warehouse to warehouse at the cost of the contractor. The insurance covers shall be valid till the equipment is handed over duly installed, tested and commissioned.

25. Verification of correctness of Equipment at Destination:

The contractor shall have to produce all the relevant records to certify that the genuine equipment from the manufacturers has been supplied and erected.

26. CLEAN UP WORKS AT SITE

During erection the contractor shall at all times keep the working and storage areas free from waste or rubbish. On completion of erection he shall remove all temporary structures, debris and leave the premises clean to the full satisfaction of the department.

27. RATES

Rates for Nos. of the items of Schedule of Quantity shall be firm and consolidated for the equipment delivered, installed, commissioned and tested at site including all taxes and levies. Prices shall remain firm and free from variation due to rise and fall in the cost of material equipments. Labour or any other reason whatsoever due to changes in statutory rules and regulations so far as admissible under the conditions of the contract.

28. TERMS OF PAYMENT

The terms of payments shall be as indicated in General Conditions of Contract.

29. PAINTING WORK

The painting should be carried out as required and as per the instruction of the department. The procedure and the standard colour codes are as follows:

- 1) Cleaning the surface
- 2) Apply a primer coat of red oxide

C....Nil I....Nil O....Nil



3) Applying two coats of enamel paint of APPROVED colour code after applying cement primer for plastered surface.

APPENDIX - II

SUBMITTALS TO BE MADE BY THE CONTRACTOR DURING THE EXECUTION OF WORK

- 1. Daily Progress report stating number of men employed under each trading, Equipment at site etc.
- 2. Weekly/ fortnightly progressing report showing progress against programme.
- 3. Programme of work for the forthcoming week.
- 4. Labour and Equipment Deployed at site Programmed Requirement vs. actual deployed fortnightly
- 5. Updated approved monthly PERT CHART along with monthly progress chart Weekly.
- 6. Construction materials by Contractor : Status and mobilization programme Fortnightly.
- 7. Progress Photographs Fortnightly.
- 8. Value of work anticipated to be done in the forth-coming including value of any materials and equipment of large value monthly

C....Nil I....Nil O....Nil



SPECIAL CONDITIONS

- 1. The Work has to be completed within the stipulated time.
- 2. In case it is noticed that the firm is intentionally delaying the work for one reason or the other, the firm could be debarred for future works i/c forfeiture of the EMD.
- 3. In case of any extra item, the contractor shall seek prior permission in writing from the Engineer-in-charge and submit analysis of rates.
- 4. In case of slow progress/intentional delay by the contractor the work can be withdrawn/rescinded in whole or part thereof and executed at the risk & cost of the defaulting contractor.
- 5. In case of any dispute, the arbitrator shall be appointed by the Director, IIT Delhi and his decision shall be Final as well as binding on both the parties.
- 6. Hindrance register shall be maintained by AE (E) / JE(E) at site.
- 7. Instructions given in Site Order Book would be followed immediately by the contractor.
- 8. Contractor and Manufacturer of luminaries shall submit guarantee period of **Fiveyear** for complete LED luminaries from the date of successful installation and testing.
- 9. Luminaries shall be of IP-20 protective rating having CRI of more then 80, THD shall be less then 10% and driver efficiency shall be more then 90%. Agency must submit type test certificate for satisfying the above technical parameters.
- 10. No T & P would be supplied by the institute and contractor will have to make own arrangement.
- 11. The contractors are advised to get acquitted with the proposed work including specifications & its and additional conditions carefully before quoting. No claim of any sort shall be entertained or account of any site conditions ignorance of specification & additional conditions. The work shall be carried out as per the availability of site
- 12. The work shall be carried out as per CPWD specifications 2014 volume I & II with up to date correction slips unless otherwise specified in the nomenclature of individual item or in the specification, additional conditions where specifications are silent, the decision of Engineer –in-Charge shall be final and binding on contractor in terms of latest from 7/8 of IITD.
- 13. The rates quoted by the contractor shall be taken as net and nothing extra shall be paid on any account i.e. Royalty, Cartage, Sales Tax & Stacking of material required at place etc.
- 14. The rates for different items of work shall apply for Heights & Depths, Leads & Lifts unless otherwise specified in the agreement or specifications applicable in the agreement.
- 15. Any damage done by the contractor to any existing item / any part of the building during the course of execution of work shall be made good by at his own cost.
- 16. Articles manufactured by the reputed firms and approved by Engineer-in –Charge shall only be used. Only articles classified as "First quality" by the manufacturer shall be used unless otherwise specified.
- 17. The sample of material required in the work brought at site shall be got approved from Engineer-in-Charge before use in execution of work.
- 18. The sample of material required for Testing shall be provided at free of cost by the contractor. Testing charges if any shall be borne by the Department in case the test results are satisfactory and if test results fail testing charges shall be deducted from the bills of the contractor. All other expenditure to be incurred for taking sample, conveyance, packing etc. shall be borne by the contractor. Testing shall be done at NABL approved lab.

C....Nil I....Nil O....Nil



- 19. The Engineer-in-Charge can modify the programme and the contractors have to work accordingly. In case work does not start within 7 days the same is liable to be rescinded as per latest form 7/8 IITD and In case of delay liquidated damages to be imposed on Contractors as per latest form 7/8 of IITD. Extension of time in work shall be dealt as per latest form 7/8 of IITD.
- 20. Some restrictions may be imposed by the security staff of IIT Delhi etc. on the working and or movement of labour camp/ huts shall be allowed in IIT Campus. The Contractor shall make his own arrangement for labour huts outside the campus. However constructions of cement go down and Chowkidar's hut in the Campus shall be permitted. The contractor shall be bound to follow all such restrictions/ instructions and nothing shall be payable on this account.
- 21. The contractor shall be fully responsible for the safe custody of the material issued or brought at site by him for doing work.
- 22. The Malba /Garbage generated at site due to construction activities shall be removed from the site immediately & shall be disposed off by the contractor to the approved dumping site of MCD.
- 23. The contractor shall clean the site thoroughly of scaffolding materials, rubbish, equipments left out of his work & dress the site around the building to the complete satisfaction of the Engineer-in-Charge before the work is treated as completed.
- 24. Contractor has to quote against the item of schedule of credit of material. The contractor cannot quote either minus rate or Zero rate for these items. The amount against these items will be subtracted in calculating lowest agency.
- 25. Work Contract Tax @ 4% or as applicable and income tax @ 2% or as applicable and other taxes as applicable shall be deducted from the bills of contractor.
- 26. 1% labour cess or as applicable will be deducted from the bills of contractor.
- 27. Water charges @ 1% of work done shall be deducted from bills if water supplied by Department.
- 28. Electricity charges shall be deducted @ 0.5% (Half Percentage) of the bill amount if supplied by the department.
- 29. The Clause of extension of time is also applicable as per CPWD manual.
- 30. Contractor will submit LM-79, LM-80 certificate & warranty for 5 years from the original manufacturer for LED fitting.
- 31. GCC for 7/8 shall form part of NIT and the bidder shall go through GCC before quoting rates and the same shall be deemed to be accepted by bidder if he participates in the tender.
- 32. Invoice of material purchase to be submitted to IITD by bidder after self certification.
- 33. Electrical contractor engaged by the bidder shall possess registration and valid Electrical License.



ACCEPTABLE MAKE OF EQUIPMENTS AND MATERIALS

	ACCEPTABLE MAKE OF EQUIPMENTS AND MATERIALS					
S. No.	Description	Approved Makes				
1.	Cement (Grey) OPC/ PPC Grade-43/Ready mixed concrete of any grade.	ACC / L & T/ J.K. / BIRLA/ UTRA TECH/ VIKRAM				
2.	Cement (White)	J.K. / BIRLA				
3.	Reinforcement Steel	PRIMARY MANUFACTURERS APPROVED BY MINISTRY OF STEEL / SECONDARY MANUFACTURERS HAVING VALID BIS LICENSE (to be as per latest BIS provisions)				
4.	Structural Steel	PRIMARY MANUFACTURERS APPROVED BY MINISTRY OF STEEL / SECONDARY MANUFACTURERS HAVING VALID BIS LICENSE (to be as per latest BIS provisions)				
5.	Stainless steel (Grade 304)	JINDAL / SAIL / Salem				
6.	Bricks	COMMERCIALLY AVAILABLE OR REQUIRED STRENGTH				
7.	Aluminium Sections	HINDALCO / JINDAL / MAHAVIR				
8.	Flush doors	CENTURY / MERINO / DURO BOARD / GREEN				
9.	Laminates	GREENLAM / DURO / ARCHID / MERINO /DECOLAM / CENTURY				
10.	Glass / Mirror	SAINT GOBAIN / MODI FLOAT / ASAHI FLOAT				
11.	Ceramic Glazed tiles/Border tiles	1 ST QUALITY KAJARIA / NITCO / JOHNSON / ORIENT / SOMANY				
12.	Vitrified Tiles	NAVEEN / NITCO / JOHNSON / KAJARIA				
13.	Interlocking Precast pavers blocks / Kerb Stone	HINDUSTAN TILES / NIMCO PREFAB / K.K. MANHOLES/SWASTIK				
14.	Stainless Steel Hinges	JOLLY / GARG /AMIT / ASI SUPREME				
15.	Stainless Steel Nuts Bolts / Screws	KUNDAN / PUJA / ATUL / GKW				
16.	Paint / primer / oil bound distemper /Acrylic paint/plastic paint	1st QUALITY PAINTS OF ASIAN / BERGER / NEROLAC / AKZONOBAL INDIA / SHALIMAR				
17.	Water Proof. Cement Paint/ Exterior paint	1st QUALITY PAINTS OF ASIAN PAINTS / BERGER / NEROLAC / AKZONOBAL / SHALIMAR				
18.	Sanitary ware (Vitreous China) (European Seats, Urinals, Wash Basins, etc.)	HINDWARE / PARRYWARE/ CERA				

C....Nil I....Nil O....Nil



	ACCEPTABLE MAKE OF EQUIPMENTS AND MATERIALS					
S. No.	Description	Approved Makes				
19.	Seat Covers	HINDWARE / PARRYWARE/ CERA				
20.	C.P. brass Fittings / Accessories	JAQUAR / MARC / KOHLAR				
21.	G.I. Pipes	TATA / JINDAL (HISSAR)				
22.	G.I. Fittings	UNIK / ZOLOTO / AM				
23.	Stainless Steel Sink	NEELKANTH / JAINA / KINGSTON (COBRA)				
24.	Commercial Board / PLY	MERINO / DURO /GREEN/ CENTURY				
25.	CI Pipes / Fittings & Manhole covers	RIF / NECO / BENGAL IRON WORKS / BC / SKF				
26.	CI Pipes "Class LA"	NICO / KESORAM / ELECTRO STEEL / KAPILANSH				
27.	Floor Spring	DOORKING / EVERITE				
28.	Door Closer	EVERITE / SANDHU/ HARDWIN				
29.	MIRROR	ATUL,MODIGUARD,SAINT GOBAIN				
30.	Vertical Blinds	VISTA / MAC				
31.	False Ceiling	ARMSTRONG/ SANIT GOBAIN/ META WORTH				
32.	Water proofing compound	CICO / FOSROC / PIDILITE				
33.	Polymer Compound	CICO / PIDILITE / FOSROC				
34.	Particle Board	NOVA PAN / BHUTAN BOARD/ ECO BOARD				
35.	Rust Remover / Anticorrosive	FOSROC / CICO / PIDILITE				
36.	Adhesive	FEVICOL / VAMICOL/DUNLOP/VAM ORGANIC				
37.	Tile Adhesive	PIDILITE / FERROUSCRETE/BALLNDURA/CICO				
38.	Wall Putty	BIRLA / JK / SARA				
39	Epoxy Grout	Ballendura / Kerakoll / Ferrouscrete				
40	PVC Water storage tank (ISI marked)	Sintex / Uni Plast / Polywell				
41.	PVC insulated Water storage tank Heavy duty 4/5 layer	Sintex / Uni Plast / Polywell /Euro.				
42.	Brass Ball Valve/ Gate Valve / Float Valve	Zoloto / AM / Leader / Sant				
43.	Aluminium Door fittings	Classic/ Everrest/Argent				
44.	Brass Bib / Stop cock	AGI / ELITE / Shakti / Sant / Leader				
45.	Thermoplastic paint	CBM, CMS, S.N. Industries.				



	ACCEPTABLE MAKE OF EQUIPMENTS AND MATERIALS					
S. No.	Description	Approved Makes				
46.	Plaster of Paris Putty	ADHARSHREE/ SHREE RAM/ J.K				
47.	RCC Pipe	LAKSHMI/SOOD&SOOD/JAIN &Co. /Diwan spun pipes.				
48.	PVC Pipe	Prakash /Prince/Supreme				
49.	Glass Pans	SAINT GOBAIN,ASAHI INDIA,MODI GUARD				
	Electrical items					
50	PVC insulated copper wire (All size)	Finolex / Skytone / Havells / ECKO (ISI Marked)				
51	Steel conduit	BEC / AKG / NIC / M.KAY (ISI Marked)				
52	PVC conduit	Poly pack / AKG/ Setia I.S.I. Marked.				
53	Batten Holder /ceiling rose /call bell & ordinary Switch, socket/regulator (socket type)	Anchor / Antex / M. KAY I.S.I. Marked.				
54	Modular type 5A switch, socket & 15A Switch, socket and electronic fan regulator (stepped type)	ROMA / MK / NORTHWEST/ LEGRAND I.S.I. Marked.				
55	Modular plate & cover	ROMA / MK / Northwest / LEGRAND I.S.I. Marked.				
56	Distribution board /MCB.	Legrand / Schneider / Hager.				
57	MCCB's / S.F.U. switches	Legrand / Schneider / Hager.				
58	Industrial type socket (SPN)	Hager / Legrand / Schneider / Indo Asian / Havells.				
59	Industrial type socket (TPN)	Hager / Legrand / Schneider.				
60	Ceiling fans (All size).	Crompton high speed / Usha Stricker/ Havells Velocity,				
61	Exhaust fans (All size).	GEC Alstom/ Crompton greaves / Usha / Havells.				
62	L.T armored cable.	Havells / Grandlay/ ICL/ NICCO I.S.I. Marked.				
63	Energy meters.	Havells / Benitex / Jaipur.				
64	Ammeter & Voltmeter.	AE /HPL /Enercon (Conserve).				
65	G.I. pipes.	JINDAL /TATA (I.S.I. Marked).				
66	LED Fittings. (2 feet x 2 feet)	Wipro cat no - CRCO10R038HP57/ Havells cat no - LHEEBP7CUL1W034 / Philips.				
67	Fresh Air Fans.	Usha / Havells / Crompton.				
68	G.I box.	Anchor / Legrand / Havells.				

<u>N.B.</u>: For any item not covered in the above list, the contractor shall require to get the samples approved from the Engineer-in-charge before the supply is made.

C....Nil I....Nil O....Nil



BID SUBMISSION

ONLINE BID SUBMISSION:

The Online bids (Complete in all respect) must be uploaded online in **two** envelops as explained below.

Sl. No.	Sl. No. Documents Content						
1.	Technical Bid	Organization Declaration Sheet as per Annexure - I	PDF.				
2.		Certificate of registration for sales tax / VAT and acknowledgement of up to date filed return	PDF.				
3.		Affidavit as per NIT condition 1.2.2 on stamp paper	PDF.				
4.		Enlistment order of contractor.	PDF.				
5.		Self attested certificate of work experience as desired	PDF.				
6.		Acceptance to execute integrity pact	PDF.				
7.		IITD 7/8 duly signed by the bidder	PDF.				
8.		EPFO & ESIC Registration proof					
9.	9. Any other document as specified in the NIT						
	Envelope – 2						
Sl. No.	Sl. No. TYPES Content						
1.	Financial Bid	Price bid should be submitted in BOQ format.	.XLS				

C....Nil I....Nil O....Nil



IITD - 2010 CORRECTION SLIPS

In General condition of contract for IIT Delhi works department 2010 –

Reference	Existing	Modified
Clause	Before any installment of advance is	Before any installment of advance is
10B	released, the contractor shall execute a Bank Guarantee Bond from Scheduled Bank for	released, the contractor shall execute a Bank Guarantee Bond from Scheduled
(ii),	the amount of advance &valid for the	Bank for the amount equal to 110% of the amount of advance and valid for the
Para-2	from time to time to cover the balance	contract period. This (Bank Guarantee
	amount and likely period of complete recovery, together with interest.	from Scheduled Bank for the amount equal to 110% of the balance amount of
		advance) shall be kept renewed from time
		to time to cover the balance amount and likely period of complete recovery.
Clause 3	If the contractor shall obtain a contract with	If the contractor had secured the contract
(vii)	Government as a result of wrong tendering or other non-bonafide methods of competitive tendering.	with Government as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits
		Breachof Integrity Agreement.

Reference	Existing Provision	Modified Provision
Page 5, IITD 2010	Page 5, IITD 2010 4A. Applicable for Percentage Rate Tender only (IITD-7) In case of Percentage Rate Tenders, a tenderer shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule-A, he will be willing to execute the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for Nos. Tender	Page 5, IITD 2010 4A. Applicable for Percentage Rate Tender only (IITD-7) In case of Percentage Rate Tenders, contractor shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule-A, he will be willing to execute the work. The tender submitted shall be treated as invalid if:- 1. The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender. 2. The percentage above/below is not quoted in figures & words both on the total amount of tender or any section/sub head of the tender.

C....Nil I....Nil O....Nil



shall have the name and number of the works to which they refer, written on the envelopes. 3. The percentage quoted above/below is different in figures & words on the total amount of tender or any section/sub head of the tender: Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for Nos. Tender shall have the name and number of the works to which they refer, written on the envelopes.

New Para 4B is added as below:

4B: In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/ below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/below on estimated cost of tender including all sub sections/sub heads as the case may be, but revised percentage quoted above/below on tendered cost or on Nos. sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

In case any of such contractors refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.

If the revised tendered amount of two more contractors received in revised offer is again found to be equal , the lowest tender, among such contractors, shall be decided by draw of lots in the presence of SE of the circle, EE(s) in-charge of major & minor component(s) (also DDH in case Horticulture work is also included in the tender), EE(P) or EE(HQ) of the circle & the lowest contractors those have quoted equal amount of their tenders.

In case all the lowest contractors those

C....Nil I....Nil O....Nil



		have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of Nos. contractor. Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.
Reference	Existing Provision	Modified Provision
10A (page 6-7)	In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy. However if the contractor has worked out the amount of the tender and if any discrepancy is found in the percentage quoted in words and figures, the percentage which corresponds with the amount worked out by the contractor shall, unless otherwise proved, be taken as	In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy. (Remaining part deleted)
	correct. If the amount of the tender is not worked out by the contractor or it does not correspond with the percentage written either in figures or in words, then the percentage quoted by the contractor in words shall be taken as correct. Where the percentage quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the percentage quoted by the contractor will, unless otherwise proved, be taken as correct and not the amount.	
Reference	Existing Provisions	Modified Provisions
Deviations/ Variations Extent and Pricing	CLAUSE 12 The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and	CLAUSE 12 The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and



instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him writing signed by the Engineerin-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main works except as hereafter provided.

instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him writing signed by the Engineerin-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main works except as hereafter provided.

The completion cost of any agreement for Maintenance works including works of up gradation, aesthetic, special repair, addition/ alteration shall not exceed 1.25 times of Tendered amount.

Deviations, Extra Items, Pricing

12.2

In the case of extra items (items that are completely new and are in addition to the items contained in the contract), the contractor may within 90 days of receipt of order or occurrence of the item(s) claim rate, supported by proper analysis, for the work and the Engineer-in-charge shall within one month of the receipt of the claims supported by analysis after giving considerations to the analysis of the rates submitted by the contractor, determined the rates on basis of market rates and the contractor shall be paid in accordance with the rates so determined.

12.2

A. For Project and original works:

In the case of extra items (items that are completely new and are in addition to the items contained in the contract), the contractor may within 90 days of receipt of order or occurrence of the item(s) claim rate, supported by proper analysis, for the work and the Engineer-in-charge shall within one month of the receipt of the claims supported by analysis after giving considerations to the analysis of the rates submitted by the contractor, determined the rates on basis of market rates and the contractor shall be paid in accordance with the rates so determined.



B. For Maintenance including works of up gradation, aesthetic, special repair, addition/alteration:

In the case of Extra Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plush cost index (at the time of tender) plus/minus percentage above below quoted contract amount.

Payment of Extra items in case of nonschedule items (Non-DSR items) shall be made as per the prevailing market rate.

Deviation, Substituted Items, Pricing

In the case of substituted items (items that are taken up with partial substitution or lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following Para.

- (a) If The market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted).
- (b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted)

A. For Project and original works:

In the case of substituted items (items that are taken up with partial substitution or lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following Para.

- (a) If The market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted).
- (b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted). For Maintenance including works of up

C....Nil I....Nil O....Nil



		gradation, aesthetic, special repair, addition/alteration: In the case of Substitute Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plush cost index (at the time of tender) plus/minus percentage above below quoted contract amount. Payment of Extra items in case of non-schedule items (Non-DSR items) shall be made as per the prevailing market rate.
Deviation, Deviated Quantities, Pricing	In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.	A. For Project and original works: In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined. B. For Maintenance including works of up gradation, aesthetic, special repair, addition/ alteration:In the case of
		contract items, which exceed the limit laid down in schedule F, the contractor shall be paid rates specified in the schedule of quantities.
	12.3 The provisions of the preceding paragraph shall also apply to the	12.3 A. For Project and original works: The provisions of the preceding



decrease in the rates of items for the work excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.

paragraph shall also apply to the decrease in the rates of items for the work excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.

B. For Maintenance including works of up gradation, aesthetic, special repair, addition/alteration:

In the case of decrease in the rates Prevailing in the market of items for the work excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.

Schedule F

Clause 12

No provision.

Clause 12

Type of work: Maintenance works including works of up gradation aesthetic, special repair, addition/ alteration.



<u>Name of work</u>: Renovation work of Various Laboratories and Rooms in academic area at IIT Delhi in year 2016-2017 (Phase-1). Sub Head: Composite works (Civil and Electrical works).

SCHEDULE OF QUANTITY

Civil Items.

S.	Description of items.	Qty.	Unit.	Rates	Amount.
No.	•	~ •			
1	CARRIAGE OF MATERIALS				
1.1	Providing and fixing of (Metaworth Lay, Armstrong & Saint Gobain) metal False ceiling System consisting of 600x600mm tiles of pre coated galvanised steel in 0.5 mm thickness with bevelled edge in white colour with standard perforation of 2.5mm dia& open area of 16%. The back of the tile should have black acoustical fleece. Tiles to be laid on 15mm grid system (Metaworth Lay, Armstrong & Saint Gobain) in module size of 600mm x 600mm. The main runner of size 3000mm installed at every 1200mm centre to centre with hanger at every 1200mm first hanger being at 450mm. Cross tee not longer than 1200mm to be interlocked into the main runner at every 600mm to form modules of 600mm x 600mm. Perimeter trims to be with wall angles of white colour secured to walls at 450mm maximum centres.	800	Sqm		
1.2	Providing and fixing Vertical blinds with anodized /powder coated aluminium channel weight, chord, hangers and chain etc. The width of louvers (fabric) shall be 100 mm of good quality & approval brand & manufacturer complete vista levelor make of Alps industries or Mac brand.	150	Sqm		
1.3	Providing and fixing cupboard shutters with 18-19mm thick commercial block board of Duro, Century, Green plywood only as per IS: 1659 of approved make with necessary SS hinges of size 75x47x1.8 mm or SS piano hinges of appropriate size etc complete as per direction of Engineer In Charge.	150	Sqm		
1.4	Providing and fixing cupboard inside shelves, sides, back portion, drawers etc. with 18-19mm thick commercial block board Duro, Century, Green plywood only as per IS: 1659 of approved make with necessary fixing arrangement and as per requirement complete as per direction of Engineer In Charge. (All exposed edges of block board to be lipped with 3 mm thick teak wood beading/ margin.)	450	Sqm		

C....Nil I....Nil O....Nil



base for lay 1.6 Providing a Duro, Centu cupboard in complete as 1.7 Providing a window, very EPDM rubbe the archite engineer-inshall be pair panes of 5.0 1.8 Providing, blocks (autodensity of cement: 4 collevels and Charge. 1.9 Providing an (factory made) a) Outogally min coard street the	of aviating floor (to male rough) for maleing			
1.6 Providing a Duro, Centu cupboard in complete as 1.7 Providing a window, very EPDM rubble the archited engineer-inshall be paid panes of 5.0 1.8 Providing, blocks (autodensity of cement: 4 collevels and Charge. 1.9 Providing an (factory made) a) Outogalve min coat 120 15-1 print b) Instead of the coat 120 15-1 print coat 15-1	of existing floor (to make rough) for making aying floor tiles.	950	Sqm	
window, very EPDM rubby the archite engineer-inshall be paid panes of 5.00. 1.8 Providing, blocks (autodensity of cement: 4 collevels and Charge. 1.9 Providing an (factory made) a) Outogally minimals coat 1200 15-15 prinimals coat 1200 15-15 prinima	g and fixing 6mm thick ply wood sheet atury, Green plywood only as per ISI in including necessary glue and nails etc. as per direction of Engineer-In-Charge.	80	Sqm	
blocks (aut density of cement: 4 cem	g and fixing glazing in aluminium door, ventilator shutters and partitions etc. with abber/ neoprene gasket etc. complete as per itectural drawings and the directions of in-charge. (Cost of aluminium snap beading baid in basic item): With float/frosted glass 5.00mm thickness.	200	Sqm	
(factory made a) Out galve min coar 120 15-i prin b) Insu	g, laying and jointing of foam concrete nutoclaved aerated cement blocks) having of 500kg/cum in cement mortar 1:4 (14 coarse sand) over the existing floor at all ad lead as per direction of Engineer-In-	1.00	Cum	
shed film stre be s as c shal scre pitc surf	and fixing 50mm thick sandwich roof puff panel ade only) as per specification as follow. Outer sheet; 0.50mm (TCT) pre-coated alvanized trapezoidal steel sheet having hinimum 30mm crest depth, polyester top out & alkyd backer. Zinc coating shall be 20g/sqm as per IS-277. Top coat polyester 5-18 microns over 5-7 micron epoxy rimer. Insulation: High density puff insulation. Inner Sheet: Colour coated galvanized, lightly ribbed. Thickness 0.50mm (TCT) hinimum 15-18 micron top coat polyester outing, Zinc coating 120g/sqm as per IS-77Grade of steel: Minimum 240Mpa (both neets). Sheet should have protective guard lim of 25 micron minimum to avoid cretches during transportations and should be supplied in single length upto 12 meter or is desired by Engineer-In-Charge. The sheet hall be fixed using self drilling / self tapping crews with EPDM seal, completed upto any itch in horizontal / vertical or curved arfaces excluding the cost purlins, rafters and trusses and including cutting to size and	150	Sqm	



1.10	Providing and applying plaster of paris putty of approved brand and manufacturer minimum thickness 2 mm or as required at site over plastered surface to prepare the surface even and smooth complete. (Make of POP: Sakarni, Ashirbad, Adharshree or as approved by Engineer-In-Charge)	500	Sqm	
1.11	Providing and Fixing 10 mm thick non- asbestos multipurpose cement board reinforced with cellulose fiber manufactured through autoclaving process (high pressure steam cured) as per IS:14862 of Everest industries Ltd or equivalent make, over the existing MS frame work (to be paid in basis items) with 25 mm counter sunk ribbed hard screws @ 200m centre to centre. The joints of the boards are finished with specially formulated jointing compound and jointing tape to be provided seamless finish, etc all complete as per drawing & direction of engineer in charge.	200	Sqm	
1.12	Providing a Computer Operator cum typist for office work during the office hours on 26 working days in a month. The person to be employed for this job should have working experience of M.S. Word, M.S. Excel and Esta. (The rate should be quoted inclusive of all saturatory payments and all other applicable Government taxes if any).	12	Per month	
1.13	Providing office attendant cum field boy for office work and shifting of furniture etc. during the office hours on 26 working days in a month. The person to be employed for this job should have working experience of office work. (The rate should be quoted inclusive of all saturatory payments and other applicable Government taxes if any).	24	Per month	
2	EARTH WORK			
2.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.			
2.1.1	All kinds of soil.	30	Cum	
2.2	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and			



	disposing of surplus excavated soil as directed, within a lead of 50 m:			
2.2.1	All kinds of soil			
2.2.1.1	Pipes, cables etc, not exceeding 80 mm dia.	50	Metre	
2.3	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.			
2.3.1	All kinds of soil	100	100 Sqm	
3	CONCRETE WORK			
3.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:			
3.1.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	15	Cum	
3.1.2	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	20	Cum	
4	REINFORCED CEMENT CONCRETE			
4.1	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	10	Cum	
4.2	Centering and shuttering including strutting, propping etc. and removal of form for:			
4.2.1	Shelves (Cast in situ)	200	Sqm	
4.2.2	Lintels, beams, plinth beams, girders, bressumers and cantilevers	100	Sqm	
4.3	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.			
4.3.1	Thermo-Mechanically Treated bars	1500	Kg	
5	BRICK WORK			
5.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:			



5.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	20	Cum	
5.2	Brick work with common burnt clay F.P.S. (non		Cum	
3.2	modular) bricks of class designation 7.5 in			
	superstructure above plinth level up to floor V level			
	in all shapes and sizes in :			
5.2.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	20	Cum	
5.3	Half brick masonry with common burnt clay F.P.S.			
	(non modular) bricks of class designation 7.5 in			
5.3.1	superstructure above plinth level up to floor V level. Cement mortar 1:4 (1 cement :4 coarse sand)	200	Sam	
	, , , , , , , , , , , , , , , , , , ,	200	Sqm	
6	MARBLE WORK			
6.1	Providing and fixing 18 mm thick gang saw cut,			
	mirror polished, premoulded and prepolished,			
	machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required			
	size, approved shade, colour and texture laid over 20			
	mm thick base cement mortar 1:4 (1 cement : 4			
	coarse sand), joints treated with white cement, mixed			
	with matching pigment, epoxy touch ups, including			
	rubbing, curing, moulding and polishing to edges to			
6.1.1	give high gloss finish etc. complete at all levels. Granite of any colour and shade			
0.1.1	Granite of any colour and shade			
6.1.1	Area of slab over 0.50 sqm	200	Sqm	
	1		1	
6.2	Providing edge moulding to 18 mm thick marble			
	stone counters, Vanities etc., including machine			
	polishing to edge to give high gloss finish etc.			
	complete as per design approved by Engineer-in-			
6.2.1	Charge. Granite work	200	Metre	
0.2.1	Offilite work	200	Wietre	
6.3	Extra for fixing marble /granite stone, over and above	200	Metre	
	corresponding basic item, in facia and drops of width			
	upto 150 mm with epoxy resin based adhesive,			
6.4	including cleaning etc. complete.	10	Each	
0.4	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform,	10	Each	
	vanity counter and similar location in marble/			
	Granite/ stone work, including necessary holes for			
	pillar taps etc. including moulding, rubbing and			
	polishing of cut edges etc. complete.		1	
7.	WOOD AND P.V.C. WORK			
7.1	Providing wood work in frames of doors, windows,			
	clerestory windows and other frames, wrought			
	framed and fixed in position with hold fast lugs or			



	with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).			
7.1.1	Kiln seasoned and chemically treated hollock wood	0.2	Cum	
7.2	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws.			
7.2.1	Kiln seasoned and chemically treated hollock wood			
7.2.1	35 mm thick	20	Sqm	
7.3	Deduct for not providing hinges in doors, windows or clerestory window shutters with :			
7.3.1	ISI marked M.S. pressed butt hinges bright finished of required size.			
7.3.1.1	For 2nd class teak wood and other class of wood shutters	50	Sqm	
7.4	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:			
7.4.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	50	Sqm	
7.5	Extra for cutting rebate in flush door shutters (Total area of the shutter to be measured).	10	Sqm	
7.6	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc. complete.			
7.6.1	50 mm.	100	Each	
7.7	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS: 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	30	Each	
7.8	Providing and fixing special quality chromium plated brass cupboard locks with six levers of approved quality including necessary screws etc. complete.			



7.0.1	g, 70	100	- 1	
7.8.1	Size 50 mm	100	Each	
7.9	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.	100	Each	
7.10	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete:			
7.10.1	300x16 mm	10	Each	
7.10.2	250x16 mm	30	Each	
7.11	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete:			
7.11.1	250x10 mm	40	Each	
7.11.2	150x10 mm	100	Each	
7.11.3	100x10 mm	200	Each	
7.12	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete			
7.12.1	125 mm	100	Each	
7.12.2	100 mm	100	Each	
7.13	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.			
7.13.1	Twin rubber stopper	40	Each	
7.14	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete.			
7.14.1	Double strip (horizontal type)	150	Each	
7.15	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS: 2046 Type S, including cost of adhesive of approved quality.			



7.15.1	1.0 mm thick	150	Sqm	
8.	STEEL WORK			
8.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	500	Kg	
8.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	1000	Kg	
8.3	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.			
8.3.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	100	Kg	
8.4	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.			
8.4.1	Hot finished welded type tubes	1500	Kg	
8.5	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.)	100	Kg	
9	FLOORING			
9.1	Cement concrete flooring 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.			
9.1.1	40 mm thick with 20 mm nominal size stone aggregate	50	Sqm	



9.2	Cement plaster skirting up to 30 cm height, with				
	cement mortar 1:3 (1 cement: 3 coarse sand), finished with a floating coat of neat cement.				
9.2.1	18 mm thick	10	Sqm		
9.3	Providing and fixing Ist quality ceramic glazed wall	250	Sqm		
	tiles conforming to IS: 15622 (thickness to be				
	specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green,				
	black of any size as approved by Engineer-in-Charge,				
	in skirting, risers of steps and dados, over 12 mm				
	thick bed of cement mortar 1:3 (1 cement : 3 coarse				
	sand) and jointing with grey cement slurry @ 3.3kg				
	per sqm, including pointing in white cement mixed				
	with pigment of matching shade complete.				
9.4	Providing and laying Vitrified tiles in floor with				
	different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08%				
	and conforming to IS: 15622, of approved brand &				
	manufacturer, in all colours and shade, laid with				
	cement based high polymer modified quick set tile				
	adhesive (water based) conforming to IS: 15477, in				
	average 6 mm thickness, including grouting of joints				
	(Payment for grouting of joints to be made				
	separately).				
1011	Circ of Tile 600v600 mm	050	Cam		
9.4.1	Size of Tile 600x600 mm	950	Sqm		
10	FINISHING	950	Sqm		
10 10.1	FINISHING 12 mm cement plaster of mix:		Sqm		
10 10.1 10.1.1	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand)	200	Sqm		
10 10.1	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or				
10 10.1 10.1.1 10.2	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix:	200	Sqm		
10 10.1 10.1.1 10.2 10.2.1	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand)				
10 10.1 10.1.1 10.2	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of	200	Sqm		
10 10.1 10.1.1 10.2 10.2.1 10.3	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix:	200	Sqm		
10.1 10.1.1 10.2.1 10.2.1 10.3.1	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand)	200	Sqm		
10 10.1 10.1.1 10.2 10.2.1 10.3	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand) Wall painting with acrylic emulsion paint of	200	Sqm		
10 10.1 10.1.1 10.2 10.2.1 10.3	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand) Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even	200	Sqm		
10 10.1 10.1.1 10.2 10.2.1 10.3 10.3.1	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand) Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade	200 150 50	Sqm Sqm		
10 10.1 10.1.1 10.2 10.2.1 10.3 10.3.1 10.4	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand) Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade Two or more coats on new work	200	Sqm		
10 10.1 10.1.1 10.2 10.2.1 10.3 10.3.1	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand) Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade Two or more coats on new work Painting with synthetic enamel paint of approved	200 150 50	Sqm Sqm		
10 10.1 10.1.1 10.2 10.2.1 10.3 10.3.1 10.4 10.4.1	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand) Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade Two or more coats on new work Painting with synthetic enamel paint of approved brand and manufacture to give an even shade	200 150 50 2500	Sqm Sqm Sqm		
10 10.1 10.1.1 10.2 10.2.1 10.3 10.3.1 10.4 10.4.1 10.5	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand) Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade Two or more coats on new work Painting with synthetic enamel paint of approved brand and manufacture to give an even shade Two or more coats on new work	200 150 50	Sqm Sqm		
10.1 10.1.1 10.1.1 10.2 10.2.1 10.3 10.3.1 10.4 10.4.1 10.5 10.5.1	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand) Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade Two or more coats on new work Painting with synthetic enamel paint of approved brand and manufacture to give an even shade Two or more coats on new work French spirit polishing:	200 150 50 2500	Sqm Sqm Sqm		
10 10.1 10.1.1 10.2 10.2.1 10.3 10.3.1 10.4 10.4.1 10.5	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand) Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade Two or more coats on new work Painting with synthetic enamel paint of approved brand and manufacture to give an even shade Two or more coats on new work French spirit polishing: Two or more coats on new works including a coat of	200 150 50 2500	Sqm Sqm Sqm		
10.1 10.1.1 10.1.1 10.2 10.2.1 10.3 10.3.1 10.4 10.4.1 10.5 10.5.1	FINISHING 12 mm cement plaster of mix: 1:6 (1 cement: 6 fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix: 1:6 (1 cement: 6 fine sand) 12 mm cement plaster finished with a floating coat of neat cement of mix: 1:4 (1 cement: 4 fine sand) Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade Two or more coats on new work Painting with synthetic enamel paint of approved brand and manufacture to give an even shade Two or more coats on new work French spirit polishing:	200 150 50 2500	Sqm Sqm Sqm		



	average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to			
	prepare the surface even and smooth complete.			
11	REPAIRS TO BUILDINGS			
11.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground within 50 metres lead			
11.1.1	With cement mortar 1:4 (1 cement : 4 fine sand)	300	Sqm	
11.2	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty			
11.2.1	Float glass panes of thickness 4 mm	100	Sqm	
11.3	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	2500	Sqm	
11.4	Melamine polishing on wood work (one or more coat).	500	Sqm	
12	DISMANTLING & DEMOLISHING			
12.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge			
12.1.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	15	Cum	
12.1.2	Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	15	Cum	
12.2	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge	10	Cum	
12.3	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.			
12.3.1	In cement mortar	30	Cum	
12.4	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead.			
12.4.1	Of area 3 sq. metres and below	50	Each	



12.5	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.			
12.5.1	For thickness of tiles 10 mm to 25 mm	500	Sqm	
12.6	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead	100	Sqm	
12.7	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material within 50 meters lead as directed by Engineer-in-charge.	150	Sqm	
12.8	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	250	Cum	
13	SANITARY INSTALLATIONS			
13.1	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:			
13.1.1	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. brass pillar tap	10	Each	
13.2	Providing and fixing white vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.	10	Each	
13.3	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required:			
13.3.1	Size 600x450x200 mm	15	Each	
13.4	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.			
13.4.1.1	Flexible pipe	25	Tr1	
	32 mm dia	25	Each	
14	WATER SUPPLY			
14.1	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the			



	walls etc.Internal work - Exposed on wall			
14.1.1	15 mm dia nominal bore	100	Metre	
14.1.2	20 mm dia nominal bore	100	Metre	
14.1.3	25 mm dia nominal bore	50	Metre	
14.2	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall:			
14.2.1	15 mm dia nominal bore	100	Metre	
14.2.2	20 mm dia nominal bore	50	Metre	
14.3	Providing and fixing brass stop cock of approved quality:			
14.3.1	15 mm nominal bore	10	Each	
14.3.2	20 mm nominal bore	10	Each	
14.4	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)			
14.4.1	25 mm nominal bore	10	Each	
14.5	Providing and fixing plasticised PVC connection pipe with brass unions			
14.5.1	45 cm length			
14.5.1.1	15 mm nominal bore	10	Each	
14.6	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)			
14.6.1	15 mm nominal bore	20	Each	
14.6.2	20 mm nominal bore	20	Each	
14.6.3	25 mm nominal bore	20	Each	
14.7	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931			
14.7.1	15 mm nominal bore	10	Each	
14.8	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.			
14.8.1	15 mm nominal bore	10	Each	
15	ALUMINIUM WORK			
15.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including			



	,			1	,
15.1.1	necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately): For fixed portion	2500			
15.1.1.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	3500	Kg		
15.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
15.1.2.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	750	Kg		
15.2	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade 1 Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-incharge.				
15.2.1	Pre-laminated particle board with decorative lamination on both sides	200	Sqm		
15.3	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS: 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
15.3.1	With stainless steel cover plate minimum 1.25 mm thickness	10	Each		
15.4	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of				



	English in the second of			
	Engineer-in-charge complete.			
15.4.1	Upto 5mm depth and 5 mm width	300	Metre	
15.5	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	60	Sqm	
15.6	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	20	Each	
15.7	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge			
15.7. 1	Powder coated minimum thickness 50 micron aluminium	40	Each	
15.8	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	100	Kg	
	Total = Rs.			
	Credit for Dismantled Unserviceable Material			
1	Fire wood from damaged cup-boards etc.	200	Kg.	
2	Old flush door shutter of various thickness and sizes with fitting etc.	10	Each.	
3	Old M.S section / steel bars scrap / G.I pipes / C.I pipes etc.	400	Kg.	
4	Old scrap aluminium sections of various size and thickness.	200	Kg.	
5	Old dismantled brick. Total = Rs.	1000	Each.	
	NetAmount of civil part = Rs.			
	Tion Indiana of Civil Part - Its.			



Electrical Items.

No.	S.	Description of items	Qty.	Unit.	Rates	Amount.
call bell point with 1.5sq.mm FRLS PVC insulated copper conductor single/multi core cable in surface/ recessed steel conduit, with modular switch, modular plate, suitable GI box & earthing the point with 1.5sq.mm. FRLS PVC insulated copper conductor single core etc as read. Group C Wiring for light/ power plug with 2X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as read. Wiring for light/ power plug with 4X4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as read. Wiring for light/ power plug with 4X4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as read. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as read. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 1 X 6 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm b. 6x4sq.mm 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC/USHA) 7. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	No.					
copper conductor single/multi core cable in surface/ recessed steel conduit, with modular switch, modular plate, suitable GI box & earthing the point with 1.5sq.mm. FRLS PVC insulated copper conductor single core et as reqd. Group C 2. Wiring for light/p ower plug with 2X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 3. Wiring for light/p ower plug with 4X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 400 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC/USHA) 7. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	1.		340	Points.		
recessed steel conduit, with modular switch, modular plate, suitable Gl box & earthing the point with 1.5sq.mm. FRLS PVC insulated copper conductor single core etc as reqd. Group C 2. Wiring for light/ power plug with 2X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 3. Wiring for light/ power plug with 4X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 6 sq.mm earth wire 160 Meter. b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire 150 Meter. 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 275 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC/USHA) 7. Supply of 10" (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
modular plate, suitable GI box & earthing the point with 1.5sq.mm. FRLS PVC insulated copper conductor single core etc as reqd. Group C 2. Wiring for light/ power plug with 2X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No 4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No 4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthng as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 400 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC / USHA) 7. Supply of 10" (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
with 1.5sq.mm. FRLS PVC insulated copper conductor single core et as reqd. Group C 2. Wiring for light/ power plug with 2X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 3. Wiring for light/ power plug with 4X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 400 Meter. 6. Supply of 10'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC/USHA) 7. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including		· · · · · · · · · · · · · · · · · · ·				
conductor single core etc as reqd. Group C 2. Wiring for light/ power plug with 2X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 3. Wiring for light/ power plug with 4X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 400 Meter. 6. Supply of 10'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC/USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
2. Wiring for light/ power plug with 2X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 3. Wiring for light/ power plug with 4X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 400 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/Havells/ GEC /USHA) 7. Supplying 6 fixing following type switch/ socket on the existing plate & switch box/ channel including						
PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 3. Wiring for light/ power plug with 4X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. 6. Supply of 12'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC / USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	2.	<u> </u>	2650	Meter.		
sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 3. Wiring for light/ power plug with 4X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 400 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10" (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
core cable for loop earthing as reqd. 3. Wiring for light/ power plug with 4X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthng as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC / USHA) 7. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including		surface/ recessed steel conduit along with 1 No 4				
3. Wiring for light/ power plug with 4X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthng as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10" (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthng as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 400 Meter. 6. Supply of 12'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
surface/ recessed steel conduit along with 2 Nos 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthng as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 400 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC / USHA) 7. Supply of 10" (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	3.		1150	Meter.		
sq.mm FRLS PVC insulated copper conductor single core cable for loop earthng as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire 350 Meter. b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire 160 Meter. c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 150 Meter. 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 275 Meter. 6. Supply of 12'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
core cable for loop earthng as reqd. 4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 400 Meter. 6. Supply of 12'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
4. Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 150 Meter. 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 275 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10" (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire 350 Meter. b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire 160 Meter. c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 150 Meter. 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 275 Meter. 6. Supply of 12'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	4					
insulated copper conductor, single core cable in surface/ recessed steel conduit as reqd. a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire 350 Meter. b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire 160 Meter. c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 150 Meter. 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 275 Meter. 6. Supply of 12'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC / USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
a. 2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 275 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10" (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
b. 2 X 6 sq.mm + 1 X 6 sq.mm earth wire 150 Meter. c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 150 Meter. 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 275 Meter. 6. Supply of 12'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including		surface/ recessed steel conduit as reqd.				
c. 4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire 5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 275 Meter. 6. Supply of 12'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	a.	2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire	350	Meter.		
5. Supplying and drawing following size of FRLS PVC insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm	b.	2 X 6 sq.mm + 1 X 6 sq.mm earth wire	160	Meter.		
insulated copper conductor single core cable in the existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm	c.	4 X 2.5 sq.mm + 2 X 2.5 sq.mm earth wire	150	Meter.		
existing surface / recessed / steel / PVC conduit / channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 275 Meter. 6. Supply of 12'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	5.					
channel as required. a. 3x4sq.mm 400 Meter. b. 6x4sq.mm 275 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10" (250 mm) size fresh air fan (Model size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
a. 3x4sq.mm b. 6x4sq.mm 275 Meter. 6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10" (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including						
b. 6x4sq.mm 275 Meter. 6. Supply of 12'' (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	-	1	400	Matan		
6. Supply of 12" (300 mm) size exhaust fan complete with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10" (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	a.	3x4sq.mm		Meter.		
with suitable size louvers as required. (Make - Crompton/ Havells/ GEC /USHA) 7. Supply of 10'' (250 mm) size fresh air fan (Model crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	b.	6x4sq.mm	275	Meter.		
Crompton/ Havells/ GEC /USHA) 7. Supply of 10" (250 mm) size fresh air fan (Model 5 Nos. crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	6.		4	Nos.		
7. Supply of 10'' (250 mm) size fresh air fan (Model 5 Nos. crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including		•				
crisp air) complete with suitable size louvers as required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including				N.		
required. 8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including	/.		5	Nos.		
8. Supplying & fixing following type switch/ socket on the existing plate & switch box/ channel including		* ' *				
the existing plate & switch box/ channel including	8.					
connections etc. as requ.		connections etc. as reqd.				

C....Nil I....Nil O....Nil



-000-				
a.	15/16 amps modular switch.	400	Nos.	
b.	6 - pin 5/6 & 15/16 amps modular socket outlet.	400	Nos.	
9.	Supply, installation, testing and commissioning of 34-36 watt recessed mounted 600mm x 600mm size (± 1%) LED luminare, IP-20, with 34-36 watt LED complete, directly on ceiling/ false ceiling, including connection with 1.5 sq.mm FRLS PVC insulated, copper conductor, single / multi core cable & earthing etc. as reqd.	100	Nos.	
10.	Supply, installation, testing and commissioning of 48" (1200mm size) ceiling fan complete with all accessories for use on 220/240 volts 50 HZ, single phase A/C supply including wiring the down rods of standard length (upto 30cm) with 1.5 sq.mm FRLS PVC insulated, copper conductor, single / multi core cable etc. as reqd.	35	Nos.	
11.	Supply, installation, testing and commissioning of 56" (1400mm size) ceiling fan complete with all accessories for use on 220/240 volts 50 HZ, single phase A/C supply including wiring the down rods of standard length (upto 30cm) with 1.5 sq.mm FRLS PVC insulated, copper conductor, single / multi core cable etc. as reqd.	25	Nos.	
12.	Supplying & fixing 2 module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as reqd.	60	Nos.	
13.	Supplying & fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as reqd.	100	Nos.	
14.	Supplying & fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as reqd.			
a.	3 Module (100 mm X 75 mm)	10	Nos.	
b.	6 Module (200 mm X 75 mm)	20	Nos.	
C.	12 Module (200 mm X 150 mm)	100	Nos.	
15.	Supplying & fixing suitable size GI box with modular plate & cover in front on surface or in recess, including providing & fixing 3 pin5/6 amps modular socket outlet & 5/6 amps modular switch, connection etc. as reqd.	10	Nos.	
16.	Supplying & fixing suitable size GI box with modular plate & cover in front on surface or in	10	Nos.	



	recess, including providing & fixing 6 pin 5/6 & 15/16 amps modular socket outlet & 15/16 amps modular switch, connection etc. as reqd.				
17.	Supplying & fixing following way, single pole & neutral, sheet steel, MCB distribution board, 240 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as reqd.				
a.	8 way, Double door	2	Nos.		
b.	12 way, Double door	4	Nos.		
18.	Supplying and fixing 63amp double pole, 240 volts, MCB in the existing MCB DB complete with connections, testing and commissioning etc. as required.	6	Nos.		
19.	Supplying of PVC insulated, PVC sheathed XLPE aluminium conductor armored cable of 1.1 KV grade confirming to I.S 1554/1/88 of following size.				
a.	3 ½ x35sq.mm.	60	Meter.		
b.	3 ½ x 50sq.mm	50	Meter.		
C.	3 ½ x 70sq.mm	50	Meter.		
d.	4x25sq.mm	50	Meter.		
20.	Supplying & fixing following ways surface/ recess mounting, vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's, with provision of 100/ 125 amps TP 25 KA MCCB as incomer, interconnection between incomer MCCB & bus bars (but without MCB's/ MCCB) as reqd. (Note: Vertical type MCB TPDB is normally used where 3 phase outlets are reqd.)				
a.	8 Way TP.	3	Nos.		
b.	12 Way TP.	3	Nos.		
21.	Supplying & fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections,				



	testing & commissioning etc. as reqd.			
a.	Single pole.	210	Nos.	
22.	Supplying & fixing DP sheet steel enclosure on surface/ recess along with 25/32 amps 240 volts "C" curve DP MCB complete with connections, testing & commissioning etc. as reqd.	10	Nos.	
23.	Supplying & fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole & earth, metal enclosed plug top along with 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let & complete with connections, testing & commissioning etc. as reqd.	32	Nos.	
24.	Supplying & fixing 20 amps, 415 volts, TPN industrial type, socket outlet, with 4 pole & earth, metal enclosed plug top along with 20 amps "C" curve, TP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let & complete with connections, testing & commissioning etc. as reqd.	10	Nos.	
25.	Supplying & fixing 30 amps, 415 volts, TPN industrial type, socket outlet, with 4 pole & earth, metal enclosed plug top along with 30 amps "C" curve, TP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let & complete with connections, testing & commissioning etc. as reqd.	10	Nos.	
26.	Supplying and fixing 100A/125 amps, 25KA, TP MCCB in the existing TPN Distribution board/ panel board including testing & commissioning etc as required.	6	Nos.	
27.	Providing and fixing M.S fan hook for ceiling fan, including digging in RCC & making god the same complete as required.	35	Nos.	
28.	Installation of exhaust fan / fresh air fan up to 450mm size with cutting of glass & fixing with backelight sheet complete as required at site .	9	Nos.	
29.	Providing and fixing plastic trunking without cover etc.Make – Legrand (105mmx50mm) / Hager 100 mm x 50 mm / M.K 100mm x 50mm.	60	Meter.	



30.	Providing and fixing suitable size covers etc.	60	Meter.	
	Make – Legrand / M.K. / Hager.			
31.	Providing and fixing end caps. (Make – Legrand / M.K. / Hager.).	12	Nos.	
32.	Providing and fixing 6/8 modules Arteor frame for existing cover. (Make – Legrand / M.K. / Hager.).	100	Nos.	
33.	Providing and fixing flat angel etc. (Make – Legrand / M.K. / Hager.)	10	Nos.	
34.	Providing and fixing internal angel complete as required. (Make – Make – Legrand / M.K. / Hager.)	12	Nos.	
35.	Providing and fixing external angel complete as required. (Make – Legrand / M.K. / Hager.)	12	Nos.	
36.	Supplying and fixing modular 16A/20 amps switch (Legrand/ MK/ Schnieder Make) on the existing modular plate & switch box including connection as required. Make – Legrand / M.K. / Hager.	200	Nos.	
37.	Supplying and fixing modular 6/16 amps multi socket (Legrand/ MK/ Schnieder Make) on the existing modular plate & switch box including connection as required.Make – Legrand / M.K. / Hager.	200	Nos.	
38.	Providing and fixing body joint complete as required. Make – Legrand / M.K. / Hager.	20	Nos.	
39.	Providing and fixing cover joint etc as required. Make – Legrand / M.K. / Hager.	20	Nos.	
40.	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power Cable of 1.1 kv grade of following size on wall surface as required.			
a.	Upto 35sq.mm.	110	Meter	
b.	Above 35 sq.mm & upto 95sq.mm	100	Meter	
41.	Providing and fixing 6 SWG dia G.I. wire on surface or in recesses for loop earthing along with cable as required.	420	Meter	
42.	Supplying and fixing of 25mm dia medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.	50	Meter	
43.	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.			
a.	3 ½ x 70sq.mm	4	Nos.	



b.	3 ½ x 50sq.mm	4	Nos.		
c.	3 ½ x 35sq.mm	4	Nos.		
d.	4 x 25sq.mm	4	Nos.		
	Credit for Dismantled Unserviceable Materi	al			
1	Dismentaled old 1x40 watt /2x40watt tube light fitting /CFL fitting.	80	Nos.		
2	Dismentaled old 1200 mm ceiling fan.	30	Nos.		
3	Dismentaled old 1400 mm 'size ceiling fan	30	Nos.		
4	Dismentaled old 12''/15" size exhaust fan	8	Nos.		
5	Dismentaled old 18" size exhaust fan	1	Nos.		
6	Dismentaled old Copper/ Aluminium wire.	80	Kg.		
7	Dismantal of old Dis. Board of different size.	6	Nos.		
8	Dismantal old SP MCBS of different capacity.	180	Nos.		
9	Dismantal of old MS box with Bakelite sheet of different size.	60	Kg.		
10	Dismantal of 5A switch piano type.	300	Nos.		
11	Dismantal of 15A switch.	150	Nos.		
12	Dismantal of 5A socket.	150	Nos.		
13	Dismantal of 15A socket.	150	Nos.		
14	Dismantal of old fan regulator.	50	Nos.		
15	Dismantal old DP Isolator	6	Nos.		
16	Dismantal of 100 mm/150 mm width old M.S channel.	20	Kg.		
	Total =				
	Net amount of Electrical part =				
Total cost of Civil and Electrical work = Rs.					