



INSTITUTE OF NANO SCIENCE AND  
TECHNOLOGY

Habitat Centre, Sector-64, Phase-X, Mohali - 160062

Phone No. 0172 - 2210073/75/57

Website: [www.inst.ac.in](http://www.inst.ac.in)

## NOTICE INVITING TENDER

**NIT No.:- 2/INST/2016-17**

**NAME OF WORK:- "Up-gradation of Building for setting up laboratory at INST Campus Mohali"**

Certified that this NIT contains 1 to 78 Pages.

This NIT is approved for Rs. 36, 60,650/- (Rupees Thirty Six Lakh Sixty Thousand Six Hundred Fifty Only).

Consultant (Engg),INST

Director ,INST

**INDEX**

*Name of Work: "Up-gradation of Building for setting up laboratory at INST Campus Mohali"*

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**NOTICE INVITING TENDER**

**NIT No.:- 2/INST/2016-17.**

*Name of work:-* **“Up-gradation of Building for setting up laboratory at INST  
Campus Mohali”**

ESTIMATED COST	:- Rs. 36, 60,650/-
EARNEST MONEY	:- Rs. 73,213/-(to be returned after receiving Performance Guarantee)
SECURITY DEPOSIT	:- A sum @2.5% of the tendered value. However in case of contracts involving maintenance work Corresponding Performance guarantee as per Supplementary agreement value shall be retained as security deposit.
PERFORMANCE GUARANTEE	:- 5% of Tendered Cost
TIME ALLOWED	:- 45 Days.

## CHECK LIST FOR CONTRACTORS FOR SUBMISSION OF TENDERS

*Name of Work:* **"Up-gradation of Building for setting up laboratory at INST Campus Mohali"**

TENDERER TO ENSURE THAT:-

- (i) The tender/tenders containing conditions contrary to those specified in this document shall be liable to be summarily rejected and in such a situation the earnest money shall also be liable to be forfeited.
- (ii) The contractor shall quote his rates keeping in mind the specifications, terms and conditions, additional/particular and special conditions etc. And nothing shall be payable extra whatsoever, unless otherwise specified.

**Bank Details of INST for on-line Transfer of EMD/Security Deposit/consultancy Fee**

ACCOUNT NAME	DIRECTOR, INST MOHALI
BANK NAME	CANARA BANK
ADDRESS	SECTOR-34A, CHANDIGARH-160022
TYPE OF ACCOUNT	CURRENT ACCOUNT
ACCOUNT NO.	2452201001102
IFSC CODE	CNRB0002452
MICR CODE	160015003
SWIFT CODE	CNRBINBBFFC

**Funds Transfer Details**

NAME OF Transferor	
NAME OF WORK FOR WHICH FUNDS TRANSFERRED	
TRANSACTION ID/NO. OF TRANSFER	
NAME & BRANCH OF TRANSFEROR BANK	
DATE OF AMOUNT TRANSFERRED	
AMOUNT TRANSFERRED	
PURPOSE	

## GUIDELINES / PROCEDURE TO TENDERERS

1. **Submission of Bids:** The bidders who are desirous of participating in the tendering process shall submit their price bids in the standard formats prescribed in the Tender documents, to be **downloaded** from institute website: [www.inst.ac.in](http://www.inst.ac.in) or CPPP website: [www.eprocure.gov.in](http://www.eprocure.gov.in). The bidder should attach the copies of all the relevant certificates, documents etc., in support of their price bids. The bidder shall sign on all the statements, documents, certificates, to be submitted by him, owning responsibility for their correctness / authenticity.
2. **Payment of Bid Security (Earnest Money Deposit):** The EMD shall be paid **ONLINE** in the account of INST. Details given on page 4 above. **The copy of the original transaction shall be deposited along with all other relevant documents at the time of submission of tender.**
3. **Participation of Bidders at the time of opening of bids:** Bidders have option to participate in person or through his representative with due authorization in tendering process at the time of opening of Bid at INST, Mohali at specified time and date ie. on **7-2-2017 at 3:30PM** at INST by the concerned officer / officers.
4. **Processing of Tender:-** The concerned officer/officers will evaluate and process the tenders as done in the conventional tenders and the successful bidder will be communicated accordingly.
5. **Payment of performance Guarantee:** The successful bidder shall submit irrevocable performance guarantee of 5% (Five percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract. This guarantee shall be in the form of DD / Banker Cheque / pay order / FDR / guarantee bonds of any scheduled bank drawn in favour of **Director, INST, Mohali**
6. **Participation Financial Rules:** The system would be applicable for purchase of goods, outsourcing of services and execution of work as prescribed in GFRs.
7. **Signing of agreement:** After the award of the contract, an agreement shall be signed.
7. To download the general contract condition 2014 (i.e. GCC-2014) following link may be followed: <http://cpwd.gov.in>

## INSTRUCTIONS TO TENDERERS FOR SUBMISSION OF TENDER

1. The tenderers should read all the instructions terms & conditions, contract clauses, nomenclature of items, specifications etc. contained in the tender documents very carefully, before quoting the rates. The tenderer should also read the general conditions of contract for CPWD works 2014 available with M/s. Jain Book Agency, Connaught Palace, New Delhi, which will form a part of the Agreement with upto date correction slips.
2. Tender should be signed and witnessed on **page-18** of tender documents indicating full address of witness and the names of signatories.
3. Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tenders, or in the time allowed for carrying out the work, or which contain any other condition of any sort including conditional rebates, will be summarily rejected.
4. The contractor shall quote his rates keeping in mind the specifications terms & conditions and special conditions etc. and nothing shall be payable extra whatsoever unless otherwise specified.
5. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so. Such power of attorney should be produced with the tender and it must be disclosed that the firm is duly registered under the Indian Partnership Act, 1952.
6. Sales Tax, Excise duty, Works Contract Tax and Service Tax Punjab VAT, Labor cess etc. as applicable shall be paid by the contractor himself. The department shall deduct from the R/A bills, the TDS as applicable. The contractor shall quote his rates considering all such Taxes.
7. Letter of recommendation for exemption of Octroi shall be issued by the department on demand. However, the department is not liable to reimburse the Octroi duty in case such exemption certificates are not honored by the concerned authorities.
8. The agencies shall get registered with works contract cell of sales tax department/under Punjab VAT of Govt. of Punjab and submit valid registration certificate from works contract cell of Sales Tax Department preferably at the time of tendering.
9. The tender, which is not duly signed by authorized signatory or is conditional shall be treated as non-responsive and shall be summarily rejected.
10. **Copy of transaction details for ONLINE submission of EMD should be submitted along with the tender.**

**PRESS NOTICE**

**INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR TENDERING FORMING PART OF NIT AND TO BE POSTED ON WEBSITE**

The Director, INST, Srctor-64, Phase-X, Mohali-160062 invites PERCENTAGE RATE tender from approved and eligible contractor of appropriate composite/civil category of CPWD, and those of appropriate list of MES, Railways, U.T. Chandigarh Administration, Punjab PWD, dealing with building and roads for the following work :-

SI. No.	NIT No.	Name of Work	Estimated costputtender(inRs)	Earnest Money (in Rs.)	Period of Completion	Last Date and Time of submission of bid, original EMD, copy of receipt for deposition of original EMD, and other documents as specified in the press notice.	Date and Time of opening of Tech./Financial Bid Part of tender
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
1	NIT No. 2/INST/2016-17	"Up-gradation of Building for setting up laboratory at INST Campus Mohali"	Rs. 36,60,650/-	Rs. 73,213/- (To be returned after receiving of performance guarantee).	45 (Forty Five days)	07/02/2017  Upto 3.00pm	07/02/2017  Upto 3.30pm

TENDER ID. 2/INST/2016-17

Enlistment of the contractors should be valid on the last date of submission of tenders.

In case only the last date of submission of tender is extended, the enlistment of contractor should be valid on the original date of submission of tenders.

Tender documents shall be considered valid of only those contractors who will submit copies of the following documents along with tender:-

(i) **Payment of Bid Security (Earnest Money Deposit):** The EMD shall be paid **online** in the account of INST. Details given on page 4 above. **The copy of the original transaction shall be deposited along with all other relevant documents at the time of submission of tenders.**

(ii) (a) Registration of enlistment with CPWD in the appropriate class. (Only for CPWD Contractors.)

*Or*

(b) Appropriate list of MEs, BSNL and other state Govt. Department in which enlisted for building and road works.

*Or*

- (c) Experience certificate of similar work as mentioned above. (Only for other experienced contractors). Which should not be issued below the rank of Executive Engineer on **7-2-2017 at 3:30PM** at INST by the concerned officer / officers.
- (iii) Registration certificate under Punjab VAT 2004, if the contractor is out of Punjab state he shall submit affidavit that before claiming first payment he shall obtain VAT registration of Punjab State and enclose that VAT registration of any State/UT of India.
- (iv) Copy of latest Punjab VAT returns filed in Punjab VAT Department.
- (v) Copy of PAN Card issued by Income Tax Department.
- (vi) Copy of applicable licenses /registration of Labor License with EPFO, ESIC

Or

The proof of applying for obtaining Labour License /registration with EPFO, ESIC, as the case may be.

Bidders are required to **download the NIT** in PDF as uploaded by INST.

Certified copy of all the relevant documents as specified in press notice shall have to be submitted by the bidder at the submission of tender.

The bid submitted shall become invalid if: - .

- (i) The bidder is found ineligible.
- (ii) The bidder does not deposit original EMD along with tender documents. (The EMD document shall only be issued from the place in which the INST office is situated.)
- (iii) The bidder does not submit all the documents (including service tax registration/ VAT registration/ Sales Tax registration) as stipulated in the bid documents.
- (iv) If any discrepancy is noticed between the documents as downloaded, at the time of submission of bid and hard copies, as submitted physically by the lowest tenderer in the office of tender opening authority.

**The tender document consisting of 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 from the institute website: [www.inst.ac.in](http://www.inst.ac.in) or CPPP website: [www.eprocure.gov.in](http://www.eprocure.gov.in).**

**Consultant (Engg), INST  
Habitat Centre, Sector-64,  
Phase-X, Mohali-160062.**

**INSTITUTE OF NANO SCIENCE AND TECHNOLOGY, MOHALI  
NOTICE INVITING TENDER**

The Director, Institute of Nano Science and Technology, Habitat Centre, Sector-64, Phase-X, Mohali-160062 invites percentage rate Tender from approved and eligible contractor of CPWD Civil /Composite category, those of appropriate list of MES, Railways, U.T. Chandigarh Administration and Punjab PWD and other state Govt. departments dealing with buildings and roads upto 3.00 PM on 07/02/2017.

The enlistment of the contractors should be valid on the last date of submission of bids. In case the last date of submission of bid is extended, the enlistment of contractor should be valid on the original date of submission of bid.

- 1.1 The work is estimated to cost Rs. 36, 60,650/-. This estimate, however, is given merely as a rough guide.
- 1.1.1 The authority competent to approve NIT will also nominate the discipline which will deal with all matters relating to invitation of tenders.
- 1.2 Intending bidders 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 magnitude specified below:-

Tender Bid shall contain the following documents:-

- (i) **Payment of Bid Security (Earnest Money Deposit) :** The EMD shall be paid **online** in the Account of INST. Details given on **page 4 above**. **The copy of the original transaction shall be deposited along with all other relevant documents at the time of submission of tenders.**
- (ii) (a) Registration of enlistment with CPWD in the appropriate class. (Only for CPWD Contractors.)  

*Or*

(b) Appropriate list of MEs, BSNL and other state Govt. Department in which enlisted for building and road works.  

*Or*

(c) Experienced certificate of similar work as mentioned above. (Only for other experienced contractors). Which should not be issued below the rank of Executive Engineer or Administrative officer?
- (iii) Registration certificate under Punjab VAT 2004, if the contractor is out of Punjab state he shall submit affidavit that before claiming first payment he shall obtain VAT registration of Punjab State and enclose that VAT registration of any State/UT of India.
- (iv) Copy of latest Punjab VAT returns filed in Punjab VAT Department.
- (v) Copy of PAN Card issued by Income Tax Department.
- (vi) Scanned copy of applicable licenses /registration of Labor License with EPFO, ESIC

Or

The proof of applying for obtaining Labor License /registration with EPFO, ESIC.

2. Agreement shall be drawn with the successful Tenderer/bidder on prescribed Form No. **CPWD-7** with up to date correction slips which is available as a Govt. of India Publication 2014 edition, Tenderer shall quote his rates as per various terms and conditions of the said form which forms part of the agreement.
- 3 **The time allowed** for carrying out the work will be **(45) Forty Five days** 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. (i) The site for the work is available.  
(ii) **The architectural and structural drawings shall be made available in phased manner, as per requirement of the same as per approved programme of completion submitted by the contractor after award of work.**
5. Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms and conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents have been uploaded at e-procurement website

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 bid 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 bid as notified.
8. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.
9. **Payment of Bid Security (Earnest Money Deposit):** The EMD shall be paid **online** in the account of INST. Details given on **page 4 above**. **The copy of the original transaction shall be deposited along with all other relevant documents at the time of submission of tenders.**

A part of earnest money is acceptable in the form of bank guarantee also. In such case, **minimum** 50% of earnest money or Rs.20 Lac, whichever is less, **shall** have to be deposited in shape prescribed above, and balance **may be deposited** in shape of Bank Guarantee of any scheduled bank **having validity for six months or more from the last date of receipt of tenders** which is to be scanned and uploaded by the intending bidders.

The following undertaking in this regard shall be also be deposited by the intending bidders: Copy of Enlistment Order and certificate of work experience and other documents as specified in the press notice shall also be deposited along with the tender documents on specified time and date.

The bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited Earnest Money Deposit and other documents are found in order.

The bid submitted shall be opened at 03:30 PM on **07/02/2017**.

10. The bid submitted shall become invalid if:
  - (i) The bidder is found ineligible.
  - (ii) The bidder does not submit all the documents (a) EMD online transaction receipt (b) CPWD Registration (c) Registration certificate under Punjab VAT 2004 (d) Punjab VAT return filed in VAT Deptt. as stipulated in the bid document
  - (iii) If any discrepancy is noticed during scrutiny of the documents as submitted at the time of submission of bid by the lowest bidder in the office of bid opening authority.
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 cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any scheduled bank/Banker's Cheque of any scheduled bank/Demand Draft of any scheduled bank/ Pay order of any Scheduled Bank of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or 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 Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee.
12. The description of the work is as follows:

**As per name of work and as per schedule of quantity with tendered documents.**

Copies of other drawings and documents pertaining to the work will be open for Inspection by the tenderers at the office of the above-mentioned officer.

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 sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may 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 his own 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 bidders 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 does not bind himself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all of the tenders received without the assignment of a reason. **All tenders, in which any of the prescribed conditions is not fulfilled or any condition including that of conditional rebate is put forth by the tenderers shall be summarily rejected.**
14. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and tenders submitted by the contractors who resort to canvassing will be liable to rejection.
15. The competent authority reserves to himself the right of accepting the whole or any part of the tender and the tenderers shall be bound to perform the same at the rate quoted.
16. The contractor shall not be permitted to tender for works in the INST, Mohali (responsible for award and execution of contracts) in which his near relative is posted as 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 gazetted officer in the Central Public Works Department or PWD, Delhi or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
17. No Engineer of Gazetted rank or other Gazetted officer employed in Engineer or Administrative duties in an Engineering Department of Govt. of India is allowed to work as a contractor, for a period of one year after his retirement from Govt. service, without the permission of the Govt. of India in writing. This contract is 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 Govt. of India as aforesaid before submission of the tender or engagement in the contractor's service.
18. The tender for the work shall remain open for acceptance for a period of **Thirty (30) days** from the date of opening of tenders. If any tenderers withdraws his tender before the said period or makes any modification in terms and conditions of the tender which are not acceptable to the department, then the Govt. shall, without prejudice to any other right or remedy, be liable to forfeit 50% of the said Earnest Money as aforesaid. Further, the tenderer shall not be allowed to participate in the re-tendering process of work.
19. This notice inviting tender, shall form a part of the contract document. The successful Tenderer / Contractor, on acceptance of his tender by the Accepting Authority, shall within 7 days from the stipulated date of start of the work, sign the contract consisting of:-
  - a. The notice inviting tender, all the documents including additional conditions, specifications and drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading to thereto.
  - b. Standard **PWD- form 7** or other Standard C.P.W.D. Form as applicable.

Consultant (Engg), INST,  
Habitat Center,  
Sector-64, Phase-X, Mohali-  
160062,

## CONDITION FOR SECURITY DEPOSIT & PERFORMANCE GUARANTEE

1. The contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent of the tendered amount) in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (notwithstanding and /or without prejudice to any other provisions in the contract) within **10 days** of issue of letter of acceptance . This period can be further extended by the Engineer-in-charge upto a maximum period of **5 days** with late fee @ 0.1% per day of performance guarantee amount.  
This guarantee shall be in the form of Govt. securities or fixed deposit receipts or guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any scheduled Bank is furnished by the contractor to the Govt. as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipts, the loss caused thereby shall fall on the contractor and the contractor shall forth with on demand furnish additional security to the Govt. to make good the deficit.
2. A letter of acceptance shall be issued informing the successful tenderer of the decision of the competent authority to accept his tender and to submit the performance guarantee within **10 days** in any of the prescribed form. On receipt of prescribed performance guarantee, necessary letter to commence the work shall be issued and site of work shall be handed over thereafter. In case of failure by the contractor to furnish the performance guarantee within the specified period. Government shall without prejudice to any other right or remedy available in law, be at liability to forfeit the earnest money absolutely.
3. The performance guarantee shall be initially valid upto the stipulated date of completion (i.e. 6 Months) plus 60 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of performance guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest. **However, in case of contracts involving maintenance of building and services/other work, then 50% of performance Guarantee shall be retained as security Deposit. The same shall be returned year wise proportionately.**
4. The Engineer-in charge shall not make a claim under the performance guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and /or without prejudice to any other provisions in the contract agreement) in the event of :
  - a) Failure by the contractor to extend the validity of the performance guarantee as described herein above, in which event the Engineer -in charge may claim the full amount of the performance guarantee.
  - b) Failure by the contractor to pay President of India any amount due, either as agreed by the contractor or determined under any of the clauses/ conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-charge.  
In the event of the contract being determined or rescinded under provision of any of the clause/condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the President of India.
5. The refund of Security Deposit to a contractor on completion of work will be regulated as per clause 17 of agreement.

To,

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

**Sub: NIT No. 2/INST/2016-17 for the work "Up-gradation of Building for setting up laboratory at INST Campus Mohali"**

Dear Sir,

It is here by declared that INST is committed to follow the principle of transparency, equity and competitiveness in public department.

The subject Notice Inviting of Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tender/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the INST.

Yours faithfully

**DIRECTOR, INST,  
SECTOR-64, PHASE-X,  
MOHALI-160062,**

To,  
**Director, INST,  
Sector-64, Phase-X,  
Mohali-160062**

Sub: Submission of Tender for the work of **Up gradation to Existing School for Physics Research laboratory**

**Dear Sir,**

I/We acknowledge that INST 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) us an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender 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 ACCEPTRANCE 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 INST. I/We acknowledge and accept the duration of the 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, INST shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

**To be signed by the bidder and same signatory competent/authorized to sign the relevant contract of behalf of INST.**

**INTEGRITY AGREEMENT**

This Integrity Agreement is made at.....on this..... day of.....20.....

**BETWEEN**

Director, Institute of Nano Science and Technology, Sector-64, Phase-X, Mohali-160062, .....Hereinafter referred as the '**Principal/Owner**', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

**AND**

.....

(Name and Address of the Individual/firm/Company)

Through..... (Hereinafter to as the

(Details of duly authorized signatory)

"Bidder/**Contractor**" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

**Preamble**

WHEREAS the Principal /Owner has floated the Tender (NIT No. -----) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for -----

(Name of work)

hereinafter referred to as the "**Contact**".

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 witness as under:

**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) could obtain an advantage in relation to the Tender process or the Contract execution.
  - c) The Principal/Owner shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

- 1) 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 (PC Act) or is in violation 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)**

- 1) It is required that each 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) commits 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 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) The Bidder(S)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(S)/Contract(s) will not use improperly, (for the propose of completion or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business details, including information contained or transmitted electronically.
  - d) The Bidder(s)/Contractor(s) of foreign original shall disclose the names and addresses of agents/representatives of India, if any. Similarly Bidder(s)/Contractor(s) of India 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 on behalf of one manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
- 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 practice **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 justify interest of other and/or to influence the procurement process to the detriment of the Government interest.**
- 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 right 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/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.**
- 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/determine the contract or has accrued the right to terminate/determine the contract according to Article 3(1), 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 of 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 Indian Penal code IPC/Prevention of Corruption Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same law enforcing agencies for further investigation.

### **Article 4: Transgression**

- 1) The Bidder declares that no previous transgressions occurred in the last **7 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 dealing/holiday listing of the Bidder/Contractor as deemed fit by the Principal/Owner.
- 3) If the Bidder/Contractor can prove that he has restored/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own direction, revoke the exclusion prematurely.

### **Article 5: Equal Treatment of all Bidder(s)/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 Sub-contractors/sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidder(s) and Contractors.
- 3) The Principal/Owner will disqualify Bidder(s), 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 12 Months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidder(s), 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 discharge/determined by the Competent Authority, PWD.

**Article 7- Other Provisions**

- 0) 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.
- 1) Changes and supplements need to be made in writing. Side agreements have not been made.
- 2) 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.
- 3) 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 intentions.
- 4) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreements / 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/Contract 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:

Date:

**Office memorandum No. DG/SE/CM/CON/285 issued by Director General CPWD dated 04.06.2015 shall become part of NIT & GCC-2014**

S.No.	Existing Provision	Modified Provision
1.	<p><b>CPWD - 6 for e-tendering</b>  <b>11.</b>The contractor whose tender is accepted will be required to furnish performance guarantee of 5% (Five percent) of the tendered amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs.10,000/-) or Deposit at call receipt of any scheduled bank/Banker's 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 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 Earnest Money deposited by the Contractor shall be forfeited automatically without any notice to the contractor The Earnest Money deposited shall be returned after receiving the aforesaid performance guarantee.</p>	<p><b>CPWD - 6 for e-tendering</b>  <b>11.</b>The contractor whose tender is accepted will be required to furnish performance guarantee of 5% (Five percent) of the tendered amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs.10,000/-) or Deposit at call receipt of any scheduled bank/Banker's 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 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 Earnest Money deposited by the Contractor shall be forfeited automatically without any notice to the contractor <b>The Earnest Money deposited shall be returned after receiving the aforesaid performance guarantee</b> <b>The contractor whose bid is accepted will</b> required to furnish either copy of applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO,ESIC and BOCW Welfare Board and Programme Chart (Time and Progress) within the period specified in Schedule F.</p>
2.	<p><b>Clause-5.1</b>  As soon as possible after the Contract is concluded, the Contractor shall submit a Time and Progress Chart for each mile stone and get it approved by the Department. The Chart</p>	<p><b>Clause-5.1</b>  <b>The Contractor shall submit a Programme chart (Time and Progress) for each mile stone alongwith Performance Guarantee</b> get it approved by the Department. The Chart shall be prepared in direct</p>

	<p>shall be prepared in direct relation to the time</p> <p>stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per mile stones given in Schedule 'F'.</p>	<p>relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents,</p> <p>and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per mile stones given in Schedule 'F'.</p>
3.	<p><b>Claus-7A</b></p> <p>No Provision</p>	<p><b>No running account bill shall be paid for the work till the applicable labour Licenses, registration with EPFO,ESIC and BOCW Welfare Board whatever applicable for submitted by the contractor to the Engineer-in-charge.</b></p>
<b>SI.No.</b>	<b>Existing Provision</b>	<b>Modified Provision</b>
..	<p><b>Clause - 19</b></p> <p>The contractor shall obtain a valid license</p>	<p><b>Clause-19</b></p> <p>The contractor shall obtain a valid license under the</p>

	<p>under the contract labour (R&amp;A) Act 1970 and the contract labour (regulation and Abolition) Central Rules 1971 before the commencement of the work and continue to have a valid license until the completion of the work The Contractor shall also comply with provisions of the inter-state migrant Workman (Regulation of Employment and Conditions of Service) Act, 1979.</p>	<p>contract labour (R&amp;A) Act 1970 and the contract labour (regulation and Abolition) Central Rules 1971 before the commencement of the work and continue to have a valid license until the completion of the work. <b>The Contractor shall also comply with provisions of the inter-state migrant Workman (Regulation of Employment and Conditions of Service) Act, 1979.</b></p>
	<p><b>Schedule -F</b> <b>Clause 1</b> (i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance .....days</p>	<p><b>Schedule -F</b> <b>Clause 1</b> i) Time allowed for submission of performance guarantee, Programme Chart (Time and Progress) and applicable labour Licenses, registration with EPFO, ESIC and BOCW Welfare Board or Proof of applying thereof from the date of issue of letter of acceptance ..... Days</p>
	<p><b>Schedule F</b> <b>Clause-7A</b> No provision</p>	<p><b>Schedule F</b> <b>Clause-7A</b> Whether clause 7A shall be applicable - <b>Yes/No</b></p>



# CENTRAL PUBLIC WORKS DEPARTMENT

OFFICE MEMORANDUM

NO. DG/MAN/336

ISSUED BY AUTHORITY OF DIRECTOR GENERAL, CPWD

NIRMAN BHAVAN, NEW DELHI

DATED: 01.07.2016

Subj:- Modification in CPWD Works Manual 2014 – Amendment in Para 15.9(11) and Annexure-20A.12(18) in respect of Validity of tender.

In pursuance of recommendations of Committee of Secretaries for Proposal regarding fixation of govt. tenders at national level, the para 15.9(11) and Annexure-20A.12(18) of CPWD Works Manual 2014 are modified as under:-

Existing Provision	Modified Provision
<p><b>15.9 Preparation of Notice Inviting Tenders/bid documents</b></p> <p>(11) The validity period i.e. the tender shall remain open for acceptance for a period of 30/45/60/90 days from the opening of date of tenders, may be kept for single bid tenders as under:-</p> <p>(i) Tenders to be accepted by EE - upto 30 days  (ii) Tenders to be accepted by SE - upto 45 days  (iii) Tenders to be accepted by CE - upto 60 days  (iv) Tenders to be approved by ADG/Spl.DG/DG/CWB - upto 90 days  (Added vide OM DG/MAN/306 dt. 16.05.2014)</p>	<p><b>15.9 Preparation of Notice Inviting Tenders/bid documents</b></p> <p>(11) The validity period i.e. the tender shall remain open for acceptance for a period of 10/15/30/45/60 days from the opening of date of tenders, may be kept for single bid tenders as under:-</p> <p>(i) Tenders to be accepted by AE - upto 10 days  (ii) Tenders to be accepted by EE - upto 15 days  (iii) Tenders to be accepted by SE - upto 30 days  (iv) Tenders to be accepted by CE/ADG - upto 45 days  (v) Tenders to be approved by RWB/CWB- upto 60 days</p> <p>The validity period for tenders invited in two/three bid system shall be upto 60 days from date of opening of technical bid.</p>
<p><b>ANNEXURE - 20A.12</b></p> <p><b>CPWD-6 FOR E-TENDERING</b></p> <p>18. The bid for the works shall remain open for acceptance for a period of thirty/ forty five/ sixty/ Ninety (30/45/60/90) days from the date of opening of bids in case of single bid system/Ninety(90) days from the date of opening of technical bid in case bids are invited on 2 bid/envelop system/ One hundred twenty(120) days from the date of opening of technical bid in case bids are invited on 3 bid/envelope system for specialized work (strike out as the case may be). If any bidders 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 Government shall,</p>	<p><b>ANNEXURE - 20A.12</b></p> <p><b>CPWD-6 FOR E-TENDERING</b></p> <p>18. The bid for the works shall remain open for acceptance for a period of Ten/Fifteen/thirty/forty five/sixty (10/15/30/45/60) days from the date of opening of bids in case of single bid system/Sixty (60) days from the date of opening of technical bid in case bids are invited on 2 or 3 bid/envelop system (strike out as the case may be). If any bidders 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 Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.</p>

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SRT/aw

without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work. (Modified vide OM DG/CON/279 dt. 09.05.2014)

  
Superintending Engineer (C&M)

Issued from file No. CSQ/CM/16(1)/2015

1. All Spl. DGs, ADGs, CPWD, E-in-C, PWD, Delhi Govt. They are requested to endorse a copy of this O. M. to all CEs, SEs & EEs.

  
Executive Engineer (M)

INSTITUTE OF NANO SCIENCE  
AND TECHNOLOGY,**1.0 PERCENTAGE RATE TENDER & CONTRACT FOR WORKS**

*Tender for the work of:- "Up-gradation of Building for setting up laboratory at INST Campus Mohali"*

- (i) To be submitted by **03.00 PM on 07/02/2017** after download from **e-procurement website** or Institute website: [www.inst.ac.in](http://www.inst.ac.in).
- (ii) To be opened in the presence of tenderers who may be present at **03.30 PM on 07/02/2017** in the office of the "Director, INST, **Habitat Centre, Sector-64, Phase-X, Mohali-160062,**

**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 and 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 President of India within the time specified in Schedule 'F', viz. schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred 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 respects of accordance with, such conditions so far as applicable.

We agree to keep the tender open for **Thirty (30)** days from the due date of its opening of submission thereof and not to make any modifications in its terms and conditions. A sum of **Rs. 73,213/-** is hereby forwarded in receipt treasury Challan / Deposit at call Receipt of Scheduled Bank / Fixed deposit receipt of a scheduled Bank / Demand draft of a scheduled bank/bank guarantee issued by a scheduled bank as earnest money in favour of Director, INST, Sector-64, Phase-X, Mohali-160062. The original EMD should be deposited either in the office Director, INST, Sector-64, Phase-X, Mohali-160062 inviting bids or division office of any Director, INST, Sector-64, Phase-X, Mohali-160062, PWD within the period of bid submission. (The EMD document shall only be issued from the place in which the office of receiving division office is situated). The EMD receiving Director, INST, Sector-64, Phase-X, Mohali-160062 shall issue a receipt of deposition of earnest money deposit to the bidder in prescribed format (enclosed) uploaded by tender inviting EE in the NIT. This receipt shall also be uploaded to the e-tendering website by the intending bidder upto the specified bid submission date and time.

If I / We fail to furnish the prescribed performance guarantee within prescribed period, I/we agree that the said President of India 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 work as specified, I/We agree the President of India or the successors or the successors in office shall, without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said performance guarantee shall be a guarantee to execute all the works referred to in the tender document 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 or both 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 CPWD 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 Deposited/Performance Guarantee.

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

### ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the President of India for a sum of Rs-----  
(Rupees-----)

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

- (i)
- (ii)
- (iii)

-----  
Designation-----  
Dated-----

**PROFORMA OF SCHEDULES A to F (CIVIL)**

**SCHEDULE 'A'**

Schedule of Quantities attached on page No. 66 to 72

**SCHEDULE 'B'**

Schedule of materials to be issued to the contractor.

Sl. No.	Description of Item	Quantity	Rates in Figure & Words at which the material will be charged to the Contractor	Place of Issue
1	2	3	4	5
--- NIL---				

**SCHEDULE 'C'**

Tools and Plants to be hired to the contractor

Sl.No.	Description	Hire charges per day	Place of issue
1	2	3	4
---- NIL----			

**SCHEDULE 'D'**

General Conditions, Additional Conditions, Special conditions, General Specifications and particular specifications attached on Page 40 to 53

**SCHEDULE 'E':-**

**Reference to General :-Conditions**

**General conditions of contract for CPWD-Works 2014 with amendment issued upto date till receipt of tender.**

**Name of work**

**:- "Up-gradation of Building for setting up laboratory at INST Campus Mohali"**

**Estimate Cost**

**:- Rs. 36, 60,650/-**

**Earnest Money**

**:- Rs. 73,213/- to be returned after receiving performance guarantee)**

**Performance guarantee**

**:-** The contractor shall be required to deposit an amount equal to 5% of the tendered value of work as performance guarantee in the form as mentioned in Para 9 of PWD-6 within 7 days of the issue of letter of acceptance. This period can be further extended by Engineer- in-charge upto a maximum of 15 days on written request of the contractor

**Security Deposit**

**:-** 2.5% of tendered value plus 50% of PG for contracts involving maintenance of the building and services/other work after construction of same building and services/other work.

**Labour regulations to be complied by the contractor.**

**:-** (1). In terms of clause 19 of the GCC, a valid labour license is obtained by the contractor before start of work in terms contract labour (Regulation & abolition) Act-1970. (2). In terms of clause 19L of the GCC, ESI & EPF contribution are to be paid by the contractor, for which contractor is to get registered himself with EPFO and ESIC. (3). Labour employed by the contractor has obtained smart card of ESI, which is essential for imparting medical facility to labour. (4). Labour employed by the contractor has registered themselves with Building and other Construction Worker Act-1996 to get applicable benefits  
5. Record prescribed in 'CPWD Contractor's Labour Regulations' laid down

in GCC are maintained. These include registers for workmen employed by the contractor, Muster Roll, Register of Wages, Wages slip, Employment Card, Service Certificate, Register of Fines, Register of Deduction for Damage of Loss, Register of overtime and Register of Advance.

**Amendment in General conditions of contract (GCC)2014- payment of wages to the labour by contractor**

- :- CPWD Contractor's labour Regulations.
- 5. Payment of wages
- vi.) Wages due to every worker shall be paid to him direct by contractor through through Bank or ECS or online transfer to his bank account.
- vii) All wages shall be paid through Bank or ECS or online transfer.
- x) It shall be the duty of the contractor to ensure the disbursement of wages through Bank or ECS or online transfer to his bank account of labour.
- xi) The contractor shall obtain from the Junior Engineer or any other authorized representative of the Engineer-in-charge as the case may be, a certificate under his signature at the end of the entries in the "Register of Bank or ECS or online transfer to his bank account.

Wages" or the " Wage cum-Muster Roll" as the case may be i ay be in the following form:-  
 "Certified that the amount shown in column No..... has been paid to The workman concerned through Bank account of labour on.....at....."

**SCHEDULE 'F':-  
General Rules & Directions**

**Officer Inviting Tender:-**

**Consultant ( Engg), INST, Mohali**

**Definitions:-**

2(i) Engineer-In-Charge

**Consultant ( Engg), INST, Mohali**

2(vii) Accepting Authority  
 2(x) Percentage on cost of materials and labour to cover all overheads and profits

Director, INST, Mohali.  
 15%

2(ix) Standard schedule of Rates

Delhi Schedules of Rate 2016 with upto date correction slips.

2(xii) Department Format of Contract

Institute of Nano Science and Technology, Mohali.

9(ii) Clause-1:-i)Time allowed for submission of Performance guarantee, programme Chart (and

CPWD Form 7 (2014) as modified & amended upto date.

an applicable Labour licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of Applying thereof from the date of issue of letter of Acceptance.

7 days

allowabl  
ii)Maximum e extension with late fee @0.1% per day of Performance Guarantee amount beyond the period provided in (i) above.

3 Days

Clause- Authority  
2:- y for fixing compensation Under clause 2

The Director, INST, Mohali.

Clause-2A:-Whether Clause-2A shall be applicable

Not  
Applicable

Clause-5:- Number of days from the date of issue of letter of acceptance for reckoning date of start

7 days.

Clause-5.1:-

MILE STONE:

TABLE OF MILE STONE (S)			
Sl. No.	Physical Progress	Time Allowed (from date of start)	Amount to be with-held in case of non achievement of milestone

Time allowed for execution of works

45 (Forty Five) Days

Authority to give fair and reasonable extension of time and rescheduling of milestone

The Director, INST, Mohali.

Clause 6, 6A  
Clause applicable (6 or 6A)

Clause-6A

Clause-7:- Gross work to be done together with net payment /

Rs. 15.00 (Fifteen ) Lakh

adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment

**Clause-7A:-** Whether Clause 7A shall be applicable:-

**Clause-10A:-** List of testing equipments to be Provided by the contractor.

**Clause-10B (ii):-** Whether clause 10B (ii) shall be Applicable

**Applicable**

(No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge/ Consultant ( Engg),INST.)

As per list attached.- Annexure (A) Page-33

No Applicable

**Clause- 10CA**

Materials covered under this clause:	Nearest material ( <b>other than cement, reinforcement bars and structural steel</b> ) for which All India Wholesale Price Index to be followed:	Base Price of all the materials covered under Clause 10 CA
1. Cement OPC	-----	<b>5400.00</b>
<b>2.Reinforcement Bars TMT 500-12 MM Primary Manufacturer</b>	-----	<b>34070.00</b>
<b>3. Structural Steel Primary Manufacturer MT</b>	-----	<b>41240.00</b>

**Clause 10 C**

**25 % as labour component for Gross value of work done**

Clause 10 CC

Not Applicable

Clause 10 CC to be applicable in contracts with stipulated period of completion exceeding the period shown in the next column

06 Months

**Clause-11:-** Specifications to be followed for Execution of work.

Attached in the tender documents and CPWD

**Specification 2009 Vol I & II with upto date amendments & Morth Specification**

**Clause-12:-**

Type of work

Up gradation work.

**12.2 & 12.3** Deviation limit beyond which clause 12.2 & 12.3 shall apply for building work.

**30%**

**12.5 (i)** Deviation limit beyond which clause 12.2 & 12.3 shall apply for foundation work. (Except earth work)

**30%**

Deviation limit for items in earth work subhead of DSR or related Items

**100%**

**Clause-16:-** Competent Authority for deciding reduced rates

**The Director, INST, Mohali.**

Clause-18:- List of mandatory machinery, tools Plants to be deployed by the contractor at site.

**As per list attached – Annexure-'A' at P-33**

**Clause 25 :-**

<b>Constitution of Dispute Redressal Committee (DRC)</b>	<b>Competent Authority to appoint DRC.</b>
<b>A. <u>DRC for total claims</u></b>  <b>1. Chairman - Dr. H.N. Ghosh, Sci-G, INST, Mohali.</b>  <b>2. Member - CFAO,INST</b>  <b>3. Member - Executive Engineer, IISER, Mohali</b>  <b>4. Member - Executive Engineer, PGIMER, Chd</b>  <b>Member - Consultant ( Engg),INST</b> <b>5. (Only to present the case).</b>	Director, INST, Mohali.

**Clause 36 (i)**

Minimum qualifications & experience required for Principal Technical Representative.

**Requirement of Technical Staff Representative(s) and Recovery Rate**

S. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical/ Technical representative)	Minimum experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 36(i)
1	Graduate Engineer Or Diploma Engineer		Site Engineer	2 years 5 years	1	Rs.15,000/- (Per month)

**“Assistant Engineers retired from Government Services that are holding Diploma will be treated at par with Graduate Engineer”.**

**Clause-42:-**

(i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates **DSR 2014** Printed by CPWD

ii) Variations permissible on theoretical quantities:	3% plus/minus.
(a) Cement	
For works with estimated cost put to tender not more than Rs. 5 lakh.	
For works with estimated cost put totender more than Rs.5 lakh.	2% plus/minus.
(b) Bitumen All Works	2.5% plus side only & nil on minus side.
(c) Steel Reinforcement and structural steel sections for each diameter, section and category	2% plus/minus.
(d) All other materials.	Nil

**RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION**

S.No.	Description of Item	Rates in figures and works at which recovery shall be made from the contractor	
		Excess beyond Permissible Variation	Less used beyond the permissible variation
1	2	3	4
1. 2.	To be arranged by contractor.  Cement Steel reinforcement	NIL	<b>Not allowed as the work will be rejected.</b>

**DIRECTOR, INST,  
SECTOR-64, PHASE-X,  
MOHALI-160062**

## LIST OF EQUIPMENTS FOR SITE LABORATORY

Particulars	Item	Qty
<b>(I) Weighing equipment</b>	Physical balance capacity 200 gms.	1 No.
	Dial type spring balance having knob capacity 10 kg reading to ½ kg.	2 Nos.
	Counter scale capacity 1 kg & 10 kg.	1 No./each
	Weighting platform capacity 100 kg.	1 No.
	Iron weights of 5 kg, 2 kg, 500 gm, 200 gm, 100 gm.	2 Nos./each
	Brass weights of 50 gm, 20 gm, 10 gm, 5 gm, 2 gm, 1 gm.	2 Nos./each
<b>(II) Water Measuring Equipment</b>	water bottles/canes 5 ltr, 2 ltr, 1 ltr, ½ ltr.	5 Nos./each
	Measuring cylinder capacity 10 ml, 500 ml, 250 ml, 100 ml.	2 Nos./each
	Beakers with capacity 500 ml, 200 ml, 50 ml.	2 Nos./each
<b>(III) Laboratory Tools</b>	1. Set of Box spanner ratchet.	2 Nos.
	2. Hammer 1 lb.	2 Nos.
	3. Rubber Hammer	2 Nos.
	4. Hacksaw with 6 blades.	1 No.
	5. Measuring tape 2 mtr.	2 Nos.
	6. Depth guage 20 cm.	2 Nos.
	7. Vernier Calliper.	2 Nos.
	8. Micrometer screw 25 mm guage.	2 Nos.
<b>Miscellaneous item</b>	1. Showels & Spade.	6 Nos./each
	2. Plastic or GI Buckets 15 ltr, 10 ltr & 5 ltr.	3 Nos./each
	3. Wheel Barrow.	3 Nos.

**The laboratory shall have equipped with the following equipment also: a)**

Balances:-

- i) 7 kg 10 kg. capacity, semi self-indicating type-accurate to 10 gm.
- ii) 500 gm capacity, semi self-indicating type-accurate to 1 gm.
- iii) Pan balance type 5 kg - accurate to 10 gm.
- b) Equipment of slump test - slump cone, steel plate, temping rod, steel scale, scoop.
- c) Dial gauges 25 mm travel - 0.01 mm / division least count - 2 nos.
- d) Graduated measuring cylinders 200 ml capacity - 3 nos.
- e) Enamel trays for efflorescence test for bricks:-  
300 mm x 250 mm x 40 mm = 2 Nos.  
Circular plates of 250 mm dia. = 4 Nos.
- f) Other instruments like steel tapes - 30 m, vernier calipers, a good quality plumb bob, spirit level minimum 30 cm long with 3 bubbles for horizontal vertical, wire gauge (circular type) disc, foot rule, long nylon thread, magnifying glass, screw driver 30 cms long, ball pin hammer 100 gms, plastic bags for taking samples etc.
- g) The equipment's not relevant for this work may be exempted by Engineer-in-Charge on the written request of the agency.

**Note: In case any of the above equipment goes out of order or is damaged, it shall be replaced by a proper working equipment by the contractor within 24 hours.**

## SALIENT HIGHLIGHTS OF THE TENDER

### **NAME OF WORK: - Up gradation to Building for Physics Research laboratory at INST Campus**

1. The contractor (s) shall make his own arrangement for electricity and water required for the execution of work and nothing extra shall be paid for the same. However, the Engineer-in-Charge shall recommend the application to the BSES for electric connection, if desired. Necessary payment shall be made by the contractor directly to the department concerned. In case BSES fails to sanction the electric connection or delays the sanction for electric connection; the contractor shall make his own arrangement by providing diesel generators of adequate capacity at his own cost.
2. For water supply, contractor shall make his own arrangements including boring of tube well, if necessary and nothing extra shall be paid by the Department for arrangement of water or on its treatment as per IS : 456/2000, para 5.4 or CPWD specifications 2009 volume-I to II.
3. All the materials including cement and steel (T.M.T Bars) will be arrangement by the contractor himself and nothing extra shall be paid for cartage of material to site of work.
4. **Quality Assurance**
- 4.1 The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted. He shall have to submit quality assurance programme within two weeks of the award of work. The quality assurance programme should include method statement for various items of work to be executed along with check lists to enforce quality control.
- 4.2 The contractor shall get the source of various raw materials namely aggregate, cement, sand, steel, water etc. to be used on the work, approved from the Engineer-in-Charge and trial mixes for controlled concrete shall be done using the approved materials. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests etc. shall be done by the contractor at his own cost.
- 4.3 Samples including brand / quality of materials and fittings to be used in the work shall be got approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work.
- 4.4 Similarly, the contractor shall submit brand/ make of various materials to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it. Any change will have to be got approved from Engineer-in-Charge in advance.
- 4.4 The contractor shall submit shop drawings of staging and shuttering arrangement, Stone cladding, aluminium work and other works including mock work as desired by Engineer-in-Charge for his before execution. The contractor shall also submit bar-bending schedule for approval of Engineer-in-Charge. before execution.
- 4.5 The contractor shall arrange carrying out of all tests required under the agreement through the laboratory as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including fee for testing. However, no testing charges will be payable by the contractor for the tests conducted in laboratories at site of work. In all cases, cost of samples and to and fro carriage shall be borne by the contractor. Contractor shall establish a laboratory at site of work at his own cost. The laboratory shall be equipped, inter alia, with the equipment as details at page number 33 of this NIT.  
Allowing establishing the laboratory at site shall not absolve the contractor from fulfilling the criteria of getting the test done in independent Lab. /CPWD Lab. The decision of the Engineer-in-charge of allowing any test in the site laboratory or any other laboratory shall be final.

Extensive testing of the materials used for construction is a pre-requisite for attaining high quality of the work. This shall also require specialized tests, physical, chemical, ultrasonic, x-ray and various other types of tests which cannot possibly be carried out in a site laboratory. These tests also require specialized personnel who regularly deal in such testing. Therefore the need arises for carrying out the tests in outside laboratories. These laboratories may be in the Government sector, Semi Government or private sector. All govt. Institutes, Indian institutes of technology, national institutes of technology central and state research centers, centrally and state funded laboratories.

Testing of building material shall be done as per the following priority.

a) **CPWD testing lab**

**4.6. SAMPLES FOR TESTING:-**

4.6.1 The contractor shall provide samples of materials required for testing free of charge. The cost of tests shall be borne by the contractor.

**All other expenditure required to be incurred for taking samples; conveyance, packing etc. shall be borne by the contractor himself.**

4.6.2 However, if any load testing or special testing is to be done for concrete whose strength is doubtful, the cost of the same shall be borne by the contractor.

4.6.3 In case there is any discrepancy in frequency of testing as given in list of mandatory tests and that in individual sub-heads of work as per CPWD Specifications higher of the two frequencies of testing shall be followed and nothing extra shall be payable on this account.

4.6.4 The contractor has to establish field laboratory at site including all necessary equipment for field tests at his own cost.

4.7 Samples of materials required for testing shall be provided free of cost by the contractor. Testing charges, if any, shall be borne by the department in case the test results are satisfactory except where-ever specifically mentioned otherwise in the NIT. All other expenditure to be incurred for taking samples, conveyance, packing etc. shall be borne by the contractor. If material fails in testing, the testing charges will be borne by the contractor.

The contractor shall get the water tested with regard to its suitability and conforming to the relevant IS Code. The contractor shall obtain written approval from the Engineer-in-Charge before he proceeds by using the same for execution of work. The water testing charges shall be borne by the contractor.

4.8 Unless otherwise specified in the schedule of quantities the rates for all items shall be considered as inclusive of pumping / balling out water, if necessary, for which no extra payment shall be made. These conditions shall be considered to include water from any source such as rain, flood, surface and sub-soil water etc. and shall apply to the execution in any season.

4.9 The contractor has to use specialized agency for specialized items of works such as water proofing treatment etc., the Contractor(s) shall submit for the approval of the Engineer-in-Charge, the names of such specialized agencies, of reputed along with their technical capability proposed to be engaged by him.

Approval of specialized agencies for each specialized work shall be obtained from the Engineer-in-charge in one month of award of work. Even if, the work is being executed by such specialized agencies; the work shall be deemed to be executed by the tenderer for all purposes and the responsibility of the quality of items of works executed etc. shall continue to be that of the tenderer only.

4.10 The agencies shall get registered with works contract cell of Sales Tax Department, Government of NCTD Delhi and submit valid registration certificate from works contract. Failure to do so may lead to rejection of tender.

4.11 HOUSING, WATER SUPPLY, DRAINAGE AND ELECTRICITY - The contractor has to make his own arrangements for electric connection, stores and field offices etc. including drainage arrangements. Contractor should visit the site and see in what manner he is able to arrange the above. Arrangement of water for drinking purpose in addition to the water required for construction work is also to be made by the contractor. For electric connection, the

contractor shall make necessary connection as per requirement from NDPL/BSES/NDMC and the contractor shall be authorized to use the same for execution or work. The department shall provide necessary help for obtaining electric connection. The decision of the Engineer-in-charge shall be final and binding on the contractor.

**WATER FOR THE WORK SHALL BE ARRANGED BY THE CONTRACTOR OTHERWISE RECOVERY @ 1% OF THE GROSS VALUE OF WORK DONE SHALL BE MADE FROM THE BILL.**

4.12 Contractor should provide at site suitable space as per Direction of Engineer in charge with two tables and four chair alongwith one Almira for Engineer for effective quality of work and one separate room for testing of field tests.

**5.0 Safety Precautions**

Contractor shall within two weeks of award of work, submit to the Engineer-in-Charge for his approval, list of measures for maintaining safety of manpower deployed for construction and avoidance of accidents.

**6.0 Scaffolding**

For facia work, double steel scaffolding having two sets of vertical supports with steel staircase for inspection of works by Engineer-in-Charge shall be used. The supports shall be sound and strong, tied together with horizontal piece over which scaffolding planks/Challies shall be fixed. Supplying and stacking scaffolding as procured vide item no. 85 in schedule of quantity, is the property of department.

**7.0 Sub-letting**

Un- authorized sub- letting of work shall not be permitted.

**8.0 Sub- Specialized work**

The Contractor shall engaged specialized agency for specialized items (i.e. water proofing treatment) of work. The Contractor(s) shall submit names for the approval of such specialized agency/firm from the Engineer-in-charge before starting the work.

The work shall be deemed to be executed by the tenderer for all purposes and the responsibility of the quality of these items of works executed etc. shall continue to be that of the tenderer only.

## GENERAL CONDITIONS

1. Except for the items, for which particular specifications are given or where it is specifically mentioned otherwise in the description of the items in the schedule of quantities, the work shall generally be carried out in accordance with the "CP WD Specifications 2009 Vol-I &II with upto date corrections slips for Civil Work, Wherever CPWD Specifications are silent, the latest IS Codes/ Specifications shall be followed.
2. The order of preference in case of any discrepancy as indicated in condition No. 8.1 under "Conditions of Contract" given in the standard CPW D Contract form may be read as the following:-
  - i) Description of schedule of quantities.
  - ii) Particular Specification and special condition, if any.
  - iii) Drawings.
  - iv) CPWD Specifications 2009 with upto date correction slips.
  - v) Indian Standard Specifications of B.I.S.
  - vi) Manufacturers specifications.
  - vii) Sound Engineering Practice
3. A reference made to any Indian Standard Specifications in these documents, shall imply to the latest version of that standard, including such revisions / amendments as issued by the bureau of Indian Standards upto last date of receipt of tenders. **The Contractor shall keep at his own cost all such publications of relevant Indian Standard applicable to the work at site.**
4. Unless otherwise specified in the schedule of quantities, the rates tendered by the contractor shall be all inclusive and shall apply to all lifts & all heights, floors including terrace, leads and depths and nothing extra shall be payable on this account.
5. The rates for all items of work shall, unless clearly specified otherwise, include cost of all labour, material, tools and plants and other inputs involved in the execution of the item.
6. The contractor(s) shall quote all inclusive rates against the items in the schedule of quantities and nothing extra shall be payable for any of the conditions and specifications mentioned in the tender documents unless specifically specified otherwise.
7. Unless otherwise specified in the schedule of quantities the rates for all items shall be considered as inclusive of pumping / bailing out water, if necessary for which no extra payment shall be made.
8. The rate for all items, in which the use of cement is involved is inclusive of charges for curing.
9. The foundation trenches shall be kept free from water while works below ground level are in progress.
10. The work shall be executed and measured as per metric dimensions given in the schedule of quantities, drawings etc. (FPS units wherever indicated are for guidelines only)
11. Payment for items of "RCC work", brick work and concrete work above different floor shall be made at the rates provided for these items. For operation of these rates, the floor level shall be considered as top of the main structural slab in that floor viz Top of RCC slab in main room and not top of any sunk or depressed floor for toilet slabs.
12. The rate of items of flooring is inclusive of providing sunk flooring in bath-rooms, kitchen, etc. and nothing extra on this account shall be payable.
13. Any legal or financial implications resulting out of disposal of earth shall be sole responsibility of the contractor. Nothing extra shall be paid on this account.
14. The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors are minimized. Wherever absolutely essential, the chase shall be cut using chase cutting machines. Chases will not be allowed to be cut using hammer / chisel. The electrical boxes should be fixed in walls simultaneously while raising the brick work. The contractor shall ensure proper co-ordination of various disciplines viz. sanitary & water supply, electrical, fire-fighting and any other services.
15. All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested as per the design conditions before covering.

15. Before commencement of the work, the contractor shall correlate nomenclature of the item with all the relevant architectural and structural drawings to satisfy himself that the information available there from is complete and unambiguous. The figures and written dimensions of the drawing shall super seed the measurement by scale. The contractor submits for approval of Engineer-in-Charge his workshop drawings and samples of the work to be performed under the specified items of work before actually commencing the mass execution of the work under the item. Nothing extra shall be payable on this account.
17. The discrepancy in the drawing issued, if any, shall be brought to the notice of the Engineer-in-Charge for immediate decision before execution of the work. The contractor, alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any enormous and incomplete information and no claim, whatsoever, shall be entrained on this account.
18. **Maintenance of Register of Tests**
- (i) All the registers of tests carried out at construction site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-Charge in the same manner as being issued to CPWD field staff.
- (ii) All samples of materials including cement concrete cubes shall be taken jointly with contractor by JE and out of this at least 50% samples shall be taken in presence of AE in charge. If there is no JE, all samples of materials including cement concrete cubes shall be taken by AE jointly with contractor. All the necessary assistance shall be provided by the contractor. Cost of samples materials is to be borne by the contractor and he shall be responsible for safe custody of samples to be tested at site.
- (iii) All the tests if field lab setup at construction site shall be carried out by the Engineering staff deployed by the contractor which shall be 100% witnessed by JE and 50% of tests shall be witnessed by AE -in-Charge. At least 10% of the tests are to be witnessed by the Executive Engineer.
- (iv) All the entries in the registers will be made by the designated Engineering Staff of the contractor and same should be regularly reviewed by JE/AE/EE.
- (v) Contractor shall be responsible for safe custody of all the test registers.
19. Submission of copy of all test registers, Material at site register and hindrance register along with each alternate Running Account Bill and Final Bill shall be mandatory. These registers should be duly checked by AE (P) in division office and receipts of registers should also be acknowledged by Accounts Officer by signing the copies and register to confirm receipt in Division office.
- If all the test registers and hindrance register is not submitted along with each alternate R/A Bill & Final Bill, it will be responsibility of EE & AAO that no payment is released to the contractor.
20. **Maintenance of Material at Site (MAS) Register-**
- (i) All the MAS Registers including cement and Steel Registers shall be maintained by Contractor which shall be issued to the contractor by Engineer-in-Charge in the same manner as being issued to CPWD field staff.
- (ii) Each of the entry of receipt of material at site shall be 100% test checked by JE or by AE if there is no JE.
- (iii) Each MAS register shall be checked by JE at least twice a week and at least once a week by AE. If there is no JE then MAS registers will be checked by AE at least twice a week .
- (iv) Cement Register shall be reviewed by EE at least once in a month.
21. **Recording of Hindrance & Maintenance of Hindrance Register -**
- i) Whenever any hindrance whether on part department or on part of contractor, comes to the notice of the Assistant Engineer, he should at once make a note of such hindrance in the register kept at site, and immediately make a report to the Director, INST, Sector-64, Phase-X, Mohali-160062 within a week.

- i) The following points should be kept in mind while entering the hindrances in the Hindrance Register:
  - a) The entry of date of start of hindrance and date of removal of hindrance should be made on the same day as the hindrance takes place or the cause of the hindrance is removed, respectively.
  - b) The Director, INST, Sector-64, Phase-X, Mohali-160062 should work out the over lapping period, net if hindrance and weight age of each hindrance within 15 days of removal of the cause of hindrance. For work outside headquarters, this should be done as and when he visits the site.
  - c) The items of work affected due to any hindrance should be clearly mentioned in the Hindrance Register by the Assistant Engineer, and the weight age should be allowed on this basis.
  - d) Each hindrance should be entered in the hindrance Register, which should be authenticated by the Director, INST, Sector-64, Phase-X, Mohali-160062 and Contractor.
  - e) The hindrance on part of contractor is also to be entered in the Hindrance Register.
  - f) The hindrance should be recorded carefully in the Hindrance Register after considering its effect on completion of work.
  - g) Review of hindrance register shall be compulsory in division office by EE and AAO at the time of payment of each Running Account Bill and final bill and certificate shall be recorded that all up to date hindrances on part of department and contractor have been recorded in the hindrance register.
  - h) The net delay on part of department or contractor shall be worked out after considering all the hindrances recorded in the hindrance register.
  - i) The Consultant (Engg) Should reviews the hindrance Register whenever he visit site of work.

## **22. Computerized Measurement Books (CMB's) and Bills to be submitted by the contractor**

### **22.1 Application and format of the Computerized M.B.**

- (1) In works of estimated cost put to tender of Rs. 15 lakh and above, approving authority, the conventional Measurement Books shall be replaced by a bound volume of computerized measurements to be furnished by the contractor, duly machine numbered for the pages, and with an MB number given by the Division Office. The pages of these Measurement Books shall be of A-4 size. All these Measurement Books belonging to a Division shall be serially numbered, and a record of these Computerised Measurement Books shall be maintained in a separate Register in Form CPWA 92.
- (2) The same format as in existing Measurement Books shall be used for the computerized Measurement Books. The measurements shall be carried forward from the previous recorded measurements as per the existing procedure.

### **23. Mode of measurements**

- (1) The measurements shall be recorded and entered in computerised format in the first instance by the contractor, and a hard copy shall be submitted to the Department. All entries shall be made exactly as per the existing procedure.
- (2) These measurements shall then be 100% checked by the Junior Engineer. If Junior Engineer is not available, the Assistant Engineer shall perform 100% check of the measurements. The contractor shall incorporate all such changes or corrections, as may be done during these checks, to his draft computerised measurements, and submit to the department the corrected computerized measurements in the form of a book, duly hard bound in red colour on the lines of the conventional Measurement Books now in use, and with its pages machine numbered.
- (3) The Assistant Engineer and the Director, INST, Sector-64, Phase-X, Mohali-160062 shall test check these computerized measurements as per the existing instructions. This book shall be treated as a Computerised Measurement Book.
- (4) The Junior Engineer, Assistant Engineer and the Consultant ( Engg),INST, Sector-64, Phase-X, Mohali-160062 shall record the necessary certificates for their checks and test checks as per the existing procedure in this Computerised Measurement Book.
- (5) The Computerised Measurement Book shall be allotted a serial number as per the Register of Computerised Measurement Books.

**23. Cutting or over-writing in the computerised M.B. not allowed**

- (1) The Computerized Measurement Book given by the contractor, duly bound, with its pages machine numbered, shall have no cutting or over-writing.
- (2) It is the responsibility of the Junior Engineer or the Assistant Engineer as the case may be to ensure that the checks and test checks done by them in the initial draft measurements are correctly incorporated in the Computerized Measurement Book before they record their certificates.
- (3) In case of any error, the Computerised Measurement Book shall be cancelled, and the contractor shall re-submit a fresh Computerized Measurement Book. This should be done before the corresponding computerised bill is submitted to the Division for payment.
- (4) The contractor shall submit as many copies of Computerised Measurement Books as may be required, and as are specified in the NIT/contract, for the purpose of reference and record in the various offices of the department.

**25. Computerised Bill to be submitted by the contractor**

- (1) The contractor shall submit his running and final bills in a computerised form in the same format as the existing conventional bills, with all the pages machine numbered, and hard bound, and with all the entries made as per the existing procedure.
- (2) The contractor shall submit as many copies of the computerized bills as may be required for the purpose of reference and record in the various offices of the department.
- (3) The bill shall be carried forward from the previous running account bill as per the existing procedure.
- (4) These computerised bills shall be processed by the various offices for payment, as per the existing procedure.

## ADDITIONAL CONDITIONS

1. The contractors are advised to get acquainted with the proposed work and its site, approach roads, working space, restrictions and also study the Soil Report, the Preliminary Architectural / structural Drawings, specifications and special conditions etc (available in the office of SOUTH BUILDING (M-422) PWD (NCT), New Delhi) carefully before tendering. No claim of any sort shall be entertained on account of any site conditions and ignorance of specifications and special conditions.
2. The tenderer shall see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost. No payment shall be made on this account.
3. The work shall be carried out as per **CPWD specifications Vol. I & II 2009** with up to date correction slips unless otherwise specified in the nomenclature of individual item or in the particular specifications and special conditions, where specifications are silent, the decision of Engineer-in-Charge shall be final and binding.
4. 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 and stacking of materials at required places etc.
5. The rates for different items of work shall apply for all heights and depths, leads and lifts unless otherwise specified in the agreement or specifications applicable to the agreement.
6. Any damage done by the contractor to any existing work during the course of execution of the work shall be made good by him at his own cost.
7. 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. In case articles bearing ISI certification are not available in the market, quality of samples brought by the contractor shall be judged by standards laid down in the relevant CPWD specifications. For the items not covered by CPWD specifications relevant BIS standards shall apply. The sample of materials to be brought to site for use in work shall be got approved from the Engineer-in-Charge before actual execution of work.
8. The quantities of each item shall not be exceeded beyond the agreement quantities without prior permission of Engineer-in-Charge.
9. Statutory deductions on account of VAT, income tax and surcharge etc. as applicable shall be made from the gross amount of the bill.
10. The contractor shall make his own arrangements for obtaining electric connection, if required and make necessary payments directly to the department concerned.
11. All types of mortars to be used in the work shall be mixed in the mechanical mixer and hand mixing shall not be permitted.
12. No payment shall be made to the contractor for any damage caused by rain, snow fall, floods or any other natural causes whatsoever during the execution of work. The damage caused to work shall have to be made good by the contractor at his own cost and no claim on this account shall be entertained.
13. Some restrictions may be imposed by the security staff etc. on the working and or movement of labour and materials, etc, the contractor shall be bound to follow all such restrictions / instructions and nothing shall be payable on this account.
14. The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards, **red lights and all other such measures**. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of the work by storing materials on the road.
15. The contractor shall be fully responsible for the safe custody of the material issued or brought by him to site for doing the work.
16. The contractor will not have any claim in case of any delay by the Engineer-in-Charge in removal of trees or shifting, removing of telegraph, telephone or electric lines (overhead or underground), water and sewer lines and other structure etc., if any which may come in the way of the work. However, suitable extension of time can be granted to cover such delay.

17. 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.
18. The **Labour Welfare Cess** @ 1% of gross work done shall be deducted.
19. The work shall be carried out in accordance with the Architectural drawings and structural drawings, to be issued from time to time, by the Engineer-in-Charge.  
Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work and satisfy himself that the information available there from is complete and unambiguous. The discrepancy, if any, shall be brought to notice of Engineer-in-Charge before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and or incomplete information.
20. The contractor shall give due notices / request letter to Municipality, Police, Labour Department and /or other authorities that may be required under the law/ rules under force in the area and obtain all requisite licenses for temporary obstructions/ enclosures and pay all charges which may be leviable on account of his execution of the work under the agreement. Nothing extra shall be payable on this account.
21. The contractor shall leave such recesses, holes, openings etc. as may be required for the electric, air-conditioning and other related works. (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be supplied free of cost by the department / other agencies working there unless otherwise specifically mentioned) and the contractor shall fix the same at the time of casting of concrete, stone work & brick work, if required, and nothing extra shall be payable on this account.
22. Before start of work, the Contractor keeping in view that the space available is limited shall furnish a construction yard layout, specifying areas for constructions, positioning of machinery, material yard, cement and other storage, steel fabrication yard, site laboratory, water tank, conveyer belt etc. and seek formal approval of the Engineer-in-Charge. The contractor shall not stack building material/ malba on the NDMC land or road or on the land owned by any other authority, as the case may be. In case, the Contractor is found stacking the building material/ malba as stated above, he shall be liable to pay the stacking charges as may be levied by NDMC or any other local body or authority and also to face penal action as per the rules, regulations and bye-laws of the said body or authority. The Engineer-in-Charge shall be at liberty to recover the sums due but not paid to the concerned authorities on the above counts from any sums due to the contractor including amount of the Security Deposit or Retention Money in respect of this contract or any other contract.
- 29. SETTING OUT:**
- 29.1 The contractor shall establish, maintain and assume responsibility for grades, lines, levels and bench marks. He shall report any errors or inconsistencies regarding grades, lines, levels, dimensions to the Engineer-in-charge before commencing work. Commencement of work shall be regarded as the contractor's acceptance of such grades, lines, levels and dimensions and no claim shall be entertained at a later date for any errors found.  
If at any time, any error in this respect shall appear during the progress of the work, the contractor shall, at his own expense rectify such error if so required to the satisfaction of the Engineer-in-charge.
- 29.2 The approval by the Engineer-in-charge of the setting out by the contractor shall not relieve the contractor of any of his responsibilities.
- 29.3 The contractor shall be entirely and exclusively responsible for the horizontal, vertical and other alignment, the level and correctness of every part of the work and shall rectify effectively and errors or imperfections therein. Such rectifications shall be carried out by the contractor at his own cost to the instructions and satisfaction of the Engineer-in-charge.
- 29.4 The rates quoted by the Contractor are deemed to be inclusive of site clearance, setting out work, profile, establishment of reference bench mark, spot levels, construction of all safety and protection devices, barriers, earth embankments, preparatory works, all testing of materials, working during monsoon, working at all depths, heights and locations etc.

- 30.0 **EXISTING SERVICES:**
- 30.1 Existing drains, pipes, cables, overhead wires, sewer lines, water lines and similar services encountered in the course of the execution of the work shall be protected against the damage by the contractor at his own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.
- 30.2 The contractor shall be responsible for the watch and ward of the building, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installation and thereafter till the work is physically handed over to the department.
- 31.0 **STORAGE AND ISSUE OF MATERIALS:**
- 31.1 Materials required for the work whether procured by the contractor or supplied by the department shall be stored by the contractor only at places, in standard profiles and in the manner as approved by the Engineer-in-charges. Storage and safe custody of all materials shall be the sole responsibility of the contractor.
- 31.2 Special care shall be taken by the contractor at his expense to store H.T. steel wires/strands/bars under suitable sheds as approved by the Engineer-in-charge. The Engineer-in-charge or his authorized representatives shall always have an easy access to the store for inspection the H.T. steel and satisfy themselves regarding the condition thereof. Any modifications in storage arrangement suggested by them shall be strictly followed by the contractor. Suitable and effective protection of the H.T. steel against corrosion shall be fully ensured. The H.T. steel shall also be invariably wrapped in gunny clothes, tar papers or with other suitable materials as approved by the Engineer-in-charge at the cost of contractor.
- 31.3 Stock piling of the H.T. steel on the work site will not be allowed any time and specially before and during the monsoon. During monsoon days the H.T. steel shall necessarily be kept in air tight stores. Nothing extra shall be paid to the contractor on these accounts.
- 31.4 Steel reinforcement shall be stored in such a way as to avoid distortions and to prevent deterioration by corrosion.
- 31.5 The contractor shall construct suitable godowns as per specifications of work for storing the materials safe against damage due to sun, rain dampness, fire, theft etc. He shall also employ necessary watch and ward establishment for the purpose.
- 31.6 The days to day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the Standard Performa by the Junior Engineer in charge of work and which shall be duly signed by the contractor or his authorized representative.
- 32.0 **PREVENTION OF NUISANCE:**
- 32.1 The contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupiers of adjacent properties and to the public in general and to prevent any damage to such building and any pollution of smoke, streams and water-ways. He shall make good at his cost and to the satisfaction of the Engineer-in-Charge, any damage to roads, paths, cross drainage works or public or private property whatsoever caused by the execution of the work or by traffic brought thereon by the contractor. All waste or superfluous materials shall be carried away by the contractor without any reservation entirely to the satisfaction of the Engineer-in-Charge.
- 33.0 **SECURITY & TRAFFIC ARRANGEMENTS:**
- 33.1 Wherever the construction is taken up, the contractor shall provide at his own cost an all weather motorable track/parking place if considered necessary by the Engineer-in-charge entirely to his satisfaction to facilitate the movement and parking of inspection vehicles.
- 33.2 No inflammable materials including P.O.L. shall generally be allowed to be stored at site. However, reasonable quantity may be permitted for storage subject to the compliance of all rules / instructions issued by the competent authorities and as per the direction of Engineer-in-Charge.
- 33.3 In the event of any restrictions (including temporary suspension of work) being imposed by the Security agency, PWD, Traffic or any other authority having jurisdiction in the area on the working or movement of labour /material, the contractor shall strictly follow such restrictions and nothing extra shall be payable to the contractor on this account. The loss of

time on this account, if any, shall have to be made up by generating additional resources etc. General Security restrictions are given as under:

- (i) The movement of trucks and vehicles shall be regulated in accordance with rules and regulations as approved by competent authority.
  - (ii) The contractor shall inform, in advance, the truck registration numbers, ownerships of the trucks, names and addresses of the drivers for necessary action by the Security agency.
  - (iii) Due to the site restrictions, there is no possibility for labour huts to be erected at site. However, a few huts may be allowed as per the discretion of the Engineer-in-charge.
  - (iv) Names and addresses of labourers/ staff etc. working at site shall be furnished for security verification.
  - (v) The labourers / staff should not be changed too frequently once the verification of the character and antecedents is done.
  - (vi) After verification of antecedents of workers, identification badges will be issued to them by the contractor under the seal of the Engineer-in-Charge or his representative. The cost of badges would be borne by the contractor.
  - (vii) As and when there will be security requirements, certain additional restriction (s) can be imposed as per the requirement of the situation.
  - (viii) No claim whatsoever will be entertained by the department on account of any restriction (including temporary suspension of work) imposed by the security agencies in execution of work.
- 33.4 The contractor shall place a private security agency on the site of work to regulate movement of materials, personnel, vehicles and machinery. Nothing extra shall be paid on this account.
- 34 MODE OF MEASUREMENTS (AS PER CPWD WORKS MANUAL 2012, CLAUSE No.7.12.2)**
- (i) The measurements shall be recorded and entered in computerized format in the first instance by the contractor, and a hard copy shall be submitted to the Department. All entries shall be made exactly as per the existing procedure.
  - (ii) These measurements shall then be 100% checked by the Junior Engineer. If Junior Engineer is not available, the Assistant Engineer shall perform 100% check of the measurements. The contractor shall incorporate all such changes or corrections, as may be done during these checks, to his draft computerized measurement, and submit to the department the corrected computerized measurement Books now in use, and with its pages machine numbered.
  - (iii) The Assistant Engineer and the Consultant ( Engg), INST, Sector-64, Phase-X, Mohali-160062 shall test check these computerized measurement as per the existing instructions. This book shall be treated as a Computerized Measurement Book.
  - (iv) The Junior Engineer, Assistant Engineer and the Consultant ( Engg), INST, Sector-64, Phase-X, Mohali-160062 shall record the necessary certificates for their checks and test checks as per the existing procedure in this Computerized Measurement Book.
  - (v) The Computerized Measurement Book shall be allotted a serial number as per the Register of Computerized Measurement Books.
  - (VI) The contractor shall submit two spare copies of such computerized MB's alongwith soft copy for the purpose of reference and record by the various officers of the department.
- 35.(i) Firstly contractor shall get ready one qtr. as a sample qtr. completed in all respect for approval of Engineer-in-charge. After approval of sample qtr. the agency should start other qtrs. for repairs.
- (ii) At the onetime only one block will be allocated for repair only and after successful completion the next block can be taken up for repair.
  - (ii) Water Proofing/Specialized items should be executed only through Specialized agency after approval of Engineer-in-Charge.
  - (iii) Prior approval of Engineer-in-Charge may be taken before cement plaster on all of the wall.
  - (iv) 600x600mm antiskid tile shall be used in place of ceramic tiles as approval of the Engineer-in-Charge.

**SPECIAL CONDITIONS FOR PROCUREMENT OF CEMENT**

1. The contractor shall procure cement 43 grade (conforming to IS: 8112) Ordinary Portland Cement as required in work from reputed manufacturers of cement having a production capacity not less than one million tons per annum, such as ACC, GRASIM, Gujrat Ambuja, Birla(Vikram) Ultra-tech. or from any other reputed cement manufacturer having a production capacity not less than one million tonnes per annum as approved by ADG for that sub region. The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves rights to accept or reject name (s) of cement manufacturer(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufacturers, given by the tenderer fully or partially. The supply of cement shall be taken in 50 kg. Bags bearing manufacturer's name and ISI marking. Samples of cement arrange by the contractors shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of relevant BIS codes. In case of test results indicate that the cement arrange by the contractor does not conform to the relevant BIS Codes, the same shall stand rejected, and it shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-Charge to do so.
2. The cement shall be brought at site in bulk supply of approximately 25 tones or as decided by the Engineer-in-charge. The cement godown of the capacity to store a minimum of 500 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made.
3. Double lock provision shall be made to the door of cement godown. The keys of one lock shall remain with CPWD Engineer-in-charge or his authorized representative and the keys of the other lock shall remain with the contractor. The contractors shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge at any time.
4. The cement shall be got tested by the Engineer-in-Charge and shall be used on the work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to testing laborites. The cost of tests shall be borne by the contractor / department in the manner indicated below:
  - (a) By the contractor, if the result shows that the cement does not conform to relevant BIS code.
  - (b) By the department, if the result shows that the cement conforms to relevant BIS codes.
5. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein. In case of cement consumption is less than theoretical consumption including permissible variation, the work will not be accepted.
6. Cement brought to site and cement remaining unused after completion of work shall not be removed form site without written permission of Engineer-in-Charge.
7. The damaged cement shall be removed from the site immediately by the contactor on receipt of a notice in writing form the Engineer-in-Charge. If he does not do so within three days of receipt of such notice, the Engineer-in-Charge shall get it removed at the cost of the contractor.

**PROFORMA FOR THE CEMENT REGISTER**

PARTICULARS OF RECEIPT			PARTICULARS OF ISSUE			REMARK							
Date of receipt	Quantity Received	Progressive Total	Date of issued	quantity issued	Item of work for which issued	Quantity returned at the end of the day	Total issued	Daily Balance in hand	Contractors initials	J.E's initials	Asstt. Engg. Initials	A.E. , E.E initials	Periodical Check
1	2	3	4	5	6	7	8	9	10	11	12	13	14

**SPECIAL CONDITION FOR PROCUREMENT OF STEEL**

1. The contractor shall procure TMT bars of **Fe500-D grade** from primary producers such as SAIL, Tata Steel Ltd., RINL, Jindal Steel & Power Ltd and JSW Steel Ltd or any other producer as approved by CPWD who are using iron ore as the basic raw material / input and having crude steel capacity of 2.0 million tones per annum and above.  
In case of non-availability of steel from primary producers the NIT approving authority may permit use of TMT reinforcement bars procured from steel producers having integrated steel plants (ISPs) using iron ore as the basic raw material for production of crude steel which is further rolled into finished shapes in house having crude steel capacity of 0.5 million ton per annum and more. In case of non-availability of steel form primary producers as well as ISPs then the NIT approving authority may also permit use of TMT reinforcement bars procured from secondary producers. In such case following conditions are stipulated
  - a. The grade of the steel **Fe500-D grade** to be procured is to be specified as per BIS 1786-2008.
  - b. The secondary producers must have valid BIS licence to produce HSD bars conforming to IS 1786: 2008. In addition to BIS licence, the secondary producer must have valid license from either of the firms Tempcore, Thermex Evcon Turbo & Turbo Quench to produce TMT Bars.
  - c. The TMT bars procured form primary producers and ISPs shall conform to manufacture’s specifications.
  - d. The TMT bars procured form secondary producers shall conform to the specifications as laid by Tempcore, Thermex, Evcon Turbo & Turbo Quench as the case may be.
  - e. TMT bars procured either from primary producers, ISPs or secondary producers, the specifications shall meet the provisions of IS 1786: 2008 pertaining to **Fe500-D grade** of steel as specified in the tender.
2. The contractor shall have to obtain and furnish test certificates from the manufacturer to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.
3. Sample shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined under para (1) (d) & (1) (e) above, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in-Charge to do so.
4. The steel reinforcement bars shall be brought to the site in bulk supply of 10.0 tonnes or more, or as decided by the Engineer-in-Charge.
5. The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
6. For checking nominal mass tensile strength bend test, re-bend test etc. specimen of sufficient length shall be cut from each size of the bar at random, and at frequency not less than that specified below.

Size of bar	For consignment below 100 Tones	For consignment over 100 Tones
Under 10mm dia bars.	One sample for each 25 Tones or part thereof.	One sample for each 40 Tones or part thereof.
10mm to 16mm dia bars.	One sample for each 35 Tones or part thereof.	One sample for each 45 Tones or part thereof.
Over 16mm dia bars.	One sample for each 45 Tones or part thereof.	One sample for each 50 Tones or part thereof.

7. The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of test shall be borne by the contractor/ department in the manner indicated below.

- ( ) By the contractor, if the result shows that the steel does not conform relevant BIS code.
  - (a) By the department, if the result shows that the steel conforms to relevant BIS codes.
8. The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations, the work will not be accepted.
  9. The steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-Charge.

## PARTICULAR SPECIFICATIONS

### CIVIL & SANITARY INSTALLATION / WATER SUPPLY / DRAINAGE WORK

#### **1 WATER PROOFING**

- 1.1 The work in general shall be executed as per CPWD specifications.
- 1.2 The water proofing compound used in integral water proofing treatment shall satisfy all the requirements indicated in IS:2645 and shall be got tested before its use.
- 1.3 Total quantity of the water proofing compound required shall be arranged only after obtaining the prior approval of the Engineer-in-Charge in writing. Materials shall be kept under double lock and key and proper account of water proofing compound used in the work shall be maintained. It shall be ensured that the consumption of the compound is as per specified requirements.
- 1.4 Contractor shall associate himself with anyone of the specialist firms mentioned in approved list of specialised agencies for the work relating to the Water Proofing Treatment. In case the contractor intends to get the water proofing work executed from an agency other than as specified in NIT. He shall apply to the Engineer-in-Charge in writing along with the credentials and relevant details including name of owner/company, its location, capacity technical establishment, past experience etc. Engineer-in-Charge shall give approval in writing and the work shall not be started without said written approval of the Engineer-in-Charge. The entire responsibility for the quality of this treatment and its efficiency shall however, rest with the main contractor only.
- 1.5 The contractor shall ensure that the basement of the building shall be absolutely water tight and seepage/leak free. In case any seepage/leakage etc. is noticed the contractor shall make it water tight & seepage/leak proof at his own cost.
- 1.6 **Construction Joints:**
- The construction joints shall be provided only at locations shown in the structural drawings or as approved by Engineer-in-Charge. Reinforcement shall continue through construction joints.
- The foreign matter and laitance shall be cleaned properly by compressed air before start of further work.
- All construction joints in RCC raft, shall be injection grouted with cement slurry. Nothing extra shall be paid on this account.
- 1.7 Water Proofing of terrace/ Sunken Portion Area/UG tank.**
- 1.7.1 **Brick Bat Terracing/ Water Proofing**
- The water proofing compound used in integral water proofing treatment shall satisfy all the performance requirements indicated in IS :m 2645 and shall be got tested before its use. The compound shall be used @ 2% by weight of cement used or as recommended by the manufacturer.
- 1.7.2 Total quantity of the water proofing compound required shall be arranged only after obtaining the prior approved of the Engineer-in-Charge in writing. Materials shall be kept under double lock and key and proper account of the water proofing compound used in the work shall be maintained. It shall be ensured that the consumption of the compound is as per specified requirements.
- 1.7.3 The finished surface after water proofing treatment for roof slab shall have smooth slope.
- 1.7.4 Before commencement of treatment on roof surface, it shall be ensured that the outlet drain pipes/ spouts have been fixed and the spout opening have been eased and rounded off properly for easy flow of water.

### 1.8 Water proofing of Sunken Portion Area

Application of cementations- organic chemical based coating as per manufacturers specifications of Krypton or equivalent applied on vertical and horizontal surface after laying of all pipes and smooth plugging of holes.

Concrete surface on which water proofing is desired shall be kept wet for 48 hrs. after cleaning of all dirt, oil grease, bitumen, laitance or other contaminants.

Surface water shall be removed prior to application of waterproofing, but surface shall remain wet during the application to enhance deep penetration & formation of crystals at greater depth to block voids.

The area shall be protected from sun and rain for 48 hrs. and continues flooding for 7 days. Flooring shall be done for 72 hrs. to test the area for any leakage/ seepage etc. In case of failure, the process shall be repeated and tested again by the contractor at his own risk and cost.

Rates shall be inclusive of all operations including labour, material, T&P, scaffolding and testing etc. complete. Nothing extra shall be payable on any account.

### 2.0 Guarantee Bond

Ten years guarantee bond in prescribed proforma attached at annexure-II herewith shall be submitted by the contractor which shall also be signed by both the specialised agency and the contractor to meet their liability/ liabilities under the guarantee bond. However, the sole responsibility about efficiency of water proofing treatment shall rest with the building contractor.

**(Ten percent)** of the cost of water proofing work shall be retained as security deposit and the amount so withheld would be released after ten years from the date of completion of the entire work under the agreement, if the performance of the work done is found satisfactory. If any defect is noticed during the guarantee period, it shall be rectified by the contractor within seven days of receipt of intimation of defects in the work. If the defects pointed out are not attended to within the specified period, the same will be got done from another agency at the risk and cost of contractor.

However, the security deposit deducted may be released in full against bank guarantee of equivalent amount in favour of Engineer-in-Charge, if so decided by the Engineer-in-Charge.

The security deposit against this item of work shall be in addition to the security deposit mentioned elsewhere in contract form.

### 3.0 SANITARY INSTALLATIONS/WATER SUPPLY/ DRAINAGE:

For the work of water supply and sanitary installation, the contractor shall engage the approved licensed plumbers and submit the name of proposed plumbing agencies with their credentials for approval of the Engineer-in-charge.

- i) The entire responsibility for the quality of work will however rest with the building contractor only and he shall submit a guarantee bond as per proforma enclosed.
- ii) The tender rates shall include the cost of cutting holes in walls, floors, RCC slabs etc. wherever required and making good the same for which nothing extra shall be paid.
- iii) The Centrifugally cast (spun) iron S&S pipe wherever necessary shall be fixed to RCC columns, beams etc. with rawl plugs of approved quality and nothing extra shall be paid for on this account.
- iv) The contractor shall give a satisfactory performance test of the entire installation(s) before the work is finally accepted and nothing extra shall be payable to the contractor on this account.
- v) P or S and floor traps in WCs shall be of deep seal type of approved make and shall have a minimum water seal 75mm. Floor traps shall have a minimum water seal of 50mm.
- vi) The contractor shall be responsible for all the protection of sanitary water supply fittings and fixtures against pilferage and breakage during the period of installation until the completion/ handing over of the building.
- vii) The pig lead to be used in jointing as per CPWD specifications Vol. I to II - 2009 with upto date correction slips. A variation of 5 % is allowed on higher side. **However, in case of variation on lower side, the work shall be dismantled and redone by the contractor at his own cost.**

- vii) The contractor shall submit completion plans for water supply, internal sanitary installations and building drainage work within 30 (Thirty) days of the date of completion. These plans are to be submitted on drawings prepared preferably through computers (1 original copy + 3 photocopies) on suitable scales to show the general arrangement and desired details at his cost. **Nothing extra on this account shall be payable.** In case the contractor fails to submit the completion plans as aforesaid, **security deposit shall not be released.**
- viii) **Guarantee Bond:**  
For the entire work of Sanitary Installation & Water Supply, Five years guarantee bond in the prescribed proforma (Forming part of this document) shall be executed by the contractor to meet his liabilities under the guarantee bond. Five percent of the cost of the work done under respective sub-head of the 'Schedule of Qualities' shall be retained as performance security and the amount so withheld would be released after five years from the date of completion of the entire work under the agreement subject to the satisfactory performance of sanitary installations and water supply system. If defects are noticed during the guarantee period, the same shall be rectified by the contractor within seven days of receipt of intimation of such defects in the work, failing which, the same will be got done at the risk and cost of the contractor. In case the rectification is got done at the risk and cost of the contractor, the entire amount of performance security should stand forfeited and shall be absolutely at the disposal of the Government.
- x) The performance security deducted may be released in full if bank guarantee of equivalent amount for five years in acceptable form is deposited in favour of Engineer-in-charge.
- xi) The performance security shall be in addition to the security deposit, performance guarantee & performance security mentioned elsewhere in the document.
- xii) Unless otherwise specified nothing extra whatsoever shall be paid for executing the work as per aforesaid particular specifications.

**LIST OF APPROVED MAKES FOR CIVIL WORKS**

1.	ORDINARY PORT LAND CEMENT	:-	ACC, GRASIM, GUJRAT AMBUJA, BIRLA(VIKRAM) ULTRA-TECH.
2.	REINFORCEMENT BARS	:-	TATA STEEL, SAIL, RINL, JINDAL STEEL & POWER LTD AND JSW STEEL LTD OR ANY OTHER PRODUCER AS APPROVED BY CPWD
3.	SYNTHETIC ENAMEL PAINTS	:-	BURGER (LUXOL GOLD), ASIAN(APCOLITE), ICI DULUX (GLOSS), NEROLAC (FULL GLOSS HARD DRYING)
4.	CEMENT PAINT, ACRYLIC DISTEMPER, PRIMER	:-	ICI INDIA LTD., BERGER PAINT LTD., GOOD LOSS NEROLAC PAINT, ASIAN PAINT LTD.,
5.	ADMIXTURE FOR CONCRETE	:-	CICO, SIKA, PIDILITE, ASIAN,
6.	CHEQUERED TILES, TERRAZO TILES (PRECAST)	:-	NITCO, GEM, MODERN, HINDUSTAN
7.	WATER PROOFING COMPOUND	:	CICO, BY STRUCTURAL WATER PROOFING CO. FOSROC BY FOSROC LTD., IMPERMO BY SNOCEM INDIA, CHESEAL PIDILITE, DR. FIXIT.
8.	PAVING TILES/PAVER BLOCK, CC STONE KERB	:	NITCO PREFAB, ULTRA KK MANHOLE, TERRAFIRMA, UNISTONE,DALAL TILES
9.	WHITE CEMENT	:	BIRLA WHITE, J.K. WHITE
10.	SANITARY WARES	:	PARRYWARE, HINDWARE, CERA, NEYCER, JOHNSON, PRAYAG
11.	GI PIPES/ M.S. PIPES	:	TATA, GST, JINDAL HISSAR
12.	GI FITTINGS	:	UNIK, , KS, RM
13.	STONEWARE PIPES & GULLY TRAP	:	PERFECT, BURN, PARRY WARE
14.	C.I. MANHOLES	:	B.C., R.I.F., NECO
15.	RCC PIPES	:	ISI MARK AS PER CPWD SPECIFICATION.
16.	WATER TANK	:	SINTEX, SHEETAL.
17.	STRUCTURAL STEEL INCLUDING DOOR, WINDOWS, GRILL OR OTHER PURPOSE.	:	SAIL, TATA, RINL, ISCO.
18.	MILD STEEL TUBES	:-	TATA, SAIL, ISCO.
19.	WELDING ELECTRODES	:-	ESAB, ADVANI-ORLIKON, WELD ALLOY
20.	VITRIFIED TILES ,CERAMIC GLAZED WALL TILES	:-	KAJARIA , ORIENT, SOMANY TILES.
21.	GLASS MOSAIC TILES	:-	SPARKLES GLASS, KHETAN TILES, MRIDUL
22.	EXTERIOR PAINT	:-	APEX NEROLAC, LEWIS BURGER, ASIAN PAINTS.
23.	STAINLESS STEEL	:-	PRISM ENGINEERS, JINDAL, SAIL.
24.	BEVELLED EDGE MIRROR WITH PVC	:-	ATUL, JOLLY, MODI GUARD,
25.	PLASTIC WC SEAT COVER	:-	COMMANDER, DIPLOMAT, BESTOLITE, CENTURY.
26.	FLUSH VALVES	:-	JAQUAR, AKOI, PARYAG
27.	C.P. ACCESSORIES	:-	ESS ESS, AKOI, PARYAG, JAGUAR , KINGSTON
28.	GUNMETAL VALVES (FULLWAY AND GLOBE VALVES)	:-	LEADER, SANT, ZOLOTO,
29.	STONEWARE PIPES & GULLY TRAP	:-	PERFECT, BURN, PARRY
30.	C.I. DOUBLE FLANGED SLUICE VALVES	:-	KIRLOSKAR, IVC, BURN
31.	C.I. DOUBLED FLANGED NON RETURN VALVES	:-	KIRLOSKAR, AND ANY OTHER APPROVED BY THE CPWD
32.	C.I. MANHOLES	:-	B.C., R.I.F., NECO

33.	BALL VALVES	:-	ZOLOTO, IBP, ARCO
34.	WATER PUMPS	:-	KIRLOSKAR, KSB, HARRISON
35.	FLOAT VOLVES	:-	IVC, LEADER
36.	CENTRIFUGAL CAST IRON PIPES 150MM/ 100MM DIA AND ITS ACCESSORIES/ FITTINGS	:-	NECO, RIF, HIF, HEPCO.
37.	STAINLESS STEEL WASH-BASIN & WCS	:-	JAYNA, NEELKANTH, PRAYAG.
38.	BLOCK BOARD, PLY WOOD	:-	GREEN PLY WOOD, NATIONAL, DURO, CENTURY.
39.	SUNMICA	:-	MERINO, SAFE DECOR (SAFARI), FROMICA
40.	GLASS SHEET	:-	ATUL, MODI GUARD, SAINT GOBIN
41.	ALUMINIUM	:-	JINDAL, HINDALCO
42.	PTMT FITTINGS	:-	PRAYAG, POLY TUFF.
43.	U PVC/C PVC PIPE FITTINGS	:-	PRAYAG, FINOLEX, SUPREME

**\*If any other make is to be used, the same shall be got approved from the NIT approving authority.**

## GENERAL CONDITIONS FOR PAINTING

### WORKS 1. The Theoretical co-efficient for material are as under :-

- (i) Oil bound distemper & Dry Distemper
  - a) One or more coats – on old work – 1.00 Kg/10 Sqm.
  - b) Two or more coats – on old work - 1.25 Kg/10 Sqm.
  - c) Two or more coats – on new work - 1.50 Kg/10 Sqm.
- (ii) **Plastic emulsion paint.**
  - a) One or more coats – on old work – 0.73 litre /10 Sqm.
  - b) Two or more coats – on old work - 0.97 litre /10 Sqm.
  - c) Two or more coats – on new work - 1.21 litre/10 Sqm.
- (iii) **Waterproofing cement paint :-**
  - a) One or more coats – on old work – 2.20 Kg/10 Sqm.
  - b) Two or more coats – on old work - 3.84 Kg/10 Sqm.
  - c) Three or more coats – on new work - 5.47 Kg/10 Sqm.
- (iv) **Synthetic enamel paint :-**
  - a) One or more coats – on old work – 0.70 litre /10 Sqm.
  - b) Two or more coats – on old work - 0.93 litre /10 Sqm.
  - c) Two or more coats – on new work - 1.16 litre/10 Sqm
- (v) **Cement primer - 0.70 litres/10 Sqm.**

- (vi) **Thermo plastic paints –**
  - Glass beads – 2.5 kg./10sqm.
  - Paints - 52 $\frac{1}{2}$ kg./10sqm.

2. Before starting the work a sample of required shade will have to be prepared as per direction of Engineer-in-charge and got approved.
3. Wherever two or more coats on old work ( by scrapping) mentioned it will be done by scrapping first and then putty shall be applied on the surface ( payment of scrapping and putty shall be separately)
4. Before starting the work , all existing furniture, fittings, carpet etc. shall be protected from damages, dust and dirt in all the circumstances. If any damages occurred, it will be made good by the contractor free of cost, if contractor fails to do so, department will got it rectified and the cost will be recovered from the contractor.
5. No T & P will be issued by the department.
6. **Oil bound washable distemper to be supplied in the following brands at site of work:-**
  - (a) Jensolin Acrylic washable distemper of Jenson and Nicholson , OR
  - (b) Bison Acrylic washable distemper of Barger paints , OR
  - (c) Nerolac washable oil bound distemper super white and other standard colours of Goodlass Nerolac Paints Ltd.
7. **Cement primer water base to be supplied in the following brands at site of work :-**
  - (a) J & N cement primer of Jenson and Nicholson OR
  - (b) B.P. cement primer ( Alkali Resistant) water thin able of Berger paints OR
  - (c) Primolite cement primer of Goodlass Nerolac paints Ltd. at site of work .
8. **Waterproofing cement paint to be supplied in the following brands at site of work :-**
  - (a) Super snowcem of Klick Nixon of India shall be brought at site in required shade OR
  - (b) Durocem of M/s Berger Paint Ltd. OR
  - (c) Gattucem of M/s Asian Paint.
9. **Plastic emulsion paint to be supplied in the following brands at site of work :-**
  - (a) ICI dulex shall be brought at site of work in required shade.
10. **Synthetic enamel paint to be supplied in the following brands at site of work :-**
  - (a) Brolac Polyurethane enamel sparkling white or Jenson & Nicholson OR
  - (b) Luxol Hi-gloss synthetic enamel snow white of Berger paints OR
  - (c) Nerolac full gloss hard drying synthetic enamel ultra white of Goodlass Nerolac paints Ltd. at site of work.
11. The material shall be purchased from the approved manufacture or their authorised dealer and cash memos/challans of these shall be produced along with the supply.
12. 100% quantity of material shall be deposited before execution for one operation.
13. The oil bound washable distemper, cement primer, waterproofing cement paint, synthetic enamel paint, plastic emulsion paint shall be brought at site before starting the work and kept either with JE concerned or under double lock arrangement and then only the contractor will be allowed to start the work. The keys of one lock shall remain with PWD Junior Engineer-in-charge and that of the other lock will be with authorized agents of the contractor at the site of work. Daily requirement shall be drawn with the knowledge of both the parties.
14. Other sundries such as brushes, colour pigments, stainer tubes , putty, old dhoti, turpentine

oil

, sand papers etc. and scaffolding will be arranged by the contractor himself. Nothing extra shall be paid on any account.

15. Contractor should see the site and conditions and quote rates accordingly.
16. No claim shall be entertained on account of escalation charges, if any , for the period of contract.
17. The work may have to be executed in odd hours in early in the morning and later at night also. Nothing extra shall be paid on this account.
18. Sample of random can be collected and sent to the following laboratory for test:- Sri Ram Test House, Delhi OR National Test House, Ghaziabad / Aligarh/Calcutta OR Any other laboratory so desired by Engineer-in-charge. All incidental charges in this account with test including transporting to testing fees shall also be borne by the contractor.
19. Execution of work shall have to be done as per program fixed by the Engineer-in-charge.
20. Contractor have to prepare the surface as described below and got approved from JE/AE concerned in writing before giving the coat of dry distemper/OBD/Plastic Emulsion etc.

#### **PREPARATION OF SURFACE:-**

##### **a) FOR WHITE WASHING :**

1. Before new work is white washed, the surface shall be thoroughly brushed free from mortar droppings and foreign materials.
2. In case of old work, all loose particles and scales shall be scrapped off and holes in plaster as well as patches of less than 50 cm area shall be filled up with mortar of the same mix.

##### **b) FOR DRY DISTEMPER:**

1. Before new work in distemper, the surface shall be thoroughly brushed free from mortar droppings and foreign materials and sand papered smooth.
2. In case of old work, all loose pieces and scales shall be removed by sand papering. The surface shall be cleaned of all grease dirt etc. Pitting in plaster shall be made good with plaster of paris mixed with colour to be used. The surface shall than be rubbed down again with a fine grade sand paper and made smooth. A coat of the distemper shall be applied over the patches.

##### **c) FOR OIL BOUND DISTEMPER:**

1. For new work , the surface shall be thoroughly cleaned of dust, old white or colour wash by washing and scrubbing. It shall than be sand papered to give a smooth and even surface. Any unevenness shall be made good by applying putty, made of plaster of paris mixed with water on the entire surface including filling up the undulations and then sand papering the same after it is dry.
2. In case of old work, all loose pieces and scales shall be removed by sand papering. The surface shall be cleaned of all grease, dirt etc. Pitting in plaster shall be made good with plaster of paris mixed with colour to be used. The surface shall than be rubbed down again with a fine grade sand paper and made smooth. A coat of the distemper shall be applied over the patches.

##### **d) PAINTING WITH SYNTHETIC ENAMEL PAINT:**

Where the existing paint is firm and sound it shall be cleaned of grease, smoke etc. and rubbed with sand paper to remove all loose particles dusted off. All patches and cracks shall then be treated with stopping and filler prepared with the specified paint. The surface shall again be rubbed and made smooth and uniform.

##### **e) PLASTIC EMULSION PAINT:**

The surface shall be thoroughly cleaned and dusted off. All rust , dirt , scales, smoke splashes, mortar dropping and grease shall be thoroughly removed before painting is started. The prepared surface shall have received the approval of the Engineer-in-charge after inspection, before painting in commenced.

21. The empty containers of all the materials shall be removed from the site only after getting approval of Engineer-in-charge.

## ADDITIONAL CONDITIONS FOR DISMANTLING AND DEMOLITION

1. All materials obtained from dismantling or demolition shall be the property of the Govt. unless otherwise specified and shall be kept in safe custody until they are handed over to the Engineer-in-Charge.
2. The demolition shall always be well planned before hand and shall generally be done in reverse order of the one in which the structure was constructed. The operations shall be got approved from the Engineer-in-Charge before starting the work.
3. Necessary propping, shoring and or under pinning shall be provided to ensure the safety of the adjoining work or property before dismantling and demolishing is taken up and the work shall be carried out in such a way that no damage is caused to the adjoining work or property. Wherever specified, temporary enclosures or partitions shall also be provided, as directed by the Engineer-in-Charge.
4. Necessary precautions shall be taken to keep down the dust nuisance to the minimum.
5. Dismantling shall be done in a systematic manner. All materials which are likely to be damaged by dropping from a height or by demolishing roofs, masonry etc. shall be carefully removed first. The dismantled articles shall be removed manually or otherwise, lowered to the ground (and not thrown) and then property stacked as directed by the Engineer-in-charge.
6. Where existing fixing is done by nails, screws, bolts, rivets, etc., dismantling shall be done by taking out the fixing with proper tools and not by tearing or ripping off.
7. Any serviceable materials, obtained during dismantling or demolition, shall be separated out and stacked properly as directed by the Engineer-in-Charge within a lead of 50 meters. All unserviceable materials rubbish etc. shall be disposed off as directed by the Engineer-in-Charge.
8. The contractor shall maintain/Disconnect existing services, whether temporary or permanent, where required by the Engineer-in-Charge.
9. Dismantling and demolition shall be measured as per nomenclature of the agreement.
10. The decision of Engineer-in-Charge at site in respect of methods demolition to be followed by the agency shall be final & binding upon the contractor.
11. The Engineer-in-Charge shall have liberty to direct the contractor in regards to demolition of any part of the building at any time during his inspection of site.
12. The demolition & dismantling shall be carried out first by the contractor at the site. In this regards the order of Engineer-in-Charge shall be final and binding.

GUARANTEE BONDS

ANNEXURE-I

GUARANTEE TO BE EXECUTED BY THE CONTRACTOR  
FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF  
STONE WORK/ TILE WORK.

The agreement made this..... day of ..... Two Thousand ..... between .....S/o .....(hereinafter called the GUARANTOR on the one part) and the President of India (hereinafter called the Government on the other part)

WHEREAS THIS agreement is supplementary to a contract (Hereinafter called the Contract) dated ..... and made between the GUARANTOR ON THE ONE PART AND the Government on the other part whereby the contractor inter alias undertook to render the work in the said contract structurally stable , workmanship, finishing and use of sound materials.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the affect that the said work will remain structurally stable and guaranteed against faulty workmanship, finishing and materials.

NOW THE GUARANTOR hereby guarantee that work executed by him will remain structurally stable after the expiry of maintenance period prescribed in the contract for the minimum life of **five** years to be reckoned from the date after the expiry of maintenance period prescribed in the contract.

The decision of the Engineer-in-Charge with regard to nature and cause of defect shall be final.

During this period of guarantee, the guarantor shall make good all defects to the satisfaction of the Engineer-in-Charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the Guarantor’s cost and risk. The decision of the Engineer-in-Charge as to the cost payable by the Guarantor shall be final and binding.

That if the guarantor fails to make good all the defects, commits breach there under, then the guarantor will indemnify the principal and his successor against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and or cost incurred by the Government, the decision of the Engineer-in-Charge will be final and binding on both the parties.

.....  
.....

IN WITNESS WHEREOF these presents have been executed by the obligator ..... and ..... by ..... for and on behalf of the President of India on the day, month and year first above written.

SIGNED, sealed and delivered by OBLIGATOR in the presence of :-

- 1. ....
- 2. ....

SIGNED FOR AND BEHALF OF THE PRESIDENT OF INDIA BY ..... in the presence of :-

- 1. ....
- 2. ....

**GUARANTEE TO BE EXECUTED BY THE CONTRACTOR**  
**FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF**  
**WATER-PROOFING WORKS.**

The agreement made  
this..... day of ..... Two Thousand..... between  
.....S/o  
..... (hereinafter called the GUARANTOR on the  
one part) and the PRESIDENT OF INDIA (hereinafter called the Government on the other part)

WHEREAS THIS agreement is supplementary to a contract (Hereinafter called the Contract) dated ..... and made between the GUARANTOR ON THE ONE PART AND the Government on the other part whereby the contractor inter alia undertook to render the building and structures in the said contract completely water and leak-proof.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain water and leak proof, for Ten years from the date of giving water proofing treatment.

NOW THE GUARANTOR hereby guarantees that work executed by him will render the structures completely leak proof and the minimum life of such water proofing treatment shall be Ten years to be reckoned from the date after the expiry of maintenance period prescribed in the contract.

The decision of the Engineer-in-Charge with regard to nature and cause of defect shall be final.

During this period of guarantee, the guarantor shall make good all defects and in case of any defect being found render the building water proof to the satisfaction of the Engineer-in-Charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the Guarantor's cost and risk. The decision of the Engineer-in-Charge as to the cost payable by the Guarantor shall be final and binding.

That if the guarantor fails to execute the water proofing or commits breach there under, then the guarantor will indemnify the principal and his successor against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and or cost incurred by the Government, the decision of the Engineer-in-Charge will be final and binding on both the parties.

.....  
.....  
IN WITNESS WHEREOF these presents have been executed by the obligator ..... and  
..... by ..... for and on behalf of the PRESIDENT OF INDIA on  
the day, month and year first above written.

SIGNED, sealed and delivered by OBLIGATOR in the presence of:-

- 1. ....
- 2. ....

SIGNED FOR AND BEHALF OF THE PRESIDENT OF INDIA BY ..... in the  
presence of :-

- 1. ....
- 2. ....

**GUARANTEE TO BE EXECUTED BY THE CONTRACTOR**  
**FOR REMOVAL OF DEFECTS AFTER COMPLETION**  
**IN RESPECT OF SANITARY INSTALLATIONS / WATER SUPPLY / DRAINAGE**  
**WORK AND ALUMINIUM WORK**

The agreement made  
this..... day of ..... Two Thousand..... between  
.....S/o  
..... (hereinafter called the GUARANTOR on the  
one part) and the PRESIDENT OF INDIA (hereinafter called the Government on the other part)

WHEREAS THIS agreement is supplementary to a contract (Hereinafter called the Contract) dated ..... and made between the GUARANTOR ON THE ONE PART AND the Government on the other part, whereby the contractor inter alia, undertook to render the work in the said contract structurally stable, leak proof and sound material, workmanship, anodizing, colouring, sealing etc.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain structurally stable, leak proof and guaranteed against faulty material and workmanship, defective anodizing / Powder coat colouring and finishing for **five** years from the date of completion of work.

NOW THE GUARANTOR hereby guarantee that work executed by him will be free from any leakage, seepage, cracks in pipes and guaranteed against faulty material and workmanship, defective galvanising for five years to be reckoned from the date after the expiry of maintenance period prescribed in the contract.

The decision of the Engineer-in-Charge with regard to nature and cause of defect shall be final.

During this period of guarantee, the guarantor shall make good all defects and in case of any defect to satisfaction of Engineer-in-Charge at his cost and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer-in-Charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the guarantor's cost and risk. The decision of the Engineer-in-Charge as to the cost payable by the Guarantor shall be final and binding.

That if the guarantor fails to make good all defects or commits breach thereunder, then the guarantor will indemnify the principal and his successor against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and or cost incurred by the Government, the decision of the Engineer-in-Charge will be final and binding on both the parties.

IN WITNESS WHEREOF these presents have been executed by the obligator .....  
.....and ..... by .....  
for and on behalf of the PRESIDENT OF INDIA on the day, month and year first above written.

SIGNED, sealed and delivered by OBLIGATOR in the presence of :-

- 1. ....
- 2. ....

SIGNED FOR AND ON BEHALF OF THE PRESIDENT OF INDIA BY..... in the presence of :-

- 1. ....
- 2. ....

**FORM OF PERFORMANCE SECURITY/****BANK GUARANTEE BOND**

In consideration of the President of India (hereinafter called "The Government") having offered is accept agreed under the terms and conditions of prepared agreement

No. \_\_\_\_\_ dated \_\_\_\_\_ made

between \_\_\_\_\_ and \_\_\_\_\_ {hereinafter called "the said contractor(s)"} for the work \_\_\_\_\_

\_\_\_\_\_ (hereinafter called "the said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement,

1. We \_\_\_\_\_  
(indicate the name of the Bank)  
  
(hereinafter referred to as "the Bank") hereby undertake to pay to the Government an amount not exceeding Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ only) on demand by the Government.
2. We \_\_\_\_\_ do hereby undertake to (indicate the name of the Bank) pay the amounts due and payable under this Guarantee without any demure, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor (s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ only).
3. We, the said bank further undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.
4. We \_\_\_\_\_ further agree that the guarantee (indicate the name of the Bank) herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge, on behalf of the Government, certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) accordingly discharges this guarantee.

5. We \_\_\_\_\_ further agree with the Government that (indicate the name of the Bank) the Government shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).
7. We \_\_\_\_\_ lastly undertake not to  
(indicate the name of bank)  
revoke this guarantee except with the previous consent of the Government in writing.
8. This guarantee shall be valid upto \_\_\_\_\_ unless extended on demand by Government. Notwithstanding anything mentioned above, our liability against this Guarantee is restricted to Rs. \_\_\_\_\_ /-(Rupees \_\_\_\_\_ only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Dated the \_\_\_\_\_ day  
of \_\_\_\_\_ for \_\_\_\_\_

(Indicate the name of the Bank)

AFFIDAVIT

I/ we have submitted a bank guarantee for the work
:.....
:.....
.....( Name of

work)

No
..... dated.....

Agreement .....

From..... (Name of bank with full
address

s)

to the Director,INST, Sector-64, Phase-X, Mohali-

160062..... (

Name of division)

With a view to seek exemption from payment of security deposit / performance guarantee /
guarantee money for expansion joint/ Electrometric bearing/ bitumen mastic wok in cash. This bank
guarantee expires on.....

I /we undertaken to keep the validity of the bank guarantee intact by getting it extended from time to
time at my/ our own initiative upto a period .....
Months after the recorded date of completion of the work or as directed by the Engineer-in-Charge.

I/we also indemnify the government against any losses arising out of..... non
encashment of the bank guarantee if any

Deponen
t

Signature of contractor

The affidavit is to be given by the executants before a first class Magistrate.

### **Special Condition for Malba Disposal**

- 1 Contractor shall have to make himself fully acquaint with the procedure of dumping malba at authorized MCD dumping ground well in advance. No hindrance shall be entertain on this account.
- 2 The malba shall be disposed/removed from the site within 72 hours from the time of intimation from the Engineer-in-Charge.
- 3 For the purpose of removal of malba contractor shall have to make his own arrangement of adequate no. of vehicles required at the MCD authorized dumping ground including necessary registration of vehicles for this purpose. Nothing extra shall be paid on this account.
- 4 The contractor shall intimate contact number/ mobile number of himself as well as of the supervisory staff who have to carry out this job of disposal of malba.

**Office memorandum**  
**(Amendment in General condition of (GCC) 2014 payment of wages to the labour by contractor**  
**(Modified as per DG/SE/CM/CON/283)**

The following provision of C.P.W.D Contractor's of GCC-2014 are amended:-

Exiting Provision	Modified Provision
<p><b>C.P.W.D Contractor's Labour Regulations</b>  <b>5. PAYMENT OF WAGES</b>                      VI) Wages due to every worker shall be paid to him direct or to other person authorized by him in this behalf.                      VII) All wages shall be paid in current coin or currency or in both.                      X) It shall be the duty of the contractor to ensure the disbursement of wages in the presence of the Junior Engineer or any other authorized representative of the Engineer-in-Charge who will be required to be present at the place and time of disbursement of wages by the contractor to work men.                      XI) The contractor shall obtain from the Junior Engineer or any other authorized representative of the Engineer-in-Charge as the case maybe, a certified under his signature at the end of the entire in the "Register of Wages" or the "Wage cum-Muster Roll" as the case may be in the following form:-  <b>"Certified that the amount shown in column No..... has been paid to the workman concerned in my Presence on.....at... .."</b></p>	<p><b>C.P.W.D Contractor's Labour Regulations</b>  <b>5. PAYMENT OF WAGES</b>                      VI) Wages due to every worker shall be paid to him direct by contractor through Bank or ECS or online transfer to his bank account.                      VII) All wages shall be paid through Bank or ECS or online transfer.                      X) It shall be the duty of the contractor to ensure the disbursement of wages through Bank account of labour.                       XI) The contractor shall obtain from the Junior Engineer or any other authorized representative of the Engineer-in-Charge as the case maybe, a certified under his signature at the end of the entire in the "Register of Wages" or the "Wage cum-Muster Roll" as the case may be in the following form:-  <b>"Certified that the amount shown in column No..... has been paid to the workman concerned through bank account of labour on.....at....."</b></p>

The field units may also pursue with contractor of the existing contract to make payment to the labour by contractor through Bank or ECS or online transfer also.

**OUTSIDE/INDEPENDENT TESTING FACILITIES (Modified as per DG/MAN/308)**

Extensive testing of the materials used for construction is a pre-requisite for attaining high quality of the work. This shall also require specialized tests, physical, chemical, ultrasonic x-ray and various other types of tests which cannot possibly be carried out in a site laboratory. These tests also require specialized personnel who regularly deal in such testing. Therefore the need arises for carrying out the tests in outside laboratories. These laboratories may be in the Government sector, Semi Government or Private sector. **All Govt. Institutes of Technology, National Institutes of Technology, Centre and state research approved. No approval is required for testing in these laboratories/institutes. However, the outside private laboratories shall be approved in the following manner:-**

1. The ADG will approve the private lab on the recommendation of Chief Engineer if no approve is available within 200 km of the work site. A particular private lab will be approved for specified tests and work/project. Approving authority will specify the tests while approving the laboratory.
2. A lab will have to submit details of space available, equipments staff (Technical and Non Technical) accreditation and approval from various department/institutes. Lab must NABL approved.
3. Initial approval of lab should be for one year and can be revalidated for further one year and so on.
4. Every lab will be audited for maintenance and calibration of equipments and employment of staff prior to approval/revalidation.

SCHEDULE OF QUANTITY

**Name of work: Up gradation to Existing Building for Physics Research laboratory at INST Campus.**

**Percentage BoQ**

**TENDER INVITING AUTHORITY :- DIRECTOR, INST, HABITAT CENTR, SECTOR-64, PHASE-X, MOHALI-160062.**

**Name Of Work:- Up-gradation of Building for Setting up laboratory at INST Campus Mohali**

NIT No. 2/INST/2016-17

Sl. No.	Item Description	Qty	Unit	Estimated Rate	Amount	AMOUNT in Words
1	2	3	4	5	6	7
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.					
	All kinds of soil.	1030.00	cum	166.40	171392.00	INR One Lakh Seventy One Thousand Three Hundred & Ninety Two Only
2	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m including getting out the excavated soil, and then returning the soil as required, inlayers 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 :					
	All kinds of soil					
a)	Pipes, cables etc, not exceeding 80 mm dia.	70	metre	138.05	9664.00	INR Nine Thousand Six Hundred & Sixty Four Only
b)	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	70	metre	225.45	15782.00	INR Fifteen Thousand Seven Hundred & Eighty Two Only
3	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	366.00	cum	125.75	46025.00	INR Forty Six Thousand & Twenty Five Only
4	Supplying and filling in plinth with fine / Jamuna sand under floors, including watering, ramming, consolidating and dressing complete	9.00	cum	917.75	8260.00	INR Eight Thousand Two Hundred & Sixty Only

5	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	1625.00	sqm	7.20	11700.00	INR Eleven Thousand Seven Only
6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					
	1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size)	106.03	cum	3959.70	419847.00	INR Four Lakh Nineteen Thousand Eight Hundred & Forty Seven Only
7	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :					
	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	13.10	cum	6215.35	81421.00	INR Eighty One Thousand Four Hundred & Twenty One Only
8	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 above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size).	0.50	cum	7390.80	3695.00	INR Three Thousand Six Hundred & Ninety Five Only
9	Centering and shuttering including strutting, propping etc. and removal of form for :					
	b) Lintels, beams, plinth beams, girders, bressumers and cantilevers.	17.42	sqm	342.90	5973.00	INR Five Thousand Nine Hundred & Seventy Three Only
10	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.	1768.00	Kg	66.70	117926.00	INR One Lakh Seventeen Thousand Nine Hundred & Twenty Six Only
11	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in:					
	Cement mortar 1:6 (1 cement : 6 coarse sand)	70.43	cum	4751.65	334659.00	INR Three Lakh Thirty Four Thousand Six Hundred & Fifty Nine Only
12	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in :					
	Cement mortar 1:3 (1 cement : 3 coarse sand)	7.68	sqm	618.00	4746.00	INR Four Thousand Seven Hundred & Forty Six Only
13	Providing and fixing hard drawn steel wire fabric 75x25 mm mesh of weight not less than 7.75 Kg per sqm to window frames etc. including 62x19 mm beading of second class teak wood and priming coat with approved steel primer all complete.	27.00	sqm	1054.00	28458.00	INR Twenty Eight Thousand Four Hundred & Fifty Eight Only

14	Providing and fixing aluminium sliding door bolts, ISI marked polyester powder coated (minimum thickness of powder coating 50 micron) to required colour or shade, with nuts and screws etc. complete :					
	250x16 mm	13.00	No,s	189.20	2460.00	INR Two Thousand Four Hundred & Sixty Only
15	Providing and fixing aluminium tower bolts, ISI marked, polyester powder coated (minimum thickness of powder coating 50 micron) to required colour or shade, with necessary screws etc. complete :					
	250x10 mm	9.00	each	88.10	793.00	INR Seven Hundred & Ninety Three Only
	150x10 mm	23.00	each	64.30	1479.00	INR One Thousand Four Hundred & Seventy Nine Only
16	Providing and fixing aluminium handles, ISI marked, polyester powder coated (minimum thickness of powder coating 50 micron) to required colour or shade, with necessary screws etc. complete :					
	125 mm	26.00	each	51.10	1329.00	INR One Thousand Three Hundred & Twenty Nine Only
	75 mm	10.00	each	38.95	390.00	INR Three Hundred & Ninety Only
17	Providing and fixing angle iron frames for doors, windows and ventilators of mild steel Angle sections of size 35x35x5 mm, joints mitred and welded by angle iron 35x35x5 mm or 35x 5 mm flat pieces to the existing T-iron frame or to the wall with dash fastener, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer, all complete as per the direction of Engineer-In-charge.	1477.57	Kg	66.00	97520.00	INR Ninety Seven Thousand Five Hundred & Twenty Only
18	Providing and fixing 1st quality ceramic glazed wall 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 epoxy mortar as per manufacturer's specification including pointing in white cement mixed with pigment of matching shade complete.	35.14	sqm	744.80	26172.00	INR Twenty Six Thousand One Hundred & Seventy Two Only
19	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching					

	pigments etc., complete. Size of Tile 600x600 mm						INR Fifty Four Thousand Seven Hundred & Eighty Three Only
		48.94	sqm	1119.40	54783.00		
20	Providing & fixing UV stabilised fiberglass reinforced plastic sheet roofing up to any pitch, including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovigs incorporating minimum 0.3% ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and thickness without air pockets and shall conform to IS 10192 and IS 12866.The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified.						
	2 mm thick corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6" ) as specified	68.00	sqm	989.50	67286.00		INR Sixty Seven Thousand Two Hundred & Eighty Six Only
21	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture spintone/cosmos / Hexa or equivalent of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel SILHOUTTE sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 15x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 15x38 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 15 x38 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture (Spintone / Cosmos/hexa) in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T' , bottom exposed with 24 mm of all T sections shall be pre-painted with polyster baked paint, for all heights,						

	as per specifications, drawings and as directed by engineer-in-charge.					
	Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/opening (cut outs) having area less than 0.30 sqm. The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection > 85%, non - combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/m 0 KC.	41.27	sqm	1497.90	61818.00	INR Sixty One Thousand Eight Hundred & Eighteen Only
22	12 mm cement plaster of mix :					
	1:4 (1 cement: 4 coarse sand)	26.88	sqm	180.85	4861.00	INR Four Thousand Eight Hundred & Sixty One Only
23	Finishing walls with Acrylic Smooth exterior paint of required shade :					
	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	177.00	sqm	96.05	17001.00	INR Seventeen Thousand & One Only
24	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:					
	Two or more coats on new work	284.48	cum	78.40	22303.00	INR Twenty Two Thousand Three Hundred & Three Only
25	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, all complete as per directions of Engineer-In-Charge.			274.80		
	With cement mortar 1:4 (1cement: 4 coarse sand)	80.00	sqm	247.80	19824.00	INR Nineteen Thousand Eight Hundred & Twenty Four Only
26	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.					
	In cement mortar	8.28	cum	842.75	6978.00	INR Six Thousand Nine Hundred & Seventy Eight Only
27	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of:					
	G.S.Sheet	12.52	sqm	70.10	878.00	INR Eight Hundred & Seventy Eight Only
28	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.	180.80	sqm	22.40	4050.00	INR Four Thousand & Fifty Only

29	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead upto 50 metres.	793.00	sqm	90.10	71449.00	INR Seventy One Thousand Four Hundred & Forty Nine Only
30	Supplying and stacking of good earth at site including royalty and carriage up to 1 km (earth measured in stacks will be reduced by 20% for payment).	50.00	cum	332.55	16628.00	INR Sixteen Thousand Six Hundred & Twenty Eight Only
31	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	793.00	sqm	615.70	488250.00	INR Four Lakh Eighty Eight Thousand Two Hundred & Fifty Only
32	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	29.00	cum	5012.65	145367.00	INR One Lakh Forty Five Thousand Three Hundred & Sixty Seven Only
33	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge					
	Made of G.I. wire of dia. 4 mm, PVC coated to achieve outer dia not less than 5 mm in required colour and shade	137.25	sqm	594.65	81616.00	INR Eighty One Thousand Six Hundred & Sixteen Only
34	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :					
	W.C. pan with ISI marked white solid plastic seat and lid	2	each	3418.70	6837.00	INR Six Thousand Eight Hundred & Thirty Seven Only

35	Providing and fixing white vitreous china flat back half stall urinal of size 580x380x350 mm with white PVC automatic flushing cistern, with fittings, standard size C.P. brass flush pipe, spreaders with unions and clamps (all in C.P. brass) with waste fitting as per IS : 2556, C.I. trap with outlet grating and other couplings in C.P. brass, including painting of fittings and cutting and making good the walls and floors wherever required :					
	Range of two half stall urinals with 5 litre P.V.C. automatic flushing cistern	1	each	9317.60	9318.00	INR Nine Thousand Three Hundred & Eighteen Only
36	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:					
	White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps	2	each	2095.30	4191.00	INR Four Thousand One Hundred & Ninety One Only
37	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 :					
	Size 600x450x200mm	1	each	3211.45	3211.00	INR Three Thousand Two Hundred & Eleven Only
38	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.					
	Semi rigid pipe					
	32 mm dia	2	each	75.60	151.00	INR One Hundred & Fifty One Only
39	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	2	each	817.95	1636.00	INR Sixteen Thousand Six Hundred & Twenty Eight Only
40	Providing and fixing soil, waste and vent pipes : 75 mm diameter :					
	Centrifugally cast (spun) iron socketed pipe as per IS: 3989.	50	metre	921.65	46083.00	INR Forty Six Thousand & Eighty Three Only
41	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.					
	100 mm dia					
	Sand cast iron S&S as per IS- 3989	4	each	384.90	1540.00	INR One Thousand Five Hundred & Forty Only

42	Providing and fixing double equal junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete :					
	100x100x100x100 mm					
	Sand cast iron S&S as per IS - 3989	2	each	370.95	742.00	INR Seven Hundred & Forty Two Only
	Providing and fixing collar:					
	100 mm dia					
	Sand cast iron S&S as per IS-3989	2	each	351.20	702.00	INR Seven Hundred & Two Only
43	Providing lead caulked joints to sand cast iron/ centrifugally cast (spun) iron pipes and fittings of diameter:					
	75 mm	100	each	263.60	26360.00	INR Twenty Six Thousand Three Hundred & Sixty Only
44	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :					
	100 mm inlet and 75 mm outlet					
	Sand cast iron S&S as per IS - 3989	2	each	1072.80	2146.00	INR Two Thousand One Hundred & Forty Six Only
45	Painting sand cast iron/ centrifugally cast (spun) iron soil, waste vent pipes and fittings with two coats of synthetic enamel paint of any colour such as chocolate grey, or buff etc. over a coat of primer (of approved quality) for new work :					
	100 mm diameter pipe	6	metre	40.65	244.00	INR Two Hundred & Forty Four Only
46	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.					
	15 mm dia nominal bore	25	metre	186.40	4660.00	INR Four Thousand Six Hundred & Sixty Only
47	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. External work					
	20 mm dia nominal bore	100	metre	186.30	18630.00	INR Eighteen Thousand Six Hundred & Thirty Only
48	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :					
	25 to 40 mm nominal bore	1	each	394.15	394.00	INR Three Hundred & Ninety Four Only
49	Providing and fixing brass stop cock of approved quality :					
	20 mm nominal bore	8	metre	280.40	2243.00	INR Two Thousand Two Hundred & Forty Three Only

50	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :					
	20 mm nominal bore	2	each	327.05	654.00	INR Six Hundred & Fifty Four Only
51	Providing and fixing uplasticised PVC connection pipe with brass unions :					
	45 cm length					
	15 mm nominal bore	5	each	67.80	339.00	INR Three Hundred & Thirty Nine Only
52	Painting G.I. pipes and fittings with two coats of anti-corrosive bitumastic paint of approved quality :					
	20 mm diameter pipe	40	metre	7.10	284.00	INR Two Hundred & Eighty Four Only
53	Providing and filling sand of grading zone V or coarser grade all-round the G.I. pipes in external work.					
	20 mm diameter pipe	40	metre	67.70	2708.00	INR Two Thousand Seven Hundred & Eight Only
54	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work)					
	20 mm nominal bore	2	each	178.85	358.00	INR Three Hundred & Fifty Eight Only
55	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, ISI : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.					
		500	Litre	7.25	3625.00	INR Three Thousand Six Hundred & Twenty Five Only
	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 :					
	15 mm nominal bore	5	each	371.70	1859.00	INR One Thousand Eight Hundred & Fifty Nine Only
56	Providing and fixing C.P. brass long nose bib cock of approved quality conforming to IS standards and weighing not less than 810 gms					
	15 mm nominal bore	5	each	555.30	2777.00	INR Two Thousand Seven Hundred & Seventy Seven Only
57	Providing and Fixing CP Grating with frame including cutting and making good the walls and floors wherever required complete in all respects	4	each	100.00	400.00	INR Four Hundred Only
58	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :					
	100 mm diameter	20	metre	216.25	4325.00	INR Four Thousand Three Hundred & Twenty Five Only

	150 mm diameter	10	metre	327.05	3271.00	INR Three Thousand Two Hundred & Seventy One Only
59	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :					
	100 mm diameter	20	metre	622.95	12459.00	INR Twelve Thousand Four Hundred & Fifty Nine Only
	150 mm diameter	10	metre	761.85	7619.00	INR Seven Thousand Six Hundred & Nineteen Only
60	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design :					
	100 mm diameter S.W. pipe	20	metre	296.05	5921.00	INR Five Thousand Nine Hundred & Twenty One Only
61	Providing and fixing square-mouth S.W. gully trap class SP1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :					
	150 x 100 mm size P type.					
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	each	1623.25	3247.00	INR Three Thousand Two Hundred & Forty Seven Only
62	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :					
	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :					
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	3	each	8634.10	25902.00	INR Twenty Five Thousand Nine Hundred & Two Only
63	Extra for depth for manholes					
	Size 90x80 cm					

	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	0.5	metre	5718.60	2859.00	INR Two Thousand Eight Hundred & Fifty Nine Only
64	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :					
	For pipes 100 to 230 mm diameter	1.00	each	391.15	391.00	INR Three Hundred & Ninety One Only
65	Making soak pit 2.5m diameter 3.0 metre deep with 45X45 cm dry brick honey comb shaft with bricks and S.W. drain pipe 100mm diameter, 1.8m long complete as per standard design.					
	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1.00	each	20681.55	20682.00	INR Twenty Thousand Six Hundred & Eighty Two Only
66	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS : 1285, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing and paneling to be paid for separately) :					
	For fixed portion					
	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	1614.00	Kg	391.80	632365.00	INR Six Lakh Thirty Two Thousand Three Hundred & Sixty Five Only
67	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 PVC / neoprene gasket required (Fittings shall be paid for separately).					
	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	304.00	Kg	452.40	137530.00	INR One Lakh Thirty Seven Thousand Five Hundred & Thirty Only

68	Providing and fixing 12mm thick pre-laminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I 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-in-charge.					
	Pre-laminated particle board with decorative lamination on both sides	68.00	sqm	866.60	58929.00	INR Fifty Eight Thousand Nine Hundred & Twenty Nine Only
69	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer in-charge . (Cost of aluminium snap beading shall be paid in basic item)					
	With float glass panes of 6.00 mm thickness	91.00	sqm	1003.95	91359.00	INR Ninety One Thousand Three Hundred & Fifty Nine Only
70	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, for doors including cost of cutting floors as required, embedding in floors 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.					
	With stainless steel cover plate minimum 1.25 mm thickness	26.00	No,s	2054.40	53414.00	INR Fifty Three Thousand Four Hundred & Fourteen Only
71	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineer-in- charge complete.					
	205 X 19 mm	26.00	No,s	211.60	5502.00	INR Five Thousand Five Hundred & Two Only
<b>Total in Figures</b>					<b>3660650.00</b>	<b>INR Thirty Six Lakhs Sixty Thousand Six Hundred &amp; Fifty Only</b>
<b>Quoted Rate in Figures ( Percentage)</b>		<b>Less (-) / Above (+)</b>				
<b>Quoted Rate in Words ( Percentage)</b>		<b>INR</b>				

( Seal & Signature of the Tenderer)