

**INDIAN INSTITUTE OF TECHNOLOGY KANPUR
INSTITUTE WORKS DEPARTMENT
CENTRAL OFFICE**

TENDER DOCUMENT

Name of work: Construction of room on terrace of North-West block of faculty building with construction of Lift well in place of spiral fire escape.

Sl. No.	Description	Page
1	Part-A (NIT, Forms CPWD 6 & 7, Proforma of Schedules and Special Conditions etc.)	59 pages
2	Part-B (Schedule of Quantity & Percentage Schedule)	14 pages

Note: The following will be the part of the Contract Agreement:

- i. **The soft copy of the GCC 2014 is hereby uploaded separately and amendments are here by uploaded separately.**

Estimated Cost Rs. 1,18,37,383/- (Rupees One Crore Eighteen Lacs Thirty Seven Thousand Three Hundred Eighty Three Only).

**Sr. Assistant Engineer (S.G)
(Civil)**

**Executive Engineer-II
(Civil)**

Approved by

Superintending Engineer

INDIAN INSTITUTE OF TECHNOLOGY KANPUR
INSTITUTE WORKS DEPARTMENT
CENTRAL OFFICE
Notice Inviting e-Tender

The Acting Superintending Engineer, on behalf of Board of Governors, IIT Kanpur, invites online percentage rate tenders in single bid system from the registered contractors in CPWD, BSNL, MES, UPPWD, and Central PSUs in appropriate category for the following work:

NIT No.	Name of work	Estimated cost (In Rs.)	Earnest money (In Rs.)	Period
31/Civil/ D2/2019- 20/02	Construction of room on terrace of North-West block of faculty building with construction of Lift well in place of spiral fire escape.	1,18,37,383/-	2,36,748/-	12 Months

Last date & time of submission of bid **on 23.01.2020 up to 3.30 PM**. All details are available on website www.iitk.ac.in/iwd/tenderhall.htm, <https://eprocure.gov.in/cppp/latestactivetenders>, www.tenderhome.com. The bids can only be submitted online at <https://eprocure.gov.in/eprocure/app>. If any corrigendum is issued regarding tender notice, the same shall be available on above websites.

No. IWD/CO/2020/ 1012

Dated: 03.01.2020

Acting Superintending Engineer

**For Publication in the Newspaper:
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PART-A

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

The Acting Superintending Engineer, on behalf of Board of Governors, IIT Kanpur, invites online percentage rate tenders from eligible firms/contractors for the following work:

S. No.	NIT No.	Name of work and location	Estimated cost put to tender	Earnest Money	Period of Completion	Last date & time of technical & financial bid for online submission	Last date for submitting hardcopy of EMD, Cost of Tender Documents, e-tender processing fee and other documents	Time & date of opening of financial bid
1	31/Civil/Div-2/2019-20/02	Construction of rooms on terrace of North-West block of faculty building with construction of Lift well in place of spiral fire escape.	Rs. 1,18,37,383/-	Rs 2,36,748/-	12 Months	Upto 3:30 PM on 23.01.2020	After last date and time of submission of tender and upto 3:30 PM on 24.01.2020	Opening at 3.30 PM on 27.01.2020

- 1) Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted:
 - a) Should have satisfactory completed the works as mentioned below during the last seven years ending previous day of last date of submission of bids.
 - 3 (three) similar completed works (at least one of them should be in Central Government / Central Autonomous Bodies/ State PWD/ Central Public Sector Undertakings) each costing not less than **Rs. 47.35** Lacs OR
 - 2 (two) similar completed works (at least one of them should be in Central Government / Central Autonomous Bodies/ State PWD / Central Public Sector Undertakings) each costing not less than **Rs 59.19 Lacs** OR
 - 1 (one) similar completed work (in Central Government/ Central Autonomous Bodies/ State PWD/ Central Public Sector Undertakings) of aggregate cost not less than **Rs 94.70 Lacs**.

Note: The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to the previous day of last date of submission of bids.

- Should have average annual financial turnover of **Rs 35.51 Lacs** civil construction works during the last three years ending 31-03-2019.
- c) Should not have incurred any loss in more than two years during the last five years ending 31-03-2019.
 - d) Should have solvency of **Rs 47.35 Lacs**.
 - e) Should have valid registration with EPF, ESIC & GST authority.
 - 2) The intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
 - 3) Information and Instructions for bidders posted on website shall form part of bid document.
 - 4) The agreement shall be drawn with the successful tenderer on prescribed Form No. CPWD-7 as modified and corrected upto to the last date of receipt of tender, which is available as a Govt. of India Publication. Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement
 - 5) The time allowed for carryout the work will be **12 (Twelve) Months** from the date of start as defined in schedule "F" or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender document.
 - 6) The site for the work is available.
 - 7) The bid document consisting of plans, specifications the schedule of quantities of varies types of items to be executed and set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.iitk.ac.in/iwd/tenderhall.htm, <https://eprocure.gov.in/cppp/latestactivetenders> and www.tenderhome.com free of cost and shall be submitted on line on website <https://eprocure.gov.in/eprocure/app>.
 - 8) But the bid can only be submitted on website <https://eprocure.gov.in/eprocure/app> after uploading the details of the mandatory documents such as Demand Draft or Pay order or Banker's cheque or Deposit at call Receipt or Fixed deposit Receipts and Bank Guarantee of any scheduled Bank towards cost of bid document and EMD in favour of "Director IIT Kanpur" and the Processing Fee shall be payable through e-payment in favour of "ITI Limited, New Delhi" along with other documents as specified.

Other necessary documents also can be seen in the office of the Executive Engineer, IWD Division-II, IIT, Kanpur between hours of 10:00 AM to 5:00 PM from **03.01.2020 to 23.01.2020** every day except on Saturdays, Sundays and Public Holidays free of cost.

- (i) Treasury Challan or Demand Draft or Pay Order or Banker`s Cheque or Deposit at Call Receipt or FDR or Bank Guarantee against EMD, Cost of Tender Document and proof of deposit of tender Processing Fee shall be placed in single sealed envelope superscripted as "Earnest Money, Cost of Tender Document and Cost of Tender Processing Fee" with name of work and due date of opening of the tender also mentioned thereon.
- (ii) Copy of Registration / Enlistment Order and certificate of work experience wherever applicable and other documents if required and specified in this bid document shall be scanned and uploaded to the e-Tendering website within the period of tender submission and certified copy of each shall be deposited in a separate envelop marked as "Other Documents".

Both the envelopes shall be placed in another envelope with due mention of Name of work, date & time of opening of tenders and to be submitted in the office of the Executive Engineer after last date & time of submission of tender and up to 03:30 PM on 24.01.2020.

Online tender documents submitted by intending tenderers shall be opened only of that tenderer, who's Earnest Money Deposit, Cost of Tender Document and e-Tender Processing Fee and other documents placed in the envelope are found in order.

The tender submitted shall be opened at **03:30 PM on 27.01.2020.**

- 9) The tender submitted shall become invalid and cost of tender & e-Tender processing fee shall not be refunded if:
 - (i) The tenderers are found ineligible.
 - (ii) The tenderers do not upload all the documents as stipulated in the tender document.
 - (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of tender and hard copies as submitted physically in the office of tender opening authority.
- 10) The tender shall be accompanied with earnest money of **Rs. 2,36,748/-**. The 50% of earnest money or Rs.20 Lacs whichever is less will have to be deposited in the form of Demand Draft or Pay Order or Banker's Cheque or Deposit At Call Receipt or Fixed Deposit Receipt of any schedule bank in favour of Director IIT Kanpur payable at Kanpur. The balance amount of earnest money can be deposited in the form of Bank Guarantee issued by a schedule bank having validity for 6 months or more from the last date of receipt of tenders. The scanned copy of the EMD shall be uploaded to the e-tendering website within the period of bid submission and original shall be submitted in the office of the Executive Engineer along with the other documents on or before due date as prescribed above.

- 11) 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 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 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.**
- 12) The Institute reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed to suitable by it, if too many bids are received satisfying the laid down criterion.
- 13) 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 schedule bank / bankers 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' indicating the extended period if any, the earnest money deposited by the contractor shall be forfeited automatically without any notice to the contractor.
- 14) The description of the work is as follows:
Construction of room on terrace of North-West block of faculty building with construction of Lift well in place of spiral fire escape.
Copies of other drawings and documents pertaining to the works will be open for inspection by the tenderers at the office of the above mentioned officer.
Tenderers, are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders 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 the risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer 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 tender by a tenderer 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.

- 15) The competent authority on behalf of the Board of Governors, IIT Kanpur does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all of the tenders received without the assignment of any 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 tenderer, shall be summarily rejected.
- 16) Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- 17) The competent authority on behalf of Board of Governors, IIT Kanpur reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted
- 18) The contractor shall not be permitted to tender for works in the IIT Kanpur 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 grade 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 officer in the IIT Kanpur. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of the concerned Department / termination of the contract from this institute.
- 19) No Engineer of gazetted rank or other gazetted officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of two years after his retirement from government service, without the previous permission of the Government 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 Government of India as aforesaid before submission of the tender or engagement in the contractor's service.
- 20) The tender for the works shall remain open for acceptance for a period of **Ninety days** from the date of opening of financial bid. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, which-ever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at a liberty 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 the work.

- 21) 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 15 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 thereto.
 - b) Standard C.P.W.D. **Form-7** as modified and corrected upto to the last date of receipt of tender.
- 22) Tenders with any condition including conditional rebates shall be rejected forthwith. However, tenders with unconditional rebates will be acceptable.
- 23) Schedule of quantity is included in this tender for civil items of work. If the tenderer wants to offer any unconditional rebates on their rates, the same should also be offered. The tenderer must fill up abstract of cost at end of schedule of quantities otherwise the tender shall be rejected.
- 24) The acceptance of the tender shall be conveyed by the **Acting Superintending Engineer, IIT, Kanpur** on behalf of the Board of Governors, IIT Kanpur.

(R.K. Verma)
Acting Superintending Engineer

SALIENT/MANDATORY REQUIREMENTS FOR THE TENDER

Name of **Construction of room on terrace of North-West block of**
Work: **faculty building with construction of Lift well in place of**
spiral fire escape.

- 1 The tenderer is advised to read and examine the tender documents for the work and the set of drawings available with Engineer-in-charge. He should inspect and examine the site and its surroundings by himself before submitting his tender.
- 2 Separate schedule of quantity is included in this tender for civil items of work. If the tenderer wants to offer any unconditional rebates on their rates, the same should also be offered. The contractor shall quote the percentage rates in figures and words accurately so that there is no discrepancy in rates written in figures and words.
- 3 Time allowed for the execution of work is **12 (Months) months.**
- 4 The contractor(s) shall submit a detailed program of execution in accordance with the master programme / milestone within fifteen days from the date of issue of award letter.
- 5 Quality of the project is of utmost importance. This shall be adhered to in accordance with the provisions of CPWD specifications and guidelines given in the relevant paras.
- 6 The contractor(s) shall make his own arrangements for water required for the execution of work. For electricity a temporary electric connection at suitable place shall be provided by the Institute on request of the contractor. The required cable and electrical meter shall be arranged by the contractor. The monthly consumption of electricity shall be recovered from the running bills of the contractors on the approved rates of the Institute.
- 7 Cement shall be arranged by the contractor himself and no secured advance shall be given.
- 8 Steel Reinforcement shall be arranged by the contractor himself.
- 9 Contractor has to deploy required Plant and machinery on the project to complete the work with in stipulated period. In case the contractor fails to deploy the plant and machinery whenever required and as per the direction of the Engineer-in-charge, he (Engineer-in-charge) shall be at a liberty to get the same deployed at the risk and cost of the contractor.
10. All measurements and levels shall be taken jointly by the authorized representative of Institute and the contractor or his authorize representative from time to time during the progress of work and such measurements shall be signed and dated by the authorize representative of Institute and the contractor.

PERCENTAGE RATE TENDER AND CONTRACT FOR WORKS

- A) **Tender for the Work of: Construction of room on terrace of North-West block of faculty building with construction of Lift well in place of spiral fire escape.**

TENDER

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

I/We hereby tender for the execution of the work specified for the Board of Governors, IIT, Kanpur 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 to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender **open for (90) Ninety days from the date of opening of financial bid** and not to make any modifications in its terms and conditions.

A sum of **Rs. 2,36,748/-** is hereby forwarded in Cash/Receipt Treasury Challan/Deposit at call Receipt of a Scheduled Bank/Fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by scheduled bank as earnest money. If I/we, fail to furnish the prescribed performance guarantee or fail to commence the work within prescribed period I/we agree that the said Board of Governors, IIT, Kanpur 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 of commence work as specified, I/we agree that Board of Governors, IIT, Kanpur or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the 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 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 therefrom to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the institute.

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

Dated _____

Signature of contractor

Postal Address:_____

Witness:_____

Address:_____

Occupation: _____

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 Director IIT Kanpur for a sum of Rs._____.(Rupees_____ only), The letter referred to below shall form part of this contact Agreement:-

- i)
- ii)
- iii)

Dated:

For on the behalf of Director, IIT Kanpur

Signature _____

Designation _____

PROFORMA OF SCHEDULES

SCHEDULE 'A'

Schedule of Quantities as per CPWD-3: As per sheet attached for civil items of work.

SCHEDULE 'B'

Schedule of materials to be issued to the contractor:

S.N.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue
1	2	3	4	5
-NIL-				

SCHEDULE 'C'

Schedule of Tools and Plants to be hired to the contractor

S.N.	Description of item	Hire charges per day	Place of issue
1	2	3	4
-NIL-			

SCHEDULE 'D'

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

As attached in tender form

SCHEDULE 'E'

Reference to General Conditions of contract.

Name of Work:	Construction of room on terrace of North-West block of faculty building with construction of Lift well in place of spiral fire escape.
Estimated cost of the work:	Rs. 1,18,37,383.00
Earnest money	Rs. 2,36,748.00
Performance Guarantee	5% of the tendered value of the work
Security Deposit	5% of the tendered value of the work

SCHEDULE 'F'

General rules and direction:

Officer inviting tender

**Acting Superintending Engineer,
Institute Works Department,
IIT Kanpur**

Maximum item of quantity of items of see at appropriate clause under work to be executed beyond which definitions rates are to be determined in accordance with Clause 12.2.& 12.3

Refer Clause 12

Definitions:

2(v) **Engineer-in-Charge**

For Civil items of work

Executive Engineer-II

2(viii) Accepting Authority

Director

2(x) Market rate: Percentage on cost of materials and labour to cover all overheads and profits

15%

2(xi) Standard Schedule of Rates:
Civil Items of Work:

D.S.R. 2018

2(ix) Department:

IWD, IIT, Kanpaur

2(x) Standard CPWD contract Form:

GCC 2014, CPWD **Form-7** as modified & corrected up to the last date of receipt of

tender. The following condition pertains to GST of Clause 37 & 38 of General Condition of contracts and corresponding Amendments should be read as follows:

- a) - The Quoted Rates should be exclusive of GST.
- b) - The GST as applicable shall be paid extra

Clause 1

Time allowed for submission of performance e guarantee from the date of letter of acceptance

15 days

ii) Maximum allowable extension beyond the period provided in (i) above authority for fixing compensation under clause 2

7 days

Clause 2

Authority for fixing compensation under clause 2

Superintending Engineer

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

22 days

Time allowed for execution of work

12 Months

Authority to decide

- i) **Extension of time** **Acting Superintending Engineer,**
- ii) **Rescheduling of mile stones** **Acting Superintending Engineer,**

Clause 6

Applicable

Clause 6A

Not Applicable

Clause 7

Gross work to be done together with net payment/Adjustment of advances for material collected, if any, since the

Rs. 50 Lacs

last such payment for being eligible to Interim payment

Clause 7A

Whether 7A shall be applicable

Yes

No running account shall be paid for the work till the applicable labour license, registration with BoCW welfare board are submitted by the contractor to the Engineer-in-Charge

Clause 10A

List of testing equipment to be provide by the contractor at site lab.

On Page No. 28-29

Clause 10B(ii)

Not Applicable

Clause 10C

Component of labour expressed as Item of value of work

Not applicable

Clause 10CA

Not applicable

Clause 10CC

Increase/Decrease in Price of materials/wages

Not Applicable

Clause 11

For civil items of work

CPWD Specification 2009 Vol.1 and Vol.2 with Upto date correction slips.

Clause 12

Clause 12.2 & 12.3

30%

Deviation limit beyond which clause 12.2 & 12.3 shall apply for building works

Clause 12.5

100%

Deviation limit beyond which clause 12.2 & 12.3 shall apply for foundation Work

Clause 16

Competent Authority for Deciding reduced rates:

For civil items of work

Superintending Engineer

Clause 18

List of mandatory machinery, tools & plants to be deployed by the contractor at site. Automatic weight bathing plant.

Clause 36(i): Requirement of Technical Representative(s) and Recovery Rate

Sl. No	Minimum qualification of Technical Representative	Discipline	Designation (Principal Technical /Technical representative)	Min. exp.	Nos	Rate at which recover shall be made from the contractor in the event of not fulfilling provision of clause 36(i)	
						Figures	Words
1.	Degree	Civil	Project Engineer	10 Yrs.	One	35000	Thirty Five Thousand
2.	Degree /Diploma	Civil	Site Engineer	0/5 Yrs.	Two	25000	Twenty Five Thousand

- Assistant Engineer retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

Clause 42

- i) a) Schedule/ statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates 2016
- ii) Variations permissible on theoretical quantities.
 - a) Cement 2% plus/minus
 - b) Steel reinforcement and Structural steel sections for each diameter, section and category 2% plus only and Nil on minus side
 - c) All other materials 2% plus/minus

Superintending Engineer

SPECIAL CONDITIONS

1. In the Contract (as hereinafter defined) the following definitions words and expressions shall have the meaning hereby assigned to them except where the context otherwise required.
 - i) Institute shall mean the Indian Institute of Technology (IIT), Kanpur
 - ii) The President of India shall mean the Board of Governors, IIT Kanpur.
 - iii) Superintending Engineer shall mean the Superintending Engineer of the Institute, who as overall In-charge and head of the Institute Works Department shall direct the contract.
 - iv) The Engineer-in-charge, who shall administer the work, shall mean the Executive Engineer for civil work.
 - v) Government or Govt. of India shall mean the Indian Institute of Technology represented by its Director.
 - vi) The term Director General of Works shall mean the Chairman, Building & Works Committee of the Institute.
 - vii) Accepting authority shall mean the Director, IIT Kanpur or on behalf of B&WC.
 - viii) Architect shall mean every partner of the firm appointed by the Institute for the work and in the event of ceasing to be the Architects, such other firms or persons as may be appointed by the Institute.
 - ix) Site Engineers shall mean the Assistant Executive Engineer / Assistant Engineer & Junior Engineer (Civil) appointed by Institute works department.
 - x) No labour huts/ jhuggies shall be allowed to construct in the campus except for the security persons at work site with proper sanitation arrangements after due approval of the Superintending Engineer.
 - xi) Any damage caused to the existing roads, power cables, telephone cables, water lines and structures by the contractor's equipments, shall have to be made good by the contractor at his own cost.
 - xii) The contractor shall have to provide the safety jackets (reflective), safety shoes, safety helmets (ISI mark) and safety belt (double harness clip type locking arrangement) to the workers as under the general obligations

under contract, no separate payment on this account shall be made. All other safety provisions as existing in GCC 2014 and National Building Code shall also be applicable.

- xiii) The contractor has to provide and make arrangement for safety net of required specification and strength to ensure proper safety of workers while working at heights. At least at two tiers safety net should be provided below the working platform. No separate payment on this account shall be made.
- xiv) Double scaffolding system (cup and lock type) on the exterior side or wherever required of the building must be provided with 40 mm dia MS tube 1.5 mtr. Centre to centre horizontal and vertical tube joining with cup and lock system with MS tube, MS tube chollies, MS clamp and MS staircase system in the scaffolding for working platform etc.
- xv) Contractor shall have to make own security arrangement for watch and ward of the own construction materials, T&P etc brought at site.
- xvi) If the work is carried out in more than one shift or during night no claim on this accounts shall be entertained.
- xvii) Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services encountered in the course of the execution of 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.
- xviii) The rate of items of flooring is inclusive of providing sunk flooring at bath rooms kitchen etc. and nothing extra on this accounts is admissible.
- xix) No payment shall be made to the contractor for any damage caused by rain, snowfall, floods, earthquake or any other natural causes whatsoever during execution of work. The damages of the work will be made good by the contractor at his own cost and no claim on this account shall be entertained.
- xx) For construction works which are likely to generate malba/rubbish to the tune of more than a tempo/truck load, contractor shall dispose of malba, rubbish & other unserviceable materials and wastes at their own cost to the notified/specified dumping. The malba / rubbish shall required to be removed from site of work on daily basis, if the same is not removed a token penalty of Rs. 250/- per day shall be levied till the removal of malba. This shall be recovered from the bill. The contractor should not throw the malba from higher floors directly on the ground. It should be brought down through the staircase by the workers or proper shoute should be

nstalled for this purpose.

- xxi) Plinth level- the Plinth Level of Building is to be kept as per Architectural drawings. All the items of works such as PCC, RCC, Brickwork and shuttering etc. in foundation upto this plinth level with be measured and paid as the work done upto plinth level. Nothing extra due to higher plinth will be paid and contractors rates quoted for all these items shall, therefore, the deemed to cater for extra height of plinth.
- xxii) The contractor shall be responsible for the watch and ward/guard of the buildings, 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 installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
- xxiii) The contractor will provide/construct at his own cost a suitable furnished office of area 30 sqm for IIT at site.

2. DUTIES & POWERS:

i) Site Engineers:

The Engineer-in-charge, from time to time in writing, delegate to the Site Engineer(s) any of the powers and authorities vested in them. Any written instruction or written approval given by the Site Engineer(s) to the contractor within the terms of such delegation (but not otherwise) shall bind the contractor and the Institute as though it had been given by the Engineer-in-charge / Architect provided always as follows:

- a) Failure of the Site Engineer(s) to disapprove any work or materials shall not prejudice the power of the Engineer In-charge / Architect to subsequently disapprove such work or materials and to order the pulling down, removal or breaking up thereof.
- b) If the contractor is dissatisfied by reason of any decision of the /Site Engineer(s), he shall be entitled to refer the matter to the Engineer in-charge / Architect, who shall thereupon confirm reverse or vary such decision.

ii) Architects:

The Architect may, from time to time, issue further supplementary drawings and / or written instructions, details, directions and explanations, which are collectively, referred to as Architects instructions. The contractor shall forthwith comply with and duly execute work comprised in such Architect's instructions provided always that verbal instruction, directions and explanation given to the contractor or his works representatives by

the Architect shall, if involving a variation, be confirmed in writing. If instructions conveyed by the Engineer-in-charge and the Architect are at variance, the opinion of Superintending Engineer shall be final and binding on the contractor.

3. ASSIGNMENT & SUBLETTING:

The contractor shall not assign the contract or any part thereof or any benefit or interest therein or thereunder without the written consent of the Engineer In-charge. The whole of the works included in the contract shall be executed by the contractor except where otherwise provided in the contract. The contractor shall not sublet any part of the works without the written consent of the Engineer In-charge and such consent, if given, shall not relieve the contractor from any liability or obligation under the contract, and he shall be responsible for the acts, defaults and neglects of sub-contractor, his agents, servants or workmen, as if they were the acts, defaults or neglects of the contractor provided always that the provision of labour contracts on a piece work basis shall not be deemed to be a subletting under this clause.

4. PROPOSED ACTION IN CASE OF AN ACCIDENT AT SITE:

- i. Contractor has to appoint qualified safety officer for proper adhering safety requirements during the entire period of contract.
- ii. In case of any serious accident at work-site, the institute may cause an enquiry/investigation into the accident and depending on the outcome of such enquiry/investigation, the Institute may take such action against the contractor as may be deemed fit and appropriate in the discretion of the Director, which may also lead to termination of the contract, and/or forfeiture of the security deposit made by the contractor, and/or the contractor may be debarred from applying for future works in the campus for a specified period.

5. Labour Laws:

- i. All labour payment shall have to made in MWMC office.
- ii. Contractor has to open a separate EPF account at Kanpur for the workers engaged on the construction site in the Institute.
- iii. All labour should be issued an I-card on format approved by the Institute.
- iv. In case of a serious violation of labour laws by the contractor in respect of the works awarded by the Institute under these agreement, the Institute may take such action against the contractor as may be deemed fit and appropriate in the discretion of the Director, which may lead to termination of the contract, and/or forfeiture of the security deposit made by the contractor, and/or the contractor may be debarred from applying for future works in the campus for a specified period.

6. **Insurance Policies:**

The contractor in his own interest before commencing the execution of work, with any way limiting his obligations and liabilities under this contract insure at his own cost an expense against any damaged or loss or injury this may be caused to any person or property at site of work.

7. **SCOPE OF CONTRACT:**

The contract comprises the construction, completion and maintenance of the works for **(12) months** after the completion, and the provision of all labour, materials, constructional plant, equipment and transportation, temporary works and everything, whether of a temporary or permanent nature required in and for such construction, completion and maintenance so far as the necessity for providing the same is specified in or reasonably to be inferred from the contract. The contractor shall make his own arrangements for the safe storage of materials, accommodation for his staff etc. and no claim for the temporary accommodation from the contractor shall be entertained.

The contractor shall carry out and complete the said work in every respect in accordance with this contract and as per the directions and to the satisfaction of the Engineer In-charge / Architect / Site Engineer. Issue of further drawings and / or written instructions, detailed directions and explanations which are hereinafter collectively referred to as instructions of the Engineer In-charge / Architect's / Site Engineer in regards to:

- a) The variation or modification of the design, quality or quantity of works or the addition or omission or substitution of any work.
- b) Any discrepancy in the Drawings or between the Schedule of Quantities and / or Drawings and / or specifications.
- c) The removal from the site of any materials brought thereon by the contractor and the substitution of any other material thereof.
- d) The dismissal from the works of any persons employed thereupon.
- e) The opening up for inspection of any work covered up.
- f) The amending / making good of any defects.

The contractor shall forthwith comply with and duly execute any instructions of work comprised in such Engineers In-charge / Architect's / Site Engineer instructions, provided always that the verbal instructions and explanations given to the contractor or his representative upon the works shall, if involving a variation, be confirmed in writing by the contractor within seven days and if not dissented in writing within a further seven days by the Engineer In-charge / Architect / Site Engineer, such shall be deemed to be instructions of the Engineer In-charge / Architect / Site Engineer within the scope of the contract.

8. CONTRACT DOCUMENT:

8.1 The several documents, forming the contract, are to be taken as mutually explanatory of one another and in case of ambiguities or discrepancies the same shall be explained and adjusted by the Engineer-in-charge who shall thereupon issue to the contractor its interpretation directing in what manner the work is to be carried out. In case the contractor feels aggrieved by the interpretation of the Institute then the matter shall be referred to the Superintending Engineer and his decision shall be final, conclusive and binding on both parties to the contract.

8.2 The drawing etc. shall remain in the custody of the Institute. Two complete sets of drawings, specification and Bill of Quantities shall be furnished by the Engineer-in-charge to the contractor in such time, which must not delay the progress of the construction, and the Institute shall furnish copies of any additional drawings, which in their opinion may be necessary for the execution of any part of the work. One complete set shall be kept on the work site and the Engineer-in-charge and his representatives shall be, at all reasonable times, have access to the same. The contractor shall study the drawings thoroughly before the commencement of work. In case of any discrepancy, the contractor shall seek clarification before proceeding with the works. Figured dimensions are in all cases to be accepted in preference to the scaled sizes. Large-scale details shall take preference over small scale ones.

The contractor shall give adequate notice in writing to the Engineer-in-charge of any further drawings or specification that may be required for the execution of the works or otherwise under the contract.

The Engineer-in-charge shall have full powers and authority to supply to the contractor from time to time during the progress of the work such drawings and instructions as shall be necessary for proper execution and the contractor shall carry out and be bound by the same.

8.3 The successful tenderer shall be required to enter into an agreement with the Institute. The Bill of Quantities & rates filled by the successful tenderer there in, the General Conditions of Contract for CPWD Works with upto date corrections slip incorporating corrections, CPWD specifications for Civil, the Special conditions, additional specifications, negotiation letter and the award letter etc. shall form part of the agreement to be signed by the successful tenderer. The cost of stamp paper and stamp duty, required for the agreement, shall be borne by the contractor.

8.4 CESS on works, Contract as per prevailing notification of U.P. Government shall be recovered from the contractor's bills.

8.5 EPF & ESI contribution paid to the contract workers shall be reimbursed by the Engineer-in-charge on actual basis after satisfying that it has been actually & genuinely paid by the contractor.

9. CONTRACT AGREEMENT:

The contract agreement, inclusive of its enclosures, shall remain in the custody of the Superintending Engineer, Institute Works Department, IIT Kanpur and be made available by him as and when required. Contractor shall however be supplied, an attested copy thereof, free of cost.

9.1 Canvassing in connection with tenders is prohibited and the tenders, submitted by the tenderers who resort to canvassing, are liable for rejection.

9.2 **Tenderers are not allowed to make additions and alternations in the tender document. Any additions and alterations, if incorporated in the tender, shall be at the tenderer's risk since the modified tender is liable for rejection.**

Conditional tenders violative of the spirit and the scope or the terms & conditions of the tender, are liable to be rejected without assigning any reason. Tenders with conditional rebate are liable for rejection at the sole discretion of the institute.

9.3 The contractor shall have to make his own arrangement of water. The withdrawal of water from the network of the Institute shall not be allowed. No charges shall be recovered if the contractor develops tube well at site and pumping arrangement at his own cost. The contractor shall have to seek permission of digging tube well etc. for water arrangements from Engineer-in-charge.

9.4 Temporary electrical connection (single / three phase) shall be provided by the Institute from its distribution network and the charges shall be realized at the prevalent commercial tariff of the institute, presently recovery rate is Rs. 7.23 per unit on the basis of actual consumption thro' a separate sub-meter under the control of the Engineer-in-charge. If the rates are revised in future the same shall be applicable to the contractor. The contractor at his own cost shall arrange the cable for service connection and the sub meter.

9.5 Cement and steel for the work shall be arranged by the contractor on his own. No material shall be supplied by the Institute except where specifically mentioned in Schedule 'C'.

9.6 Testing of materials for Civil Works:

9.6.1 Contractor shall set up at his own cost a fully equipped laboratory at site for conducting fields tests prescribed in CPWD Specifications.

9.6.2 The field / laboratory tests shall be conducted strictly as per frequency prescribed in CPWD specifications 2009.

- i) The testing of materials / samples / concrete cubes etc. shall be conducted at various laboratories of IIT Kanpur only, unless the required facility is not available.
- ii) The cost of materials / Samples / concrete cubes etc. and incidental charges, in connection with the testing, shall be borne by the contractor as per clause 10 (A) of the General Conditions of the Contract CPWD – 2014.
- iii) Testing Charges shall however be borne by the Institute in respect of samples qualifying the test in all respects. However, the cost of testing, in respect of failed samples, shall be borne by the contractor.

QUALITY ASSURANCE OF THE WORK

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.
2. The contractor shall get the source of all other materials, not specified else where in the document, approved from the Engineer-in-Charge. 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. Similarly, the contractor shall submit brand/ make of various materials not specified in the agreement, to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it.
3. The contractor shall submit shop drawings of staging and shuttering arrangement, aluminum work, and other works as desired by Engineer In Charge for his approval before execution. The contractor shall also submit bar bending schedule for approval of Engineer –in – charge before execution.

4. Test Laboratories :

A. Laboratory at site :

The contractor shall provide at site, the testing equipment and materials for the field tests mentioned in the list of mandatory tests given in CPWD specifications 2009 (Vol. I & II) at his own cost. Nothing extra shall be payable to him on this account.

In all cases, cost of samples and to and fro carriage shall be borne by the contractor.

The representatives of the department shall be at liberty to inspect the testing facilities at site and conduct testing at random in consultation with Engineer in charge. The contractor shall provide all necessary facilities for the purpose.

The laboratory shall be equipped, inter alia, with the following equipments:

B. Balances:

- i) 7 kg to 10 kg capacity, semi-self indicating type – Accuracy 10 gm.
- ii) 500 gm capacity, semi-self indicating type Accuracy 1 gm.
- iii) Pan Balance- 5 kg Capacity- Accuracy 10 gm.

C. Ovens- Electrically operated, thermostatically controlled upto 1100C- Sensitivity 10C.

D. Sieves: as per IS: 460

- a) IS Sieves – 450 mm internal dia of sizes 100 mm, 80 mm, 63 mm, 50 mm, 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm, 6.3 mm, 4.75 mm, complete with lid and pan.

- b) IS Sieves – 200 mm internal dia (brass frame) consisting of 2.36 mm, 1.18 mm, 500 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns, 75 microns with lid and pan.
- c) Sieve shaker capable of 200 mm and 300 mm dia sieves, manually operated with timing switch assembly.
- d) Equipment for slump test- slump cone, steel plate, taping rod, steel scale, scoop.
- e) Equipment for concrete testing
 - i) Concrete cube moulds 15x15x15cm. 18Nos.
 - ii) Pruning Rods 2Kg weight length 40cm and ramming face 25mm 1No.
 - iii) Extra Bottom plates for 15cm cube mould 6Nos.
 - iv) Standard Vibration table for cubes 1No
 - v) Dial gauges 25 mm travel- 0.01 mm/division Least count- 1 No.
 - vi) Compression testing machine of 100 tonne capacity. 1 No.

All test which can be performed in the site lab with above equipments shall be done at site except that at least 10% testing of materials shall be got done from institute laboratories. However, for the tests to be carried out in the institute laboratories, the contractor shall supply free of charge all the materials required for testing, including transportation. The testing charges shall be born by the Contractor / Department in the manner described in para E-1 below.

E. Institute Laboratories:

1. The contractor shall arrange carrying out of all tests required under the agreement through the institute laboratory as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including fee for testing. The said cost of tests shall be borne by the contractor/department in the manner indicated below.
 - i) By the contractor, if the results show that the test does not conform to relevant CPWD Specifications / BIS code or specification mentioned else where in the documents
 - ii) By the department, if the results conforms to relevant CPWD Specifications / BIS code or specification mentioned else where in the documents.
2. However, no testing charges will be payable by the contractor for the tests conducted at their site laboratories.
3. If the tests, which were to be conducted in the site laboratory are conducted in institute laboratories for what ever the reasons, the cost of such tests shall be borne by the contractor.

F. Sampling of Materials:

1. Sample of building materials fittings and other articles required for execution of work shall be got approved from the Engineer-in-Charge. Articles manufactured by companies of repute and approved by the Engineer-in-Charge shall only be used. Articles bearing BIS certification mark shall be used in case the above are not available, the quality of samples brought by the contractor shall be judged by standards laid down in the relevant BIS

specifications. All materials and articles brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work.

2. The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material/work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-Charge.
3. BIS marked materials except otherwise specified shall be subjected to quality test at the discretion of the Engineer-in-Charge besides testing of other materials as per the specifications described for the item/materials. Wherever BIS marked materials are brought to the site of work, the contractor shall if required, by the Engineer-in-Charge furnish manufacturers test certificate or test certificate from approved testing laboratory to establish that the material produced by the contractor for incorporation in the work satisfies the provisions of BIS codes relevant to the material and/or the work done.
4. The contractor shall procure all the materials at least in advance so that there is sufficient time to testing and approving of the materials and clearance of the same before use in work.
5. All materials brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
6. The contractor shall be fully responsible for the safe custody of the materials issued to him even if the materials are in double lock and key system.

G. Survey instruments

The Contractor shall maintain on site the following surveying instruments and relevant accessories in perfect working conditions to enable the Engineer-in-charge or his representative to check levels and lines of the work at all times.

- One theodolite, 10 sec. reading, complete with tripod and other accessories.
- One automatic level, 10mm reading, complete with tripod and other accessories.
- Three leveling staves, 3 m long, center hinged.
- Two survey Umbrellas.
- Ten ranging poles, 2 m long.
- Two measuring steel tapes calibrated, 50 m long. -
Two measuring steel tapes, 30 m long.

CONTRACTOR

(R. K. VERMA)

Acting Superintending Engineer
For and on behalf of
Director, IIT Kanpur

ADDITIONAL TERMS AND CONDITIONS

1. Unless otherwise provided in the Schedule of Quantities/Specifications, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the work and nothing extra shall be payable to him on account of the same. Extra payment for centering/shuttering, if required to be done for heights greater than 3.5 m shall however be admissible at the rates arrived at in accordance with clause 12 of the agreement, if not already specified.
2. Other agencies doing works related with this project may also simultaneously execute their works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc. for laying/burying in the work, pipes cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for the other agencies. Nothing extra over the Agreement rates shall be paid for doing these.
3. Some restrictions may be imposed by the security staff etc. on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on account of the same.
- 4a. The contractor shall fully comply with all legal orders and directions of the Public or local authorities or municipality and abide by their rules and regulations and pay all fees and charges for which he may be liable in this regard. Nothing extra shall be paid/reimbursed for the same.
- 4b. The building work shall be carried out in the manner complying in all respects with the requirements of the relevant bylaws and regulations of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer-in-charge and nothing extra shall be paid on this account.
- 4c. The work of water supply, internal sanitary, lift, fire fighting installations and drainage etc. shall be carried out as per the bylaws. The contractor shall obtain such NOC from respective authorities.
5. The contractor shall give a performance test of the entire installation(s) as per standing specifications before the work is finally accepted by making his own arrangements for water supply, electricity, lift and firefighting etc. and nothing extra whatsoever shall be payable for the same.
6. The structural and architectural drawings shall at all times be properly co-related before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and Architectural drawings relating to the relevant item, the former shall prevail unless otherwise given in writing by the Engineer-in-charge.
- 7a. For the purpose of recording measurements and preparing running account bills, the abbreviated nomenclature indicated in the publications Abbreviated Nomenclature of Items of DSR- 2018 shall be accepted. The abbreviated nomenclature shall be taken to cover all the materials and operations as per the complete nomenclature of the relevant items in the agreement and relevant specifications.
- 7b. In case of items for which abbreviated nomenclature is not available in the aforesaid publication and also in case of extra and substituted items for which abbreviated nomenclature are not provided for in the agreement, full nomenclature

of item shall be reproduced in the measurement books and bill forms for running account bills.

- 7c. For the final bill, however, full nomenclature of all the items shall be adopted in preparing abstract in the measurement books and in the bill forms.
8. The contractor shall take instructions from the Engineer-in-charge for stacking of materials. No excavated earth or building materials etc. shall be stacked/collected in areas where other buildings, roads, services, compound walls etc. are to be constructed.
9. It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
10. In case the supply of timber/steel frames/shutters for doors, windows etc. is made by some other agency, the contractor shall make necessary arrangements for their safe custody on the direction of the Engineer-in-charge till the same are fixed in position by him & nothing extra shall be paid on this account.
11. The contractor shall maintain in perfect condition, all portions executed till completion of the entire work allotted to him. Where however phased delivery of work is contemplated these provisions shall apply separately to each phase.
12. The entire royalty at the prevalent rates shall have to be paid by the contractor on all the boulders, metals, shingle sand etc. collected by him for execution of the work, directly to the Revenue authority or authorized agents of the State Government concerned or the Central Government, as the case may be.
13. Cement bags shall be stored in separate godowns to be constructed by the contractor at his own cost as per sketch (which is only indicative and actual size will depend on the site requirements) at page 23 of CPWD specification 2009 Vol. I with weather proof roofs and walls. Each godown shall be provided with a single shutter door with two locks. The key of one lock shall remain with Engineer-in-charge or his authorized representative and that of the other lock with the authorized agent of the contractor at the site of work so that the cement is issued from the godown according to the daily requirements with the knowledge of both parties and proper account for the same is maintained in the standard proforma.

PROFORMA FOR THE CEMENT REGISTER

PARTICULARS OF RECEIPT

Date of receipt	Quantity received	Progressive total	Date of issue	Quantity issued	Items of work for which issued
1	2	3	4	5	6

PARTICULARS OF ISSUE

Qty. returned at the end of the day	Total issued	Daily balance in hand	Contractor's initial	JE's initial	Remarks (AE/EE's periodical check)

7	8	9	10	11	12

14. In case of concrete and reinforced concrete work, the contractor shall be required to make arrangements for carrying out compressive strength tests at his own cost. He shall render all assistance for the preparation of cubes, safe custody of the same, their proper curing and carriage up to the laboratory where the tests are to be got conducted. The cube tests may be performed at institute / site laboratory approved by the Engineer-in-charge.
15. In case there is any discrepancy in frequency of testing as given in the list of mandatory test and that in the individual sub-head of work as per CPWD Specifications 2009 Vol.I & II with upto date correction slips the higher of the two frequencies of testing shall be adopted. Nothing extra shall be payable to the contractor on this account.

16. **ADDITIONAL TERMS & CONDITIONS FOR VARIATION IN CONSUMPTION OF PIG LEAD**

The pig lead for caulking of joints of SCI pipes shall be used as per the theoretical consumption for SCI pipes of sizes 100mm, 75mm, 50mm at 0.98kg., 0.88kg. and 0.77kg.per joint respectively. Over and above the theoretical quantities of lead as worked out a variation of 5% shall be allowed for wastage etc. Any difference between the actual consumption of pig lead and the theoretical consumption worked out on the above basis shall be recovered at double the issue rate. Where the pig lead is arranged by the contractor, also a variation of 5% shall be allowed. In case the variation is on the lower side, the quantity of pig lead used less shall be recovered from the contractor at market rate to be determined by the Engineer-in-charge whose decision in this matter shall be final.

17. **ADDITIONAL TERMS & CONDITIONS FOR WATER PROOFING TREATMENT**

The contractor shall associate himself with the specialized firm, to be approved by the Engineer-in-charge in writing, for water proofing treatment for basement/lower ground floor, under ground tank and on roofs. Guarantee in the prescribed proforma attached with tender document shall be given by the specialized firm, for a period of ten years from the date after the maintenance period prescribed in the contract, which shall be counter signed by the contractor as token of overall responsibility. In addition 10% (ten percent) of the cost of water proofing items shall be retained as guarantee to watch the performance of the work done. However half of this retained amount will be released after five years, if the performance of the work done is found satisfactory. If however any defect is noticed during the guarantee period, it shall be rectified by the contractor within seven days of intimation. In case it is not attended to, the same will be got done by another agency at the risk and cost of the contractor. This guarantee deposit

can however be released in full if a bank guarantee of equivalent amount for 10 years is produced and deposited with the department by the contractor.

S.N	ROOFING AND WATER PROOFING
	The following shall NOT be measured separately and shall be deemed to be included in the rates quoted.
1.	Preparation of surface for laying of insulation and Waterproofing treatment as required by the specialist Contractors. The surface should be cleared of all loose mortar, dust and waste by hacking and cleaning with wire brush.
2.	All cutting, dressing, trimming and waste including cutting to required shapes.
3.	Work in narrow widths, to required profiles and at all locations as shown.
4.	Work at all heights and depths.
5.	Testing of treated areas in approved manner for performance of the treatment.
6.	Treating all openings and around all pipes or such, passing through.
7.	All protection to the water-proofing surfaces to prevent damage by other trades.
8.	The treatment shall carry a guarantee of 10 years, which shall be given by the water - proofing specialist contractor and counter-signed by the main contractor. The main contractor shall be fully responsible for the performance of the water-proofing treatment.
9.	Minor modifications in the contract specifications of the treatment, may be accepted according to the method of the treatment of the respective water-proofing specialist contractor.

18. ADDITIONAL TERMS & CONDITIONS FOR QUALITY OF BRICKS

Bricks shall confirm to CPWD Specifications 2009 Vol.I & II and Bricks of quality first class local available shall be used by the Contractor in place of class designation 75 mentioned in all the items using bricks in Bill of Quantity.

19. ADDITIONAL TERMS & CONDITIONS FOR QUALITY & QUARRIES OF STONE AGGREGATE & SAND

19.1 The Stone aggregate/stone shall be brought from quarries as approved by the Engineer-in-charge, as shown below against each or any other quarry. The materials shall however confirm to CPWD specifications.

Stone/Sand	From
Stone aggregate 40mm nominal size and above	Quarry at Jhansi
Stone aggregate 20mm nominal size and	Quarry at Jhansi

below	
Stone for soling	Quarry at Jhansi
Coarse sand of fineness modulus 2.5 to 3.5 and confirming to CPWD specification 2009 Vol.I & II with upto date correction slips.	Obtained from Kalpi/Hamirpur or any other quarry approved by the Engineer-in-charge
Fine sand of fineness modulus 1.2 to 1.6 and confirming to CPWD specification 2009 Vol.I & II with upto date correction slips.	Obtained from local or any other quarry approved by the Engineer-in-charge

20. The contractor shall provide approved type of supports for maintaining the bars in position and ensuring required spacing and correct cover of concrete to reinforcement as called for in the drawings. Spacer blocks of required shape and size, MS chairs and spacer bars shall be used in order to ensure accurate positioning of reinforcement. Spacer blocks shall be cast well in advance with approved proprietary pre-packed free flowing mortars (conbextra as manufactured by M/s Fosroc Chemicals India Ltd. Or approved equivalent) of high early strength. Blocks of polymer shall not be used as spacer blocks unless specially approved by the Engineer-in-Charge. Rate of item of steel reinforcement is inclusive of cost of such cover blocks.

22. **CONDITIONS FOR CEMENT:**

- 22.1 The contractor shall procure either Pozolona Portland cement (conforming to IS 1489 (part-I) in the work, from reputed manufactures of cement, having a production capacity of one million tonnes per annum or more such as A.C.C., Ultratech, J.P. Rewa, Vikram, Shri Cement, Birla Jute and Cement Corporation of India etc. Supply of cement shall be taken in 50 Kg bags, bearing manufacture's name and ISI marking. Samples of cement, arranged by the contractor, shall be taken by the Engineer-in-charge and got tested in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by the Contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the Contractor as his own cost within a week's time of written order from the Engineer-in-charge to do so. The cost of the tests shall be borne by the Contractor/department in the manner indicated below.

- a) By the contractor, if the results show that the test does not conform to relevant CPWD Specifications / BIS code or specification mentioned else where in the documents.
- b) By the department, if the results conforms to relevant CPWD Specifications / BIS code or specification mentioned else where in the documents.

- 22.2 The cement shall be brought at site in bulk supply of approximately 250 tonnes or as directed by the Engineer-in-Charge.
- 22.3 The cement godown of the capacity to store a minimum of 5000 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made. Double lock provision shall be made to lock the door of the cement godown. The keys of one lock shall remain with the Engineer-in-charge or his authorized representative and the key of the other lock shall remain with the contractor. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge at any time.
- 22.4 The contractor shall supply free of charge the cement required for testing.
- 22.5 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 also shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by the conditions laid therein.
- 22.6 Wet curing period shall be enhanced to a minimum of 10 days or its equivalent. In hot & arid regions, the minimum curing period shall be 14 days or its equivalent.

23. CONDITIONS FOR STEEL:

- 23.1 The contractor shall procure TMT bars of **Fe 500 D** grade from primary producers such as **SAIL or TISCO or RINL or JSPL or JSW** as approve by Ministry of Steel.
 - a. The TMT bars procured from primary producers shall conform to manufacture's specifications.
 - b. TMT bars procured from primary producers, the specifications shall meet the provisions of IS 1786 : 2008 pertaining to Fe 500 D grade of steel as specified in the tender.
- 23.2** The contractor shall have to obtain vouchers and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.
- 23.3** Samples shall also be taken and got tested by the Engineer-in-charge as per the provisions in this regard in the 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)I 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 of written orders from the Engineer-in-charge to do so.
- 23.4** The steel reinforcement shall be brought to the site in bulk supply of 100 tonnes or more or as directed by the Engineer-in-charge.
- 23.5** The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent distortion & 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.

23.6 For checking nominal mass, tensile strength, bend test, re-bend test etc. specimens of sufficient length shall be cut from each size of the bar at random at frequency not less than that specified below:

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

23.7 The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor/Department in the manner indicated below:

23.7.1 By the contractor, if the results show that the steel does not conform to relevant BIS codes.

23.7.2 By the department, if the results show that the steel conforms to relevant BIS codes.

23.8 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 the conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations recovery at the rate so prescribed shall be made. In case of excess consumption no adjustment need to be made.

23.9 The steel brought to the site and the steel remaining unused shall not be removed from site without the written permission of the engineer-in-charge

23.10 Steel bars brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.

23.11 In case the contractor brings surplus quantity of steel the same after completion of the work will be removed from the site by the contractor at his own cost after approval of the Engineer-in-Charge.

23.12 Reinforcement including authorised spacer bars and lappages shall be measured in length of different diameters as actually (not more than as specified in the drawing) used in the work nearest to a centimeter. Wastage and unauthorised overlaps shall not be measured.

23.13 Mixing of different type of steel/different grades of steel shall not be allowed in the same structural members as main reinforcement to satisfy clause 26.1 of IS:456.

23.14 Tolerances on Nominal Mass:-

Sl.	Nominal size mm	Tolerances on the Nominal
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No.		Mass, %age
1	Upto and including 10	-8%
2	Over 10 upto & including 16	-6%
3	Over 16	-4%

The steel having lesser weight after allowing permissible variation on minus side will be rejected.

- 23.15 For payment purpose, the average unit weight of reinforcement shall be calculated as follows:

To arrive at unit weight for the purpose of payment three random samples each of one metre length shall be collected for each dia. Of rebar for every consignment received at site. Actual weight of three specimens for each dia. shall be taken and average weight calculated and recorded. The average weight so arrived at shall be compared with the theoretical weight of that particular dia. of rebar. Actual or theoretical weight whichever less shall be considered for making payment for the consignment. However final payment shall be made on the basis of weighted average of all the consignment. The decision of the Engineer-in-charge as regard the random samples and average weight shall be final and binding on the contractor and no claim any kind shall be entertained in this regard.

- 23.16 The measurement of steel shall be as per relevant para of CPWD specifications. The contractor has to produce the copy of cash bills to the Engineer-in Charge or his representative as an when he brings the cement and steel to the site.

24. **ADDITIONAL CONDITIONS FOR REINFORCED CEMENT CONCRETE**

- 24.1 If the quantity of cement actually used in the work is found to be more than the theoretical quantity of cement including specified variation, nothing extra shall be payable to the contractor on this account. In the event of it being discovered that after the completion of the work, the quantity of cement used is less than the quantity ascertained as herein before provided (allowing variation on the minus side as stipulated in clause 42), the cost of quantity of cement so less used shall be recovered from the contractor at the rate as specified in schedule 'F'. Decision of the Engineer-in-Charge in regard to the quantity of cement which should have been actually used as per the schedule and recovery at the rate specified shall be final and binding on the contractor.
- 24.2 For non-scheduled items, the decision of the Superintending Engineer regarding theoretical quantity of the cement which should have been actually used shall be final and binding on the contractor.
- 24.3 Cement register for the cement shall be maintained at site.
- 24.4 The account of daily receipts and issue of cement shall be maintained in the register by the authorized representative of the Engineer-in-Charge and signed daily by the contractor or his authorized agent.
- 24.5 The RCC work shall be done with Design Mix concrete unless otherwise specified. In the nomenclature of items wherever letter M has been indicated, the same shall imply for the design Mix concrete. For the nominal Mix in RCC, CPWD specifications

shall be followed. The Design Mix Concrete will be designed based on the principles given in IS: 456, 10262 & SP 23. The contractor shall design mixes for each class of concrete indicating that the concrete ingredient and proportions will result in concrete Mix meeting requirements specified. In case of use of admixture and/or white cement, the mix shall be designed with these ingredients as well. The specifications mentioned herein below shall be followed for design Mix Concrete.

24.6 DESIGN MIX CONCRETE: The contractor shall be required to submit two separate design mix of concrete with and without use of plasticizers, separately. The decision of the engineer-in-charge to specify the design mix of concrete based on above shall be final.

24.6.1 Coarse aggregate: As per CPWD Specifications

24.6.2 Fine Aggregate: As per CPWD Specifications.

24.6.3 Water: It shall conform to requirements laid down in IS:456 : 2000 and CPWD specifications.

24.6.4 Cement: Cement arranged by the contractor will be PPC (bag) conforming to IS: 1489 (Part-I). If for any reasons, cement of higher grade brought to site by contractor, the issue, payments rate as well as the quantity to be used in the design mix concrete will remain unchanged.

24.6.5 Slump: Design slump should be clearly specified in the mix design.

24.6.6 The record of white cement shall be kept in the same proforma and same manner as applicable for gray cement.

24.7 **Admixture:**-- Admixtures shall not be used without approval of Engineer-in-charge. Wherever required, admixtures of approved quality shall be mixed with concrete as specified. The admixtures shall conform to IS: 9103. The chlorides content in the admixture shall satisfy the requirements of BS: 5075. The total amount of chlorides admixture mixed concrete shall also satisfy the requirements of IS : 456. The contractor shall not be paid anything extra for admixture required for achieving desired workability without any change in specified water cement ratio for RCC/CC work.

24.8 Grade of Concrete : The compressive strength of various grades of concrete shall to be given as below:

	Grade designation	Compressive strength on 15 cm cubes min. 7 days (N/mm ²)	Specified characteristic compressive strength at 28 days (N/mm ²)	Minimum cement quantity (Kg. per cum. Mtr.)	Maximum water cement ratio
i	M 25	As per design	25	330	0.50
ii	M 30	As per design	30	340	0.45
iii	M 35	As per design	35	350	0.45
iv	M 40	As per design	40	360	0.40

Note:

- i) In the designation of a concrete mix letter M refers to the mix and number to the specified characteristic compressive strength of 15 cm x 15 cm x 15 cm – cube 28 days expressed in N/mm^2
- ii) The minimum/maximum cement content for design mix concrete shall be maintained as per the quantity mentioned above. Even in the case where the quantity of cement required is higher than the minimum specified above to achieve desired strength based on an approved mix design nothing extra shall become payable to the contractor.
- iii) Design slump has to be constantly monitored and maintained during placing of concrete through slump tests carried out as per CPWD Specifications 2009 Vol.I & II with upto date correction slips, and records maintained accordingly.

24.9 The concrete mix design/laboratory tests with and without admixture shall be got done by contractor at his own cost and will be carried out by the contractor through the Institute Laboratory, IIT Kanpur:

The various ingredients for mix design / laboratory tests shall be sent to the test houses through the Engineer-in-Charge.

24.10 The contractor shall submit the mix design report from any of above approved laboratory for approval of Engineer-in-Charge within 30 days from the date of issue of letter of acceptance of the tender. No concreting shall be done until the mix design is approved by the Engineer-in-charge.

24.11 The minimum cement permitted for RCC work of grade M25 is 330 kg/cum. If required extra cement may be used by the contractor to get the desired quality of concrete, which shall be paid extra. But, if the cement consumption increase beyond 360 kg/cum of the concrete, for M25 grade concrete, the payment for extra cement shall be restricted as concrete with the cement content of 360 kg/cum of concrete.

24.12 **WATER CEMENT RATIO:-** Under no curcuma stance shall be water cement ratio be increased beyond the permissible limit.

24.13 APPROVAL OF DESIGN MIX

The mix design for a specified grade of concrete shall be done for a target mean compressive strength $T_{ck} = F_{ck} + 1.65s$.

Where F_{ck} = Characteristic compressive strength of 28 days

s = Standard deviation which depends on degree of quality control

The degree of quality control for this work is "good" for which the standard deviation (s) obtained for different grades of concrete shall be as bellows:

Grade of Concrete	For "Good" quality of control
M 25	4.00
M 30	5.00
M 35	5.00
M 40	5.00

Of the six specimen of each set three shall be tested at seven days and remaining three at 28 days. The preliminary tests at seven days are intended only to indicate the strength to be attained at 28 days

24.13.1 All cost of mix designing and testing connected therewith including charges payable to the laboratory shall be borne by the contractor.

24.14 BATCHING

The batching plant shall conform to IS:4925. It shall have the facilities of presetting the quantity to be weighed with automatic cutoff when the same is achieved. Concreting at places may have to be resorted to through concrete pump for which nothing extra shall be paid.

All other operations in concreting work like Mixing, Slump, Laying Placing of concrete, compaction curing etc. not mentioned in this particular specification for Design Mix of concrete shall be as per CPWD specification.

24.15 WORK STRENGTH TEST

TEST SPECIMEN

Work strength test shall be conducted in accordance with IS: 456 on random sampling. Each test shall be conducted on six specimen, three of which shall be tested at 7 days and remaining three at 28 days.

TEST RESULTS OF SAMPLE

The test result of the sample shall be the average of the strength of three specimen. The individual variation shall not be more than 15 percent of the average. If more the test results of the sample are invalid. 90% of the total test shall be done at the laboratory established at site by contractor and remaining 10% in the laboratory of CPWD or in any other laboratory as directed by the Engineer-in-Charge.

Lot size

The minimum frequency of sampling of concrete of each grade shall be according to the following:-

Quantity of concrete in the work cubic metre per day	Number of samples.
1-5	1
6-15	2
16-30	3
31-50	4
51 & above	4 + one additional sample for additional 50 cubic metre or part thereof.

Note: At least one sample shall be taken from each shift.

24.16 STANDARDS OF ACCEPTANCE

- (i) In case the test result of all the samples are above the characteristic compressive strength, the concrete shall be accepted.
 - (ii) In case the test result of one or more samples fails to meet the requirement (i) above it shall be accepted if both the following conditions are met:
 - a) Any individual test result is not less than $(F_{ck} - 4) \text{ N/mm}^2$
 - b) The mean of test result from any grade of four consecutive samples is more than $(F_{ck} + 4) \text{ N/mm}^2$.
 - (iii) Concrete of each grade shall be assessed separately.
 - (iv) Concrete is liable to be rejected if it is porous or honeycombed, its placing has been interrupted without providing a proper construction joint the reinforcement has been displaced beyond the tolerances specified, or construction tolerances have not been met. However the hardened concrete may be accepted after carrying out suitable remedial measures to the satisfaction of the Engineer-in-Charge for which nothing extra is payable to the contractor.
- 24.17 Only MS centering/shuttering and scaffolding material unless & otherwise specified shall be used for all RCC. Work to give an even finish of concrete surface. However marine ply shuttering in exceptional cases as per site requirement may be used on specific request from contractor on approval by the Engineer-in-Charge.
- 24.18 Nothing extra shall be paid for the centering and shuttering circular in shape wherever the form work is having a mean radius exceeding 6 m in plan.
- 24.19 In order to keep the floor finish as per architectural drawings and to provide required thickness of the flooring as per specifications the level of top surface of RCC shall be accordingly adjusted at the time, of its centering shuttering and casting for which nothing extra shall be paid to the contractor.
- 24.20 Measurement – As per CPWD specifications.
- 24.21 Tolerances – As per CPWD specifications

24.22 Rate

- i. The rate includes the cost of materials and labour involved in all the operations described above except for the cost of centering, shuttering & reinforcement which will be paid separately
- ii. In case of actual average compressive strength being less than specified strength which shall be governed by para "Standard of Acceptance" as above the rate payable shall be worked out accordingly on prorata basis.
- iii. In case of rejection of concrete on account of unacceptable compressive strength governed by para "Standard of Acceptance" as above the work for which samples have failed shall be redone at the cost of contractors. However the Engineer-in-Charge may order for additional test (like cutting cores, ultrasonic pulse velocity test, load tests on structure or part of structure etc.) to be carried out at the cost of contractor to ascertain if the portion of structure wherein concrete represented by the sample has been used, can be retained on the basis of results of individual or combination of these tests. The contractor shall take remedial measures necessary to retain the structure as approved by the Engineer-in-Charge without any extra cost. However for payment the basis

of rate payable to contractor shall be governed by the 28 days cube test results and reduced rates shall be regulated in accordance with para 3.24.2

- iv. Necessary arrangements shall be made for field tests and all required equipment's shall be arrange by establishing field lab by the Agency for mandatory tests of the materials as specified in CPWD specifications or as per direction of Engineer-in-Charge no extra shall be paid on this account.

24.23 RCC WORK (ORDINARY)

- i. Water cement ratio for ordinary RCC work shall not be more than 0.50. Contractor shall use concrete mixture of proper design and arrangement for measuring water for mixing of concrete.
- ii. In respect of all projected slabs at all levels including cantilever canopy the payment for the RCC work shall be made under the item RCC slabs. The payment for shuttering at the edges shall be made under item of centering and shuttering of RCC slabs. Nothing extra shall be paid for the side shuttering at the edge of these projected balconies and projected varandah slabs.

24.24 REINFORCEMENT:

The rate of reinforcement in RCC work includes all operations including straightening cutting, welding, binding with annealed steel wire or welding and placing in position at all the floors with all leads and lift complete.

- 24.25 Hacking of surfaces in beams, slabs, columns, fins, facias, chajjas, etc shall be done while the concrete is green as soon as possible after the removal of shuttering except in the exposed concrete work.

24.26 SHUTTERING:

All centering and form work shall be made of steel, rigid and of robust construction. All vertical props shall be cut square at both ends and shall rest on double wages, placed on continuous horizontal runners on firm natural soil. Resting of props or runners on made up soil shall not be permitted on any account. All members of the form work shall be closely fixed without any gap between them so as to safeguard against any settlement or displacement of shuttering at the time of concreting.

24.27 PAYMENT / MEASUREMENT

Only surfaces, which are finally required to be maintained exposed/fair faced as per drawings, shall be measured and paid for under respective item. Nothing extra shall be paid for forming beads, fillets, throats, chamfers and grooves not exceeding 100mm x 25mm unless otherwise specified.

- i. All other operations in concreting work like Mixing, Slump, Laying placing of concrete, compaction curing etc. not mentioned in this particular specification for Design Mix of concrete shall be as per CPWD specification.
- ii. In order to keep the floor finish as per architectural drawing and to provide required thickness of the flooring as per specifications the level of top surface of RCC shall be accordingly adjusted at the time, of its centering shuttering and casting for which nothing extra shall be paid to the

- contractor.
- iii. Any cement slurry added over base surface for continuation of concreting for better bond is deemed to have been built in the items and nothing extra shall be payable for extra cement considered in consumption on this account.

25. ADDITIONAL CONDITIONS FOR STRUCTURAL STEEL FOR TRUSSES

The contractor shall procure structural mild steel section as per requirement of design conforming to IS : 2062 – 1999 (Fifth Revision) grade Fe 410-'O' of weldable quality from main producers such as SAIL, TISCO, RINL, Jindal as approved by the Ministry of Steel. The steel tubes for structural purposes as per requirement of design will conform to IS:1161 – 1998 (Fourth Revision) manufactured by highly reputed manufacturers approved by Engineer-in-Charge.

The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work. Samples shall also be taken and tested by the Engineer-in-charge as per the provisions in this regard in the relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to BIS codes, the same shall stand rejected and shall be removed from the site of work by the contractor at his cost within a week's time of written orders from the Engineer-in-charge.

All expenses relating to testing of steel including laboratory charges shall be borne by the contractor.

SPECIFICATIONS FOR ALUMINIUM DOOR, WINDOW, VENTILATOR WORKS ETC.

1.0 Extent and intent :

The work shall be carried out through an approved specialist contractor who shall furnish all materials, labour, accessories equipment tool and plant and incidental required for providing and installing anodised aluminium doors, windows, claddings, louvers and other items as called for in the drawings. The drawings and specifications cover the major requirement only. The supplying of additional fastenings, accessory features and other items mentioned specifically herein but which are necessary to make a complete installation shall be a part of the contract.

1.1 General :

Aluminium doors, windows, etc. shall be of sizes, section details as shown on the drawings. The details shown on the drawings location gives generally the sizes of the components parts and general standards. These may be varied slightly to suit the standards adopted by the manufacturer. Before proceeding with any manufacturing the contractor shall prepare and submit complete manufacturing and installation drawings for approval of the Engineer-in-Charge and no work shall be performed until the approval of these drawings is obtained.

1.2 Shop Drawings:

The contractor shall submit the shop drawings of doors, windows, louvers claddings and other aluminium work, based on architectural drawings to the Engineer-in-Charge for his approval. The drawings shall show full size sections of doors, windows etc. thickness of metal (i.e. wall thickness) details of construction, sub frame/rough ground profile anchoring details, hardware as well as connection of windows doors, and other metal work to adjacent work. Samples of all joints and methods of fastening and joining shall be submitted to the Engineer-in-Charge for approval well in advance of commencing the work.

1.3 Samples:

Samples of doors, windows, louvers etc. shall be fabricated, assembled and submitted to the Engineer-in-Charge for his approval. They shall be of sizes, types etc. as decided by Engineer-in-Charge. All samples shall be provided at the cost of the contractor.

1.4 Sections:

Aluminium doors and windows shall be fabricated from extruded section of profiles as detailed on drawings. The sections shall be extruded by the manufacturers approved by the Engineer-in-Charge. The aluminium extruded section shall conform to IS designation 63400-WP(HV9WP old designation) with chemical composition and technical properties as per IS: 733 and IS: 1285. The permissible dimensional tolerance of the extruded sections shall be such as not to impair the proper and smooth function/operation and appearance of doors and windows.

1.5 Fabrication:

Doors, windows etc. shall be fabricated to sizes as shown at factory and shall be of section, sizes combinations and details as shown in the Architectural drawings. All doors, windows etc. shall have mechanical joints. The joints shall be designed to withstand a wind load of 150 kgs per sqm. The design shall also ensure that the maximum deflection of any member shall not exceed 1/175 of the span of the member. All members shall be accurately machined and fitted to form hairline joints prior to assembly. The joint and accessories such as cleats, brackets, etc. shall be of such materials as not to cause any bimetallic action, the design of the joints and accessories shall be such that the accessories are fully concealed. The fabrication of doors, windows etc. shall be done in suitable sections to facilitate easy transportation, handling and installation. Adequate provision shall be made in the door and windows members for anchoring to support and fixing of hardware and other fixtures as approved by the Engineer-in-Charge.

1.6 Anodising:

All aluminum sections shall be anodised as per IS: 7088 and the required colour as specified in the item as per IS: 1868 grading as specified in items schedule after cuttings the member to the required & requisite sizes before the final assembly. Anodising to specified grade with minimum average thickness of 15 microns when measured as per IS:612. The anodic coating shall be properly sealed by steams or in boiling water or cold sealing process as per IS: 1856/IS:6057. Polythene tape protection shall be applied on the anodised section before they are brought to site. All care shall be taken to ensure surface protection during transportation and storage at site and installation. The tape protection shall be removed on installation. The sample will be tested in the approved laboratory and cost of samples, cost of testing, shall be borne by the contractor.

1.7 Powder Coating

The powder used for powder coating shall be polyester powder made by Berger or Jenson & Nicholson or equivalent. The thickness of powder coating shall not be less than 50 micron at any point measured with micron-meter.

1.8 Protection of Finish:

All aluminium members shall be wrapped with approved self adhesive non-staining PVC tapes.

1.9 Handing and Stacking:

1.9.1 Fabricated materials shall be crated in an approved manner to protect the material against any damage during transportation. The loading and unloading shall be carried out with utmost care on receipt of materials at site, they shall be carefully examined to detect any damaged pieces. Arrangements shall be made for expeditious replacement of damaged pieces/parts. Materials found to be acceptable on inspections shall be repacked in crates and stored safely.

- 1.9.2 In the case of composite windows, and doors the different units are to be assembled first. The assembled composite units should be checked for line, level and plumb before final fixing is done. Units may be serial numbered and identified as how to be assembled in their final location if situation so warrants.
- 1.9.3 Where aluminum comes into contact with masonry brickwork, concrete planter or dissimilar metals, it shall be coated with approved insulation lacquer paint or plastic tape to ensure that electro-chemical corrosion is avoided. Insulation materials shall be trimmed off to a clear flush line on completion.

1.9.4 SILICON SEALANT:

The peripheral gaps between plastered faces /RCC and aluminium sections shall be sealed both from inside and outside to make the windows watertight. Gaps upto 10 mm between the peripheral aluminium member and masonry/RCC/Stone shall be sealed by inserting Backer Rod manufactured by HT TROPLAST or Supreme Industries and by application of weather silicon/sealant of DOW Corning/GE Silicon make.

- 1.9.5 The contractor shall be responsible for doors, windows etc, being set straight plumb, level and for their satisfactory operation after fixing is complete.

1.10 Installation:

- 1.10.1 Just prior to installation the doors, windows etc. shall be uncrated and stacked on edge on level bearers and supported evenly. The frame shall be fixed into position true to line and level using adequate number of expansion machine bolts, anchor fasteners of approved size and manufacture and in an approved manner. The holes in concrete/masonry members for housing anchor bolts shall be drilled with an electrical drill.
- 1.10.2 The doors, windows assembled as shown on drawings shall be placed in correct final position in this opening and marks made on concrete members at jambs, sills and heads against the holes provided in frames for anchoring. The frame shall then be removed from the opening and laid aside. Neat holes with parallel sides of appropriate size shall then be drilled in the concrete members with an electric drill at the marking to house the expansion bolts. The expansion bolts shall then be inserted in the holes, struck with a light hammer till the nut is forced into the anchor. The frame shall then be placed in final position in the opening and anchored to the support through cadmium plated machine screws of required size threaded to expansion bolts. The frame shall be set in the opening by using wooden wedges at supports and be plumbed in position. The wedges shall invariably be placed at meeting points of glazing bars and frames.

1.11 Neoprene Gaskets:

The contractor shall provide and install Neoprene Gaskets of approved size and profile at all locations as shown and as called for to render the doors windows etc. absolutely air tight and weather tight. The contractor shall produce samples of the gaskets for approval and procure after approval only.

1.12 Fittings:

Hinges, stays, handles, tower bolts, locks and other fittings shall be in quality and manufacturer as approved by the Engineer-in-Charge.

1.13 Manufacturer's Attendance:

The manufacturer immediately prior to the commencement of glazing shall adjust and set all windows and doors and accept responsibility for the satisfactory working of the opening frames.

1.14 Details of Test:

1.14.1 The various tests on aluminium section shall be conducted in accordance with the relevant IS codes.

1.14.2 The minimum number of tests for anodic coating and corrosion resistance shall be as given below:

Sl. No.	Details	No. of Tests
(i)	Doors, windows & ventilators	5% of Nos. manufactured

1.14.3 The sample of major member of each unit of doors/windows shall be selected at random by Engineer-in-Charge such as that all the aluminium section shall be got tested.

1.14.4 The cost of samples, carriage of the samples and testing charges if any shall be borne by the contractor.

1.15 Acceptance Criteria:

The aluminium section shall be conform to the provisions of the relevant item in the schedule of quantities. For payment purpose only actual weight of sections shall be taken into account. If however, the sectional weight of any aluminium section is higher than the permissible variation then the weight payable shall be restricted to the weight of the section including permissible variation.

1.16 Measurement:

Payment by weight shall be made for aluminium sections including beading only and all fixing angles, fittings, and fixtures such as handles and hinges etc. shall not be included in the weight to be paid.

The following shall NOT be measured separately and shall be deemed to be included in the rates quoted.

S.N.	ALUMINIUM WORKS
1.	All plugs, screws, nails, pins, keys, glazing clips and such other fixing accessories.
2.	Mild steel holdfast welded or screwed to frame as shown embedding, anchoring the same in concrete etc. in supports walls/ concrete members.
3.	Expansion bolts/Rawl bolts and machine screws for fixing to supports as approved by the Engineer.
4.	All Rebates and profiles etc. as shown.
5.	Filling and finishing neat gaps around frames with approved mastic.

6.	Work at all heights, depths, locations and all shapes.
7.	Fixing of all hardware, unless other wise mentioned.
8.	Seasoning of all wood before use. Application of approved wood preservative on the wood surfaces in contact with masonry and/or concrete work.
9.	Application of silicon based sealant all around aluminium frames.
10.	The contractor shall review the aluminium sections and assembly system shown in the tender drawings, which are indicative only. The contractor shall submit before execution , a detailed system in the form of shop drawings giving full sectional details of the assembly system, weight of each Aluminium section per metre length, coupling members, method of fixing etc. duly supported with specifications etc. The contractor shall also give all mechanical properties of sections e.g. perimeters, area, moments of inertia about bending axes, principal axes etc. They shall also supply detailed calculations for maximum stresses developed in the sections and also maximum deflections under stipulated wind loads. This system, after approval of the Engineer, shall be binding on the contractor and nothing extra shall be paid, on account of non-availability of sections or any other reason, whatsoever, during the currency of the contract. Similarly proportionate deductions shall be made for using sections of lesser weight than specified in the approved system.
11.	The contractor is advised that it is entirely his responsibility to protect the Aluminium/ Steel sections of door and window from staining and damage by the plaster, other civil finishes etc. above using non-staining protection tapes. There shall not be any extra payment for this protection and all activities and materials required are deemed to be included in the contractor's rates of the respective item.
12.	All testing of individual materials and the installed door and window system with respect to wind pressure and ingress of water.

1.17 Guarantee Bond:

All aluminium work shall carry two years guarantee to be reckoned from the date after the expiry of maintenance period prescribed in the contract of the work against structural instability, leakage, unsound materials and workmanship and defective anodising, colouring, sealing and finishing as per guarantee bond attached in this tender document.

Two years guarantee in prescribed proforma attached must be given by the specialized firm, which shall be counter signed by the contractor in token of his over all responsibility. 10% (Ten Percent) of the cost of these items would be retained as guarantee to the performance of the work done. The guarantee against this item of work shall be in addition to the security deposit mentioned else where in the contract form. If any defects or deficiencies are noticed during the guarantee period the same shall be rectified by the contractor within seven days of issue of the written notice by the Engineer-in-charge, failing which the defects/deficiencies would be got removed by the Engineer-in-charge from another agency at the risk

and cost of the contractor. However this amount of the guarantee can be released in full, if bank guarantee of equivalent amount for the required period is produced and deposited with the department.

1.18 Rates :

1.18.1 The rates of the item shall include the cost of materials and labour required in all the above operation except cost of providing and fixing silicon sealant elaborated in para 1.9.4 above.

GUARANTEE

TO BE EXECUTED BY THE CONTRACTORS FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER PROOFING WORKS

The Agreement made this _____ day of _____ Two thousand and _____ between _____ son of _____ (hereinafter called the Guarantor of the one part) and the PRESIDENT OF INDIA (hereinafter called the Government of the other part).

WHEREAS THIS agreement is supplementary to a contract (hereinafter called the contract) dated _____ and made between the GUARANTOR OF THE ONE part and the Government of the other part, whereby the contractor, inter alia, undertook to render the buildings and structures in the contract recited completely water and leak-proof.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak-proof for ten years from the date after the maintenance period prescribed in the contract.

NOW THE GUARANTOR hereby guarantees that water proofing treatment given 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 maintenance period prescribed in the contract.

Provided that the Guarantor will not be responsible for the leakage caused by earthquake or structural defects or misuse of roof or alteration and for such purpose:

- (a) Misuse of roof shall mean any operation which will damage proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof.
- (b) Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts.
- (c) The decision of the Engineer-in –charge with regard to cause of leakage/seepage 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 at his cost and shall commence the work for the 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 done by the department by some other agency contractor at the GUARANTOR's risk and cost. The decision of the Engineer-in-charge as to the cost payable by the Guarantor shall be final and binding.

That if guarantor fails to make good all defects or commits breach thereunder then the Guarantor will indemnify the principal and his successors against all loss, damage, cost expense 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 the parties.

IN WITNESS WHEREOF these presents have been executed by the Obliger _____ and by _____ and for and on behalf of the PRESIDENT OF INDIA on the day, month and year first above written SIGNED, SEALED AND delivered by OBLIGOR in the presence of :

1.
2.

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

1.
2.

ADDITIONAL TERMS & CONDITIONS FOR WATER PROOFING TREATMENT

The contractor shall associate himself with the specialized firm, to be approved by the Engineer-in-charge in writing, for water proofing treatment for basement/lower ground floor, underground tank and on roofs. Guarantee in the prescribed proforma attached with tender document shall be given by the specialized firm, for a period of ten years from the date after the maintenance period prescribed in the contract, which shall be counter signed by the contractor as token of overall responsibility. In addition 10% (ten percent) of the cost of water proofing items shall be retained as guarantee to watch the performance of the work done. However half of this retained amount will be released after five years, if the performance of the work done is found satisfactory. If however any defect is noticed during the guarantee period, it shall be rectified by the contractor within seven days of intimation. In case it is not attended to, the same will be got done by another agency at the risk and cost of the contractor. This guarantee deposit can however be released in full if a bank guarantee of equivalent amount for 10 years is produced and deposited with the department by the contractor.

S.N	ROOFING AND WATER PROOFING
	The following shall NOT be measured separately and shall be deemed to be included in the rates quoted.
1.	Preparation of surface for laying of insulation and Waterproofing treatment as required by the specialist Contractors. The surface should be cleared of all loose mortar, dust and waste by hacking and cleaning with wire brush.
2.	All cutting, dressing, trimming and waste including cutting to required shapes.
3.	Work in narrow widths, to required profiles and at all locations as shown.
4.	Work at all heights and depths.
5.	Testing of treated areas in approved manner for performance of the treatment.
6.	Treating all openings and around all pipes or such, passing through.
7.	All protection to the water-proofing surfaces to prevent damage by other trades.
8.	The treatment shall carry a guarantee of 10 years, which shall be given by the water - proofing specialist contractor and counter-signed by the main contractor. The main contractor shall be fully responsible for the performance of the water-proofing treatment.
9.	Minor modifications in the contract specifications of the treatment, may be accepted according to the method of the treatment of the respective water-proofing specialist contractor.

FORM OF PERFORMANCE SECURITY

BANK GUARANTEE BOND

In consideration of the President of India (hereinafter called " the Government") having agreed under the terms and conditions of agreement No. _____ dated _____ made between _____ and _____ (hereinafter called "the contractor(s)") _____ for the work _____ (hereinafter called "the said agreement") having agreed to production of a 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, we

_____ (hereinafter referred to as "the Bank") hereby undertake to pay to the

(Indicate the name of the Bank)

Director, IIT Kanpur an amount not exceeding Rs. _____ (Rs. _____ only) on demand by the Government.

2. we _____ do hereby undertake to pay the amounts due and payable

(Indicate the name of the Bank)

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 thereunder and the contractor(s) shall have no claim against us for making such payment.

4. we _____ further agree that the guarantee herein contained shall

(Indicate the name of the Bank)

remain in full force and effect during the period that would be taken for 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 certified that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee.

5. we _____ further agree with the Institute that the Institute

(Indicate the name of
the Bank)

shall have the fullest liberty without our consent and without effecting 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 forebear 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 revoke this guarantee
_____ except with

(Indicate the name of
the Bank)

the previous consent of the Government in writing.

8. This guarantee shall be valid up to _____, unless extended on demand by Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. _____ (Rs. _____ 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)

To,
The Superintending Engineer
IIT Kanpur

**Sub: Construction of room on terrace of North-West block of faculty building
with construction of Lift well in place of spiral fire escape.**

Dear Sir,

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

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

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

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

Yours faithfully

Authorized Signatory
Seal of firm

To be signed by the bidder and authorized signatory on behalf of IIT Kanpur

INTEGRITY AGREEMENT

This Integrity Agreement is made at _____ on this _____ day of 2019/20.

BETWEEN

The Director IIT Kanpur represented through the Superintending Engineer, **IWD, IIT, KANPUR** (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 referred 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:31/Civil/ D2/2019-20/02) (hereafter referred to as "Tender / Bid") and intends to award, under laid down Organization procedure, contract for **"Construction of room on terrace of North-West block of faculty building with construction of Lift well in place of spiral fire escape"**

herein after referred to as the "Contract".

AND WHEREAS the principal Owner values full compliance with all relevant laws Of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"). The terms and condition of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties. NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1 : Commitment of the Principal /Owner

- 1) The principal/Owner commits itself to take all measure necessary to prevent corruption and to observe the following principles:
 - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the tender, or the execution of the

contract, demand, take a promise for or accept , for self or third person, any material or immaterial benefit which the person is not legally entitled to.

- (b) The Principal/Owner will, during the tender process, treat all bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process of 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.
- 2) If the principal/owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act. 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures .

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

- 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) commit himself to take measures necessary to prevent corruption, He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.

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

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the principle/Owner under law or the Contract or its established policies and laid down procedures, the Principle/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 Principal/Owner's absolute right:

- 1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the contract, if already executed or exclude the Bidder/contractor from contract, award process. 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/determined the contract or has accrued the right to terminate/determine the contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitute corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4 : Previous Transgression

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

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

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be

responsible for any violation(s) of the principles laid down in this Agreement/Pact by any of its subcontractor's sub-vendors.

- 2) The Principal/Owner will enter into pacts on identical terms as this one with all bidders and Contactors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit the duly signed Pact between the Principal/Owner and the Bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6 : Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contract/Vendor 04 Months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the contract has been awarded.

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

Article 7 : Other Provision

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

Article 8 : LEGAL AND PRIOR RIGHTS

All right 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 provision 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 presences of following witness:

.....
(For and behalf of Principle/Owner)

.....
(For and on behalf of Bidder/Contractor)

WITNESSES:

1.
(Signature, name and address)

2.
(Signature, name and address)

Place:
Dated: