अंतर–विश्वविद्यालय केंद्र : खगोलविज्ञान और खगोलभौतिकी IUCAA

Inter-University Centre for Astronomy and Astrophysics

An Autonomous Institution of the University Grants Commission

Tender for

CONSTRUCTION OF THE PROPOSED ACADEMIC AND RESEARCH CENTER – IUCAA 2

AT S. NO. 25/1/1/1/1/2, AUNDH, IUCAA CAMPUS, PUNE

Technical Bid

Inter – University Centre for Astronomy and Astrophysics (IUCAA) Pune
Post bag.4, Ganeshkhind, Savitribai Phule Pune University Campus, Pune - 411 007.
Tel. (020) 25604100 Fax: (020) 25604699

INDEX

Sr. No.	Section / Form	Particulars	Page
1.	--	Contact Details of the Bidder	3
2.	--	Copy of Tender Advertisement	4
3.	--	Important milestones and contact information	5
4.	Section – I	Tender Information	6
5.	Section – II	Commercial Terms	7-18
6.	Section – III	Scope of Work and Site Condition	19
7.	Section – IV	General rules and directions for the guidance of the bidders	20-21
8.	Section-V	Conditions of the Contract	22-44
9.	Section-VI	Additional General Conditions of the Contract and Specifications	45-66
10.	Section-VII	List of Approved Makes	67-68
11.	Section-VIII	Special Conditions of the Contract	69-72
12.	Section-IX	Basic Rates of the Material	73
13.	Section-X	Quality Control Tests, Frequencies and Additional Specifications	74-84
14.	Form - I	Technical Bid Form	85
15.	Form - II	Details of completed works	88
16.	Form - III	Details of ongoing works	89
17.	Form - IV	Waterproofing guarantee Bond	90
18.	Form - V	Undertaking / Acceptance	91
19.	Form - VI	Declaration Form	92
20.	Form - VII	EMD Refund Request Form	93
21.	Form – VIII	Articles of Agreement	94-97
22.	--	Drawings have been uploaded along with this tender document on CPP portal	--

Contact Details of the Bidder for

CONSTRUCTION OF THE PROPOSED ACADEMIC AND RESEARCH CENTER – IUCAA 2, AT S. NO. 25/1/1/1/1/2, AUNDH, IUCAA CAMPUS, PUNE.

A. Name of Vendor / Firm / Company _____

Postal Address _____

Telephone Off. _____

Telex / Fax _____

Email ID _____

Signature & seal of the Bidder

Name of the signatory:

Designation:

Date: Place:

Copy of Tender Advertisement

(Tenders Published on Web Portals)

The Estate Manager, IUCAA, on behalf of the Director, Inter-University Centre for Astronomy & Astrophysics, Savitribai Phule Pune University Campus, Ganeshkhind, Pune – 411007, invites technical & financial bids from reputed vendors / bidders for "Construction of Proposed Academic and Research Centre-IUCAA 2, at S. No. 25/1/1/1/1/2, Aundh, IUCAA, Campus, Pune."

Interested parties may view and download the tender document from the Government Central Procurement Portal http://eprocure.gov.in/eprocure/app . It is also available on IUCAA's website at https://www.iucaa.in/tenders

IUCAA reserves the right to reject any or all of the tenders without assigning any reason.

Estate Manager, IUCAA

IMPORTANT MILESTONES AND CONTACT INFORMATION

1.	Date of commencement	8th (Eighth) day after the letter of intent is received by the contractor of start the work.
2.	Date of completion	24 (Twenty-four) calendar months from the 8th day of receipt work order (including monsoon season).
3.	Defects liability Period	24 (Twenty-four) calendar months from the date of virtual Completion.
4.	Period of final measurements	Thirty days from the date of submission of Final bill with all necessary papers.
5.	The Interim Certificate / Running Bill Value	Minimum assessed bill value should not be less then Rupees One Crore.
6.	Period of Honoring Certificate	Thirty days from the issue of architect certificate.
7.	Earnest money Deposit (EMD)	Rs. 44,00,000.00 (Rs. Forty-Four Lakhs only).
8.	Security Deposit (SD)	Total security deposit, 5% of accepted Tender amount. The EMD will be converted into Security Deposit and balance amount will be recovered from the first 4 RA bills in equal installments. The SD will be released after completion of the all contractual obligations including Defect Liability Period + 60 days.
9.	Performance Guarantee (PG)	The PG will be 3% of the accepted tender value. The same has to submitted within 21 days from the award of contract / letter of Intent. The PG will be released after completion of all contractual obligations including Defect Liability Period + 60 days.
10.	Contact information of IUCAA representative for visit to site, technical information/clarification, etc.	Mr. Nitin Ohol Estate Manager, IUCAA Tel. 020-25604334, Email: nitin_ohol@iucaa.in

SECTION – I

Tender Information

Inter-University Centre for Astronomy and Astrophysics (IUCAA), Post Bag 4, Ganeshkhind, Savitribai Phule Pune University Campus, Pune 411 007, invites tenders in two-bid system, i.e., "Technical Bid" and "Financial Bid" from reputed vendors for "Construction of Proposed Academic and Research Centre-IUCAA 2, at S.No**.** 25/1/1/1/1/2, Aundh, IUCAA, Campus, Pune."

Tender available on CPPP	: 26/09/2022 at 1100 hrs.
Submission of questionnaire for Pre-Bid Meeting	: 07/10/2022 up to 1100 hrs
Pre-Bid Meeting	: 11/10/2022 at 1100 hrs.
Closing date & time for receipt of tender	: 03/11/2022 at 1100 hrs.
Tender opening date & time	: 04/11/2022 at 1100 hrs.
Place of tender opening	: IUCAA's office
Earnest Money Deposit (EMD)	: Rs.44,00,000/- (Rs. Forty-Four Lacs Only)

1) Bidders shall ensure that their tenders, complete in all respects, are uploaded at https://eprocure.gov.in/eprocure/app on or before the closing date and time indicated as above.
2) EMD should be paid through **NEFT/RTGS** only. Photo copy of transaction ID or UTR no. should be uploaded along with technical bid. Micro and Small Enterprises (MSEs) are provided tender documents free of cost and are exempted from payment of earnest money, subject to furnishing of relevant valid certificate for claiming exemption.
3) Tender fees shall not be applicable for tender documents downloaded by the bidder. (In order to promote wider participation and ease of bidding, no cost of tender document will be charged for tender documents downloaded or uploaded on CPPP by the bidder)
4) The Minimum turnover of the bidder shall not be less than Rs.20 Crores (Indian Rupees Twenty Crores only) per annum for a minimum of three years out of the last five financial years, i.e. 2017-2018, 2018-2019, 2019-2020, 2020-2021and 2012-2022.
5) In the event of any of the above-mentioned dates being declared as a holiday / closed day for IUCAA, the tenders will be received/opened on the next working day at the appointed time.
6) The Estate Manager, IUCAA, Pune - 411007 on behalf of IUCAA reserves the right to postpone the date of opening of tender without assigning any reason thereof.
7) **The bidder must have their Head Office or Branch Office at Pune for providing effective and efficient services at least for last 10 calendar years (with proof attached) failing which their tender will be rejected.**
8) Technical Bid consists of all documents mentioned in the Technical Bid form along with EMD. Financial Bid consists of the prices and for all Commercial Terms and Conditions. A tender in which any of the prescribed condition(s) is not fulfilled or any condition including that of conditional rebate are put forth by any bidder then their bid shall be summarily rejected. However, tenders with unconditional rebate will be considered.
9) IUCAA reserves the right to reject any or all of the tenders without assigning any reason thereof.

Estate Manager
Inter-University Centre for Astronomy and Astrophysics,
Post Bag 4, Ganeshkhind, Pune 411 007 Tel. (020) 25604100
Email- purchase@iucaa.in

SECTION - II
COMMERCIAL TERMS

1. Introduction

1.1 IUCAA has issued these tender enquiry documents for (Construction of IUCAA 2 & Site Development) as mentioned in (Scope of Work and site conditions).

1.2 This section provides the relevant information as well as instructions to assist the prospective bidders in preparation and submission of tenders. It also includes the mode and procedure to be adopted by IUCAA for receipt and opening as well as scrutiny and evaluation of tenders and subsequent placement of contract.

1.3 Before formulating the tender and submitting the same to IUCAA, the bidder should read and examine all the terms, conditions, instructions etc. contained in the tender documents. Failure to provide and/or comply with the required information, instructions etc. incorporated in these tender documents may result in rejection of their tender.

2. Language of Tender: The tender submitted by the bidder and all subsequent correspondence and documents relating to the tender exchanged between the bidder and IUCAA shall be written in the English language, unless otherwise specified in the tender enquiry. However, the language of any printed literature furnished by the bidder in connection with its tender may be written in any other language provided the same is accompanied by an English translation and, for purposes of interpretation of the tender, the English translation shall prevail.

3. Eligibility Criteria for Bidders: The vendors should meet the following criteria to qualify in the tendering process. (Sufficient proof with authorized work order & completion certificate to be submitted)

1. The vendor should have completed ONE similar institutional civil work which should be valued at **more than Rs.20 crores (Indian Rupees Twenty Crores only) in last 5 financial years,** OR
   The vendor should have completed TWO similar institutional civil works which should be valued at **more than Rs.16 crores (Indian Rupees Sixteen Crores only) each in the last 5 financial years,** OR
   The vendor should have completed THREE similar institutional civil works which should be valued at **more than Rs. 10 crores (Indian Rupees Ten Crores only) each in the last 5 financial years.**
2. The bidder must have their Head Office or branch office at Pune for providing effective and efficient services at least for last 10 years.
3. Valid State / Central Government registration certificate with appropriate class.
4. The Minimum turnover of the bidder shall not be less than Rs.20 Crores (Indian Rupees Twenty Crores only) per annum for minimum three years out of last five financial years.

The bids of those bidders who do not fulfil any of the above-mentioned criterion shall be summarily rejected.

4. Tendering Expenses: The bidder shall bear all the costs and expenditure incurred and/or to be incurred by it in connection with its tender including preparation, mailing and submission of its tender and for subsequent processing of the same. IUCAA will, in no case be responsible or liable for any such costs, expenditure etc. regardless of the conduct or outcome of the tendering process.

5. **Content of Tender Enquiry Documents**: The relevant details required for construction & services, the terms, conditions and procedure for tendering, tender evaluation, placement of contract, the applicable contract terms and, also, the standard formats to be used for this purpose are incorporated in the above-mentioned documents. The interested bidders are expected to examine all such details etc. to proceed further.

6. **Amendments to Tender Enquiry Documents:**

6.1 At any time prior to the deadline for submission of tenders, IUCAA may, for any reason it deems fit, modify the tender enquiry documents by issuing suitable amendment(s) to it. All such amendments shall form part of this tender document and shall be binding on all the bidders.

6.2 In order to provide reasonable time to the prospective bidders to take necessary action in preparing their tenders as per the amendments, IUCAA may, at its discretion extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline.

7. **Clarification of Tender Enquiry Documents & Pre-Bid Meeting:** A bidder requiring any clarification or elucidation on any issue of the tender enquiry documents may take up the same with IUCAA in writing by e-mail. A pre-bid technical meeting will be held at IUCAA, Pune on **11/10/2022 at 11:00 hrs.** to discuss and resolve the queries and doubts, if any from the prospective bidders. Clarifications / questionnaire sought should be sent by email to **purchase@iucaa.in** latest by **11:00 hrs. on 07/10/2022.** Clarifications / discussions / minutes of the pre-bid meeting will form a part of the tender document. Pre-bid meeting will be arranged at IUCAA campus.

One Set of hard copy of tender document & drawings shall be available at IUCAA office during office hours.

8. **Contacting IUCAA:**

8.1 From the time of submission of tender to the time of awarding of the contract, if a bidder needs to contact IUCAA for any reason relating to this tender enquiry and / or its tender, it should do so only in writing to **purchase@iucaa.in**

8.2 In case a bidder attempts to influence IUCAA in its decision(s) during scrutiny, comparison and/or evaluation of tenders and/or awarding the contract, the tender of such a bidder shall be liable for rejection in addition to appropriate legal action(s) being taken against such a bidder at the discretion of IUCAA.

9. **Corrupt or Fraudulent Practices:** IUCAA requires that the bidders who wish to bid for against IUCAA's tender have the highest standards of ethics. IUCAA shall reject bids of those bidders who are found to be engaged in corrupt and/or fraudulent practices. This also applies to a successful bidder who has been awarded the contract and is found to be engaged in corrupt or fraudulent practices during the execution of the contract.

10. **Interpretation of the clauses in the Tender Document/Contract Document:** In case of any ambiguity in or dispute arising out of or related to (including the interpretation of any of the clauses in this tender document/purchase order/contract), decision of the Director, IUCAA or his nominee shall be final and binding on all parties.

11. **Tender currencies:** The bidder shall quote only in Indian Rupees.

12. **Tender Prices:** Bidder has to check and fill all the fields mentioned in the price bid. The quoted rates shall be inclusive of all the relevant taxes excluding GST. The GST shall be

calculated automatically on the Gross Total and shown separately at the end in the BOQ sheet. The Net Total shall be the summation of the Gross Total and the GST.

13. **Taxes:** GST shall be levied as per prevailing rates (Present rate of GST is 18%).

14. **Earnest Money Deposit (EMD):** The earnest money is required to protect IUCAA against the risk of the bidder's unwarranted conduct as amplified under GCC

14.1 The amount of EMD will be Rs. 44,00,000/- (Rs. Forty-Four Lacs Only).

14.2 The EMD shall be denominated in Indian Rupees.

14.3 Scanned copy of the EMD paid receipt (as the case may be) shall be uploaded along with the Technical Bid.

14.4 The EMD shall be furnished through **NEFT/RTGS** only. IUCAA's bank details for the purpose of payment of EMD are as follows: -
Name of the Beneficiary - Inter-University Centre for Astronomy & Astrophysics
Bank Account Number - 98060100000188
Nature of Bank Account - Savings Bank Account, MICR NO. - 411012053
Name of the Bank - Bank of Baroda
Address of the branch - Bank of Baroda, IUCAA Extension counter,
Pune University Campus, Pune -411007. Bank Branch Code –EXTPOO,
IFSC Code- BARB0EXTPOO, Swift Code-BAR B IN BB PCB

14.5 Unsuccessful bidder's earnest money shall be returned to them without any interest after issuing the work order / LOI to the successful bidder. In case of the bidder whose offer is accepted, the EMD shall be converted into **Security Deposit**. [Please refer Section III, Clause 26, for further details on Security Deposit.]

14.6 EMD of a bidder will be forfeited, if the bidder withdraws or amends their bid or impairs or derogates from the tender in any respect within the period of validity of their tender. The successful bidder's earnest money shall be forfeited, if they fail to furnish the balance amount of Performance security within the aforementioned period.

14.7 Micro and Small Enterprises (MSEs) are provided tender documents free of cost and are exempted from payment of earnest money, subject to furnishing of relevant valid certificate for claiming exemption. MSEs must provide proof of their being registered as MSE (indicating the terminal validity date of their registration) for the item tendered, with any agency mentioned in the notification of the Ministry of Micro, Small and Medium Enterprises (Ministry of MSME), indicated on the website of MSME.

14.8 **Security Deposit** will be released upon completion of all contractual obligations including Defect Liability Period + 60 days.

15. **Tender Validity**

15.1 The tenders shall remain valid for acceptance for a period of **6 months** from the date of tender opening prescribed in the tender document. Any tender valid for a shorter period shall be treated as unresponsive and rejected summarily.

15.2 In exceptional cases, the bidders may be requested by IUCAA to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by e-mail followed by registered-post/courier. In all such cases the bidders will (i) have to extend the tender validity without any change or modification in their original tender and (ii) extend the validity period of the EMD accordingly. However, EMDs of those bidders who express their inability to do so shall not be forfeited and their bids shall not be considered for further process.

15.3 In case the day up to which the tenders are to remain valid falls on/ is subsequently declared as a holiday or closed day for IUCAA the tender validity shall automatically be extended up to the next working day.

16. Preparation of Bids:

16.1 For preparation of bids, the bidders shall search the tender from published tender list available on site and download the complete tender document and shall consider corrigendum issued, if any, before submitting their bids. After selecting the tender document, the same shall be moved to the 'My favorite' folder of bidders account from where bidder can view all the details of the tender document.

16.2 Bidder shall go through the tender document carefully to understand the documents required to be submitted as part of the bid. Bidders shall note the number of covers in which the bid documents have to be submitted, the number of documents – including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of their bid.

16.3 Any pre-bid clarifications if required, then same may be obtained online through the tender site, or through the contact details given in the tender document.

16.4 Bidders should get ready in advance the bid documents in the required format (pdf/xls/rar/dwf/jpg formats) to be submitted as indicated in the tender document/schedule. **Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.**

16.5 Bidders can update well in advance, the documents such as experience certificates, annual report, PAN, GST & other details etc., under "My Space / Other Important Document" option, which can be submitted as per tender requirements. This will facilitate the bid submission process faster by reducing upload time of bids.

16.6 The tender documents may be downloaded from http://eprocure.gov.in/eprocure/app till the last date of submission of tender. The Tender must be submitted online through CPP Portal http://eprocure.gov.in/eprocure/app

16.7 **The bidder should submit the bid online in two parts viz. Technical Bid and Financial Bid.** Technical Bid in cover-1 & Financial Bid in ".xls" format in Cover-2

17. Submission of Technical and Financial Bids:

17.1 All pages of the bid (except for un-amended printed literature) shall be initialed by the person or persons signing the bid. The bidder's name stated on the proposal shall be the exact legal name of the firm.

17.2 IUCAA may, at its discretion, extend the deadline for the submission of bids by amending the bidding documents, in which case all rights and obligations of IUCAA and Bidder previously subject to the deadline will thereafter be subject to the deadline as extended.

17.3 At any time prior to the deadline for submission of bids, IUCAA may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, notify changes in the bidding documents through an amendment.

17.4 The amendments, if any, shall be notified on the CPP portal and the amendments shall be binding on all the bidders. Hence, the bidders shall view the notification in complete before submitting their bids.

17.5 The bidder responding to announcement shall be deemed to have read and understood the documents in complete. Where counter terms and conditions have been offered by the bidder, the same shall not be deemed to have been accepted by IUCAA, unless a specific written acceptance thereof is obtained.

17.6 SUBMISSION OF BIDS:

i. Bidder should log into CPP Portal well in advance for bid submission so that he/ she upload the bid in time i.e., on or before the bid submission time. Bidder will be responsible for any delay.

ii. Bidder should submit the EMD as per the instructions specified in the NIT / tender document. The details of the EMD should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise, the uploaded bid will be rejected.

iii. While submitting the bids online, the bidder shall read the terms & conditions (of CPP portal) and accept the same in order to proceed further to submit their bid.

iv. Bidder shall digitally sign and upload the required bid documents one by one as indicated in the tender document.

v. Bidders shall note that the very act of using Digital Signature Certificate (DSC) for downloading the tender document and uploading their offers is deemed to be a confirmation that they have read all sections and pages of the tender document without any exception and have understood the complete tender document and are clear about the requirements of the tender document.

vi. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document. For the file size of less than 1 MB, the transaction uploading time will be very fast.

vii. **If price quotes are required in xls format, utmost care shall be taken for uploading Schedule of quantities & Prices and any change/ modification of the price schedule shall render it unfit for bidding.**
Bidders shall download the Schedule of Quantities & Prices, in .xls format and save it without changing the name of the file. Bidder shall quote their rate in figures in the appropriate cells, thereafter save and upload the file in financial bid cover (Price bid) only.
If the template of Schedule of Quantities & Prices file is found to be modified/corrupted in the eventuality by the bidder, the bid will be rejected, including forfeiture of EMD.
The bidders are cautioned that uploading of financial bid elsewhere i.e. other than in cover 2 will result in rejection of the tender.

viii. Bidders shall submit their bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission end date & time (as per Server System Clock). **The TIA will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour**.

ix. After the bid submission **(i.e. after Clicking "Freeze Bid Submission" i**n the portal), the bidders shall **take print out of system generated acknowledgement** number and keep it as a record of evidence for online submission of bid, which will also act as an entry pass to participate in the bid opening.

x. Bidders should follow the server time being displayed on bidder's dashboard at the top of the tender site, which shall be considered valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system.

xi. All the documents being submitted by the bidders would be encrypted using PKI (Public Key Infrastructure) encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology.

xii. Technical & Financial bids has to be uploaded on or before **Bid Submission End Date & Time** mentioned in the tender documents

17.7 Assistance to Bidders

i. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contract person indicated in the tender. The contact number for the IUCAA helpdesk is 020-25604134/36 between 10:30 hrs to 17:00 hrs.

ii. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24X7 CPP Portal Helpdesk. The 24 x 7 Help Desk Number 0120-4200462, 0120-4001002 and 0120-4001005. The helpdesk email id is support-eproc@nic.in

iii. All interested eligible bidders are requested to submit their bids online on CPP Portal http://eprocure.gov.in/eprocure/app as per the criteria given in this document:

a) Technical Bid should be upload online in cover-1.

b) Financial Bid should be upload online in cover-2

Both Technical and Financial Bid covers should be placed online on the CPP Portal (http://eprocure.gov.in/eprocure/app).

17.8 TECHNICAL BID (Cover-1)

Signed and Scanned copies of the Technical bid documents as under must be submitted online on CPPP Portal: http://eprocure.gov.in/eprocure/app . List of Documents to be scanned and uploaded (Under Cover-1) within the period of bid submission: -

i. **Scanned Copy of EMD paid receipt / MSE registration certificate (indicating the terminal validity date of their registration)**

ii. **Scanned copy of duly filled Technical Bid form (Form I) along with supporting documents & commercial / legal terms & conditions with proper seal and signature of authorized person on each page of the bid submitted.**

iii. **Scanned copy of** Completion Certificate of valid registered contractor for **One Institutional Building Work of costing not less than Rs. 20.00 Cores (**civil work) in last five financial years **(i.e., 17-18, 18-19, 19-20, 20-21,21-22)** Or **Two Institutional works more than 16 crores (**civil work) **in last 5 financial years** Or **Three Institutional Building work more than 10 crores (**civil work) **in last 5 financial years** from Government / Semi Government or reputed educational institutes (in **Form II**). The contractor will have to produce a certificate from an officer not below the rank of Deputy Engineer, for the works pertaining to Govt. Dept. or Semi Govt. Institutes / Dept. from their respective Heads.

iv. **Scanned copy of** Abstract of work done **(average annual financial turnover) not less than Rs 20.00 Cores per annum** in all classes of civil engineering construction work during last five financial years **(i.e., 17-18, 18-19, 19-20, 20-21, 21-22)** (**Form III**). The work done certificates issued by Govt./Semi Govt./Reputed Educational Institute to be attached in support of turnover. The certificate shall have name of work, date of start, date of completion and amount of work done of in last three financial years as above. The turnover certified by chartered accountant shall not be accepted. Income tax returns certificate should be attached.

v. **Scanned copy of duly filled Undertaking / Acceptance Letter (Form VI).**

vi. **Scanned copies of the duly filled Declaration Form (Form VII).**

vii. **Scanned copy of Valid Registration Certificate** as a Registered Contractor with the Government / Semi Government Organization in appropriate class.

viii. **Scanned copy of Partnership Deed / Certificate of Registration in case of Pvt. Ltd. Company** with list of Directors, their names and address with telephone

numbers, if the tenderer is a partnership firm / Pvt. Ltd. Company, Power of Attorney / Resolution of Board of Director's for authorized signatory.

ix. **Scanned copy of Declaration** regarding any ongoing disputes/litigations (or any history thereof) with respect to any work executed / being executed by the tenderer with details of disputes/litigations, if applicable

x. **Scanned documents of all eligibility criteria should be attached.**

17.9 FINANCIAL BID (Cover-2)

i. The currency of all quoted rates shall be Indian Rupees.

ii. In preparing the financial bids, bidders are expected to consider the requirements and conditions laid down in this Tender document. The financial bids should be uploaded online as per the specified **".xls"** format i.e. Price Bid Excel sheet attached as **'.xls'** with the tender and based on the scope of work, service conditions and other terms of the tender document. It should include all costs associated with the Terms of Reference/Scope of Work of the assignment.

18. Withdrawal of Tender: No tender shall be allowed to be withdrawn after the deadline for submission of tender and before expiry of the tender validity period. If a bidder withdraws the tender during this period, IUCAA shall forfeit the earnest money furnished/deposited by such a bidder.

19. Tender Opening:

19.1 IUCAA will open the tenders at the specified date and time and at the specified place as indicated. In case the specified date of tender opening falls on declared holiday or closed day for the purchaser, the tenders will be opened at the appointed time and place on the next working day.

19.2 In the case of two-bid system mentioned above, the technical bids are to be opened in the first instance, at the prescribed time and date. These bids shall be scrutinized and evaluated by the competent authority / committee with reference to parameters prescribed in the tender document. Thereafter, in the second stage, the financial bids of only the technically qualified / acceptable offers (as decided in the first stage) shall be opened for further scrutiny and evaluation by giving an advance intimation to the technically successful bidders. IUCAA reserves the right to select the vendor on the basis of past performance and experience of the firm. The decision of IUCAA shall be final and representation of any kind shall not be entertained on the above. IUCAA shall have no obligation to convey reason for rejection of any bid.

20. Preliminary Scrutiny of Tenders:

20.1 The tenders will first be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the tender enquiry document. The tenders, which do not meet the basic requirements, are liable to be treated as unresponsive and shall be ignored.

20.2 The following are some of the important aspects, for which a tender may be treated to be unresponsive and shall be ignored;

a) Tender is unsigned incomplete.
b) Tender is submitted without necessary supporting papers
c) Tender validity is shorter than the required period.
d) Required EMD has not been provided/paid.
e) Bidder has not agreed to give the required performance security.
f) Bidder has not agreed to essential condition(s) specially incorporated in the tender enquiry.
g) Tender is conditional tender.

21. **Minor Informality / Irregularity / Non-Conformity:** If during the preliminary examination, IUCAA finds any minor informality or irregularity or non-conformity in a tender, IUCAA may waive the same, provided it does not constitute any material deviation or financial impact and, also, does not prejudice or affect the ranking order of the bidders. In case, if IUCAA conveys its observation on such 'minor' issues to the bidder by asking the bidder to respond by a specified date, and the bidder does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, such tender will be liable to be ignored.

If IUCAA observed, that contractor had inadvertently missed out to submit some documents asked in the technical bid form, then IUCAA may ask contractor to submit the same. IUCAA may convey its observation on such 'minor' issues to the bidder by registered/speed post/email/fax etc. asking the bidder to respond by a specified date. If the bidder does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, such tender shall be liable to be rejected/ignored.

22. **Opening of Financial bids:**

22.1 The Financial bids of all eligible, technically qualified and shortlisted bidders will be opened. The date and time of opening of financial bids shall be informed only to the shortlisted bidders.

22.2 IUCAA- reserves the right to accept the offer in full or in parts or reject summarily or partly & cancel the bid without giving any reason.

23. **Bidder's capability to perform the contract:**

23.1 IUCAA, through the above process of tender scrutiny and tender evaluation will determine to its satisfaction whether the bidder, whose tender has been determined as the lowest evaluated responsive tender is eligible, qualified and capable in all respects to perform the contract satisfactorily.

23.2 The above-mentioned determination will, inter alia, consider the bidder's financial, professional capabilities for satisfying all the requirements of IUCAA as incorporated in the tender document. Such determination will be based upon scrutiny and examination of all relevant data and details & supporting document submitted by the bidder in its tender as well as such other allied information as deemed appropriate by IUCAA.

24. **Notification of Award**: IUCAA will notify the successful bidder that its tender for construction of building, has been accepted. The notification of award shall constitute the conclusion of the contract. IUCAA will inform the successful bidder in due course by e-mail.

25. **Issue of Contract:** **A**fter notification of award, IUCAA will send the duly executed contract/work order to the successful bidder by email/registered/speed post etc. The successful bidder shall return a copy of the order, duly executed and dated, to IUCAA in person / by registered / speed post / courier within fifteen days of receipt of the same from IUCAA, failing which IUCAA may treat the contract to be repudiated.

26. **Security Deposit (SD) :** SD will be 5 % of the accepted tender value. EMD will be converted in to the SD and balance amount of SD will be recovered from first 4 RA bills in equal installments. Security Deposit will be refunded to the vendor on completion of all contractual obligations including Defect Liability Period + 60 days.

27. **Performance Guarantee / Performance Bank Guarantee:** Within 21 days from the date of receipt of letter of intent/Work Order, the successful bidder shall submit a Performance Security for 3% amount of the accepted contract value. The PG shall be paid through NEFT/RTGS. Photo copy of transaction ID or UTR no. must be provided. In the event of any amendment issued to the contract, the bidder shall, within 21 days of issue of the amendment, furnish the performance guarantee of the corresponding amendment value, rendering the same valid in all respects in terms of the contract, as amended. If bidder fails to submit balance performance guarantee amount within 21 days, from the date of award of Contract / Work Order / Amendment, there shall be a penalty of Rs.5000/- per day (Rupees Five thousand only per day) up to a maximum of 5% of the WO/Contract value.

27.1 Subject to above, IUCAA will release the performance guarantee without any interest to the bidder on completion of the bidder's all contractual obligations including Defect Liability Period + 60 days.

27.2 Failure of the successful bidder in providing performance guarantee and/ or returning contract copy duly signed in terms of GCC above shall make the bidder liable for forfeiture of its EMD and, also, for further actions by IUCAA against it.

27.3 If the bidder furnishes Performance Bank Guarantee to IUCAA for an amount equal to three per cent (3%) of the total value of the contract valid up to contract period (including Defect Liability Period) + sixty days, then the amount of Performance Guarantee will be refunded. Performance Bank Guarantee must be issued by a **Nationalized Bank** in India and in the prescribed form.

27.4 In the event of any loss due to bidder's failure to fulfill its obligations in terms of the contract, the amount of the performance guarantee shall be payable to IUCAA to compensate for the same. IUCAA shall have the right to deduct full or part of the performance guarantee and shall refund the balance amount, if any, to the Agency on the termination/completion of the term of the Contract.

28. **Payment:**

28.1 The payment will be made as per the exact measurement basis.

28.2 The minimum running (R.A) certified bill value shall be of minimum Rs 1.00 Crore. In order the facilitate the speed of construction IUCAA will offer 75% Adhoc payment on assessed RA bill from the contractor. The advance will be adjusted against final certification of RA bill. The final bill payment will be made within 30 days after satisfactory completion of the work and issue of Architect's certificate. All payments shall be made through RTGS/NEFT.

28.3 GST will be paid as per prevailing rates & TDS, Labour Cess & other taxes will be recovered as per prevailing rates of Income tax act.

28.4 Payment of Wages and other conditions of employment of workers should be not inferior to as stipulated in the Minimum Wages Act. All formalities and procedures prescribed under the Contract Labour Act, Minimum Wages Act and other related acts should be strictly adhered to IUCAA's responsibility as Principle Employer should be fully protected. The necessary legal registers, forms, returns, and liaison with local (concerned authorities) etc. required as per the law of the land are to be maintained by the Agency and should be made available for inspection by the Inter-University Centre for Astronomy and Astrophysics at any time. The Agency will have its workers covered under ESI, PF and other Acts as applicable from time to time at its own cost.

29. **Taxes and Duties, Fees etc.:** Bidder shall be entirely responsible for payment of all taxes, duties, fees, levies, applicable cess etc. during the contract period.

30. **Minimum Amount of Third Party Insurance (Bidder / Agency All Risk Policy)** : The Contractor shall take Contractor's All Risk (CAR) Insurance Policy / Policies so as to provide adequate insurance cover for execution of the awaited contract work for total contract value and complete contract period from the " Directorate of Insurance, Maharashtra state, Mumbai only. Its postal address for Correspondence is "264 MHADA, First Floor, Opposite Kalanagar, Bandra (East), Mumbai-400051." (Telephone Nos. 022-26438690/ 26438746 and Fax No. is 022-26438461),Similarly all workmen appointed to complete the contract work are required to insure under workmen's compensation Insurance policy. Insurance Policy / Policies taken out from any other company will not be accepted. **The rates are inclusive of insurance charges.**

31. **ESI, PF & other regulatory rules & laws:** Agency has to cover his workers & staff under ESI & PF scheme and comply with local laws & statutes dealing with employment of persons necessary reports to be submitted.

32. **Termination and Penalty/Liquidated Damage (LD)**: It shall be the primary responsibility of the contractor that work contract is executed as per terms and conditions stipulated under this contract to the complete satisfaction of IUCAA. If the completion of project is delayed beyond stipulated time period, then the penalty shall be applicable at the rate of 0.5% per week of incomplete project cost, up-to maximum of 5% of the work order value. In extreme cases, IUCAA may issue show cause notice to Agency giving 15 (fifteen) days for improvement, failing which the work contract shall be liable to be terminated along with forfeiture of the performance guarantee. Decision of IUCAA in this regard shall be treated as final and binding on the Agency. If the Agency refuses to carry out the work under this contract at any stage before the expiry of the period of contract, the work contract shall be liable to be terminated by IUCAA without giving any notice along with forfeiture of the performance guarantee. In such situations IUCAA may get the work done from any other person/firm at the risk and cost of the Agency till new contract is awarded or 60 days period whichever is earlier. An expenditure so incurred by IUCAA shall be deducted from the payments due to the Agency.

32.1 **Termination for insolvency:** If the bidder is declared by any competent authority/court as bankrupt or otherwise insolvent, the contract shall be deemed to be terminated from the date of such declaration however, such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to IUCAA.

32.2 **Termination for convenience:** IUCAA reserves the right to terminate the contract, in whole or in part, by serving written notice to the bidder at any time during the currency of the contract. The notice shall specify that the termination is for the convenience of IUCAA. The notice shall also indicate inter alia, the extent to which the bidder's performance under the contract is terminated, and the date with effect from which such termination will become effective.

The goods and services which are complete and ready in terms of the contract for delivery and performance within thirty days after the bidder's receipt of the notice of termination may be accepted by IUCAA following the contract terms, conditions and prices. For the remaining goods and services, IUCAA may decide:

a) to get any portion of the balance completed and delivered at the contract terms, conditions and prices; and / or

b) to cancel the remaining portion of the goods and services and compensate the bidder by paying an agreed amount for the cost incurred by the bidder towards the remaining portion of the goods and services.

32.3 IUCAA, reserves the right to terminate the said contract at any time on the ground

of ineffective services rendered by the agency. IUCAA will be the sole judge to determine the facts.

33. Force Majeure: Notwithstanding the provisions contained in tender document clauses, the bidder shall not be liable for imposition of any such sanction so long the delay and/or failure of the bidder in fulfilling its obligations under the contract is the result of an event of force majeure.

33.1 For purposes of this clause, force majeure means an event beyond the control of the bidder and not involving the bidder's fault or negligence and which is not foreseeable. Such events may include, but are not restricted to, acts of IUCAA either in its sovereign or contractual capacity, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, and freight embargoes.

33.2 If a force majeure situation arises, the bidder shall promptly notify IUCAA in writing of such conditions and the cause thereof within twenty-one days of occurrence of such event. Unless otherwise directed by IUCAA in writing, the bidder shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

33.3 If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of force majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.

33.4 In case due to a force majeure event IUCAA is unable to fulfill its contractual commitment and responsibility, IUCAA will notify the bidder accordingly and subsequent actions taken on similar lines described in above sub-paragraphs.

34. Settlement of Disputes:

34.1 Any dispute arising out of the terms of this contract or in the interpretation of any clause herein shall be settled by mutual discussion between the nominated authorities of IUCAA and the Agency or their authorized representatives. The Director of IUCAA will be the final authority in resolving such disputes.

34.2 In the event of a dispute or difference which cannot be resolved by mediation, the same shall be referred to an Arbitration Tribunal consisting of three members. Either party shall give notice to the other regarding its decision to refer the matter to arbitration. Within 30 days of such notice, one Arbitrator shall be nominated by each party and the Umpire Arbitrator shall be nominated by agreement between the parties to this agreement. The venue of the arbitration will be Pune. Subject to the aforesaid, the Arbitration and Conciliation Act, 1996 with amendments and the rules there under and any statutory modification thereof for the time being in force shall apply to the Arbitration proceedings.

35. Governing language: The contract shall be written in English language following the provision as contained in tender document. All correspondence and other documents pertaining to the contract, which the parties exchange, shall also be written accordingly in English language.

36. Applicable Law: The contract shall be interpreted in accordance with the laws of India.

37. Contacting IUCAA Authorities: No bidder shall contact any of the IUCAA authorities on any matter relating to their bid, from the time of the opening of the bids to the time the contract is awarded.

38. **Committee Duly Constituted by IUCAA Reserves the Right to Accept any Bid and to Reject Any or All Bids**: A committee duly constituted by IUCAA reserves the right to reject, accept or prefer any bid and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the ground for its actions and decisions. IUCAA also reserves the right to accept any bid in part or split the contract between two or more bidders.

SECTION -III

SCOPE OF WORK & SITE CONDITION

Name of work: -	**Construction of Academic and Research Centre – IUCAA 2 at S. No. 25/1/1/1/1/2, Aundh, IUCAA Campus, Pune**
Location	The site is located in IUCAA Campus, adjacent to Chandrashekhar Auditorium in Savitribai Phule Pune University, Pune. 411007
Nos. of Floors	Basement Parking + 4 Floors + Terrace Work
Approximate Built-up Area	60,500 Sq.ft. 5,612 Sqm.

SECTION-IV

GENERAL RULES AND DIRECTIONS FOR THE GUIDANCE OF BIDDERS (FORM B-2)

ITEM RATE TENDER AND CONTRACT FOR WORKS

ESTATE DEPARTMENT
IUCAA, PUNE – 7

Name of Work: Construction of Academic and Research Centre – IUCAA 2 at S. No. 25/1/1/1/1/2, Aundh, IUCAA Campus, Pune.

GENERAL RULES AND DIRECTIONS FOR THE GUIDANCE OF CONTRACTORS.

1. All works proposed to be executed by contract shall be notified in a B-2 (Item rate) form of invitation to tender pasted on a board hung up in the office IUCAA, Pune - 7.

   This form will state the work to be carried out as well as the date for submitting and opening tenders, and the time allowed for carrying out the work, also the amount of the earnest money to be deposited with the tender and the amount of security deposit to be deposited by the successful tenderer, and the percentage, if any, to be deducted from bills. It will also state whether a refund of a quarry fees, royalties, dues and ground rents will be granted. Copies of the specifications, designs and drawings, estimated rates, scheduled rates and any other documents required in connection with the work shall be signed by the IUCAA for the purpose of identification and shall also be open for inspection to contractors at the office of the Estate Manager office during office hours.

   Where the works are proposed to be executed according to the specifications recommended to a contractor and approved by a competent authority on behalf of the IUCAA, Pune such specifications with designs and drawings shall form part of the accepted tender.

2. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof, and in the event of the absence of any partner, it shall be signed his behalf by a person holding a **power of attorney** authorizing him to do so.

3. The IUCAA authority competent to dispose of the tender shall have the right of rejecting all or any of the tender.

4. No receipt for any payment, alleged to have been made by a contractor in regard to any matter relating to his tender or the contract, shall be valid and binding on IUCAA of Pune unless it is signed by the Estate Manager.

5. All works shall be measured net by standard measures and according to the rules and customs of the Public Works Department and their rates shall be without references to any local custom.

6. Under no circumstances shall any contractor be entitled to claim enhanced rates for any items in this contract.

7. Every registered contractor should produce along with his tender certificate of registration as approved contractor in the appropriate class, amount showing limit and renewal of such registration with date of expiry.

8. All corrections and additions or pasted slips should be initialed.

9. The measurements of work will be taken according to the usual methods as in use in P.W.D. Red Book / I.S. Codes and no proposals to adopt alternative methods will be accepted. The Engineer-in-charge decision as to what is the usual method in use in the Department will be final.

10. Successful tenderer will have to produce PAN-Card, GST certificate issued by Income Tax Department otherwise their R.A. Bills will not be paid by the IUCAA, Pune

11. The contractor will have to construct shade for storing controlled and valuable materials brought by the contractor at the work site, having double locking arrangements at contractor's cost. The materials will be taken for use in the presence ofthe departmental person. No material will be allowed to be removed from the site of works.

12. The contractor will have to make his own security arrangement for the protection of material and the equipment. The owner security arrangement for the protection of material and the equipment. The owner /IUCAA will be not responsible for any theft.

13. The successful tenderer will have to produce to the satisfaction of the accepting authority a valid and current license issued in his favor under the provision of Contract Labour (Regulation and Abolition Act, 1973) before starting work, failing which earnest money will be forfeited by IUCAA.

14. The contractor shall comply with the provision of the Apprentice Act 1961 and rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and Director/Engineer-in-charge may in his discretion cancel the contract. The contractor shall also be liable, for any pecuniary liability arising on account of any violation by him of the provisions of the said Act

SECTION-V
CONDITIONS OF CONTRACT

Clause 1 :- Deleted

Compensation For delay.

Clause 2 :- The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which the order to commence work is given to the contractor. The work shall through the stipulated period of the contract be proceeded with, all due diligence (time being deemed to be essence of the contract on the part of the contractor) and the contractor shall pay as compensation and amount as follows

Full work (as mentioned in the tender) to be completed **in (24) Twenty-Four Months** including monsoon.

It shall be the primary responsibility of the contractor that work contract is executed as per terms and conditions stipulated under this contract to the complete satisfaction of IUCAA. If the completion of project is delayed beyond stipulated time period then the penalty shall be applicable at the rate of 0.5% per week of incomplete project cost, up-to maximum of 5% of the work order value. In extreme cases, IUCAA may issue show cause notice to Agency giving 15 (fifteen) days for improvement, failing which the work contract shall be liable to be terminated along with forfeiture of the performance guarantee. Decision of IUCAA in this regard shall be treated as final and binding on the Agency. If the Agency refuses to carry out the work under this contract at any stage before the expiry of the period of contract, the work contract shall be liable to be terminated by IUCAA without giving any notice along with forfeiture of the performance guarantee. In such situations IUCAA may get the work done from any other person/firm at the risk and cost of the Agency till new contract is awarded or 60 days period whichever is earlier. An expenditure so incurred by IUCAA shall be deducted from the payments due to the Agency. If the Agency fails to ensure 95% attendance of total man days consecutively for three months, it shall be sufficient ground for termination of the work contract and forfeiture of the performance guarantee.

In the event of the contractor failing to comply with this conditions shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the Engineer-in-charge (whose decision in writing shall be final) maydecide of the said estimated cost of the whole work for every day that the due quantity of work remains incomplete provided always that the total amount of compensation to be paid under the provisions of this clause shall not exceed 10 percent of the Estimated cost of the work as shown in the tender. Engineer-in-charge should be the final authority in this respect, irrespective of the fact thatthe tender is accepted by Engineer-in-charge.

Action when whole of security deposit is forfeited.

Clause 3:- In any case in which under any clause of this contract, the contractor shall have rendered himself liable to pay compensation amounting to the whole of this security deposit whether paid in one sum or deducted by installment or in the case of abandonment of the work owing to serious illness or death of the contractor or any other cause the Engineer-in-charge, on behalf of the IUCAA shall have power to adopt any of the following courses, as he may deem suited in the interest of the IUCAA.

a) To rescind the contract (for which rescission notice in writing to the contractor under the head of Engineer-in-charge shall be conclusive evidence) and in that case the security deposit of the contractor shall stand forfeited and be absolutely at the disposal of IUCAA.

b) To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work, expenditure incurred on tools and plant, and charges on additional supervisory staff including the cost of work-charged establishment employed for getting the unexecuted part of the work completed and crediting him with the value of the work done departmentally in all respects in the same rates as if it had been carried out by the Contractor under the terms of his contract. The certificate of the Engineer-in-charge as to the costs and other allied expenses so incurred and as to the value of the work so done departmentally shall be final and conclusive against the contractor.

c) To order that the work of the contractor be measured up to and take such part thereof as shall be unexecuted, out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including thecost of work-charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of the workdone or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Engineer-in-charge as to all, the cost of the work and other expenses incurred as aforesaid for or in getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor.

In case the contract shall be rescinded under clause (a) above the contractor shall not be entitled to recover or be paid, any sum for any work therefore actually performed by him under this contract unless and until the Engineer-in-charge shall have certified in writing the performance of the such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the courses referred to in clause (b) or (c) being adopted and the cost of the work executed departmentallyor through a new contractor and other allied expenses exceeding the value of such work credited to the Contractor, the amount of excess shall be deducted from money due to the contractor by IUCAA under the contract or otherwise howsoever, or from his security deposit or the sale proceeds thereof provided, however that the contractor shall have no claim against IUCAA, even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided alwaysthat whichever of the three courses mentioned in clause (a), (b) or (c) is adopted by the Engineer-in-charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchasesor procured any materials, or entered into any engagement made any advances on account or with a view to the execution of work or the performance of the contract.

Action when the progress of any particular portion of the work is unsatisfactory.

Clause 4 :- If the progress of any particular portion of the work unsatisfactory, the Engineer-in-charge, shall notwithstanding, that the general progress of the work is in accordance with the conditions mentioned in clause 2, be entitled to take action and of clause 3(b) after giving the contractor 10 days' notice in writing. The contractor will have no claim for compensation, for any loss sustained by him owing to such action.

Contractor remains liable to pay compensation if action not taken under clause 3 and4. Power to take possession of or required removal of or sell contractor's plant.

Clause 5:- In any case in which any of the powers conferred upon the Engineer-in-charge by clause 3 and 4 hereof shall have become exercisable and the same shall not have been exercised, the non-exercise thereof shall notconstitute a waving of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor for which under any clause hereof he is declared liable to pay compensation amounting to the whole of his security deposit and the liability ofthe contractor for past and future compensation shall remain unaffected. In the event of the Engineer-in-charge taking action under sub-clause (a) or (c) of clause 3, he may, if he so desires, take possession of all or any tools and plant, materials and stores in or upon the work of the site thereof or belonging to the contractor, or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing for the same in account at the contract rates, or in the case of contract rates not being applicable at current market rates to be certified by the Engineer-in-charge whose certificate thereof shall be final. In the alternative the Engineer-in-charge, may, after giving noticein writing to the contractor or his clerk of the work, foreman or other authorizedagent require him to remove such tools and plants, materials, or stores from the premises within a time to be specified in such notice, and in the event of the contractor failing to comply with any such requisition, the Engineer-in-charge may remove them at the contractor's expense or sale them by auction or private sale on account of the contractor and at his risk in all respects and the certificateof the Engineer-in-charge as to the expense of any such removal and theamount of the proceeds and expense of any such sale shall be final andconclusive against the contractor.

Extension of time.

Clause 6 – If the contractor shall desire an extension of the time for completion of work on the ground of his having been unavoidably hindered in its execution or on any other grounds he shall apply in writing to the Engineer-in-charge before expiration of the period stipulated in the tender or before the expiration of 30 days form the date on which he was hindered as aforesaid or on which the cause for asking for extension occurred, whichever is earlier and the Engineer-in-charge, or in the opinion of Engineer-in-charge, as the case may be if his opinion, there were reasonablegrounds for granting an extension, grant such extension as he thinks necessaryor proper. The decision of the Engineer-in-charge in this matter shall be final. The HINDRANCE register shall be strictly maintained by contractor and certified by IUCAA.

Final certificate

Clause 7:- On the completion of the work, the contractor shall be furnished with a certificate by the Engineer-in-charge (hereinafter called the Engineer-in-charge) of such completion but no such certificate shall be given nor shall have the work be considered to the completed until the contractor shall have removed from the premises on which the work shall have been executed, all scaffolding, surplus materials and rubbish and shall have cleaned off, the dirt from all wood work, doors, windows, walls, floor or other parts of any building in or upon which the work has been executed or which he may have had possession for the purpose of executing the work, not until the work shall have been measured by the Engineer-in-charge or where the measurements have been taken by his subordinates until they have received approval from the Engineer-in-charge, the said measurements being binding and conclusive against contractor. If the contractor shall fail to comply with requirements of this clause as to the removal of scaffolding surplus

materials and rubbish and the cleaning of dirt on or before the date fixed for the completion of the work the Engineer-in-charge may at the expense of the contractor remove such scaffolding, surplus materials as aforesaid except for any sum actually realized by the sale thereof.

Payment on intermediate certificate to be regarded as advances.

Clause 8 :- No payment shall be made for any work estimated to cost less than rupees one thousand till after the whole of work shall have been completed and a certificate of completion given, But in the case of work estimated to cost more than rupees one thousand the contractor shall on submitting a monthly bill therefore, be entitled to receive payment proportionate to the part of the work then approved and passed by the Engineer-in-charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. All such intermediate payments shall be regarded as payments by way of advance against the final payments only and not as payments for work actually done and completed and shall not preclude the Engineer-in-charge from requiring any bad, unsound, imperfect or unskillful work to be removed or taken away and reconstructed or re-elected nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof if any respect or the occurring of any claim nor shallit conclude, determine or affect in any other way, the powers of Engineer-in- charge as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or effect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for the completion of the work, otherwise the Architect's certificate of the measurements and of the total amount payable for the work shall be final and binding on all the parties.

Payment at reduced rates on account of items of work not accepted as completed, to be at the discretion of the Engineer –in-charge

Clause 9 :- The rates for several items of work estimated to cost more than Rs.1000/- agreed to within shall be valid only when the item concerned is accepted as having been completed fully in accordance with the sanctioned specification. In cases, where the items of work are not accepted as so completed by the Engineer-in-charge, he may make payment on account of such items at such reduced rates as he may consider reasonable in the preparation of final or on account bills.

Bills to be submitted in RA's

Clause 10: - The minimum running (R.A) certified bill value shall be of minimum Rs 1.00 Crores. In order the facilitate the speed of construction IUCAA will offer 75% Adhoc payment on accessed RA bill from the contractor. The advance will be adjusted against final certification of RA bill. The RA bills and the final bill payment will be made through NEFT/RTGS within 30 days after satisfactory completion of the work.

Bills to be on printed forms

Clause 11:- The contractor shall submit all bills in Excel format with hard and soft copies at the office of the Engineer-in-charge. The Architect and Project Management Consultant shall certify/recommend the bill to IUCAA for payment.

Stores supplied by Government.

Clause 12:- IUCAA will not supply any material for the construction.

Works to be executedin accordance with specifications, drawings, orders, etc.

Clause 13:- The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner, and both as regards materials and every other respect in strict accordance with specifications. The contractors shall also conform exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Engineer-in-charge and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office, or on the site of the work during office hours. The contractor will be entitled to receive one set of tender drawings and one certified copy of the accepted tender along with the work order free of cost.

Alteration in specification and designs not invalidate contracts

Clause 14: - The Engineer-in-charge / Architect shall have power to make any alteration in or additions to the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with any instruction in this connection which may be given to him writing signed by the Engineer-in-charge and such alteration shall not invalidate the contract, and any additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work, and at the same rates as are specified in the tender for main work, and if the additional and altered work includes any class of work for which no rate is specified in this contract, then such class of work shall be carried out at the rates entered in the Schedule of Rates of the Division or at the rates mutually agreed upon between the Engineer-in-charge and contractor, whichever are lower. If the additional or altered work for which no rate is entered in the schedule of rates of Division is ordered to be carried before the rates are agreed upon then the contractor shall within seven days of the date of receipt by him of the order to carry out the work inform the Engineer-in-charge of the rate which it is his intention to charge for such class of work. And if the Engineer-in-charge does not agree to this rate he shall by notice in writing be at liberty to cancel his order to carry out such class of work and arrange to carry out in such manner as he may consider advisable provided always that if the contractor shall commence work or incur any expenditure in regard thereto before the rates shall have been determined as lastly here in before mentioned, then in such case he shall only be entitled to be paid in respect of the work carried out or expenditureincurred by him prior to the date of the determination of the rate as aforesaid according to such rate or rates as shall be fixed by the Engineer-in-charge. In the event of dispute, the decision of the Building and Works committee will be final. Where, however, the work is to be executed according to the designs, drawings and specifications recommended by the contractor and accepted by thecompetent authority the alterations above referred to shall be within the scope of such designs, drawings and specifications appended to the tender.

Extension of time in consequence of additions or alterations.

The time limit for the completion of the work shall be extended in the proportion that the increase in its cost occasioned by, alterations or additions bears to the cost of the original contract work, and the certificate of the Engineer-in-Charge as to such proportion shall be conclusive**.**

No claim to any payment or compensation for alteration in or restriction of work.

Clause 15 :- 1) If at any time after the execution of the contract documents the Engineer-in-Charge shall for any reason what-so-ever (other than default on the part of the contractor for which he is entitled to rescind the contract) desire that the whole or any part of the work specified in the tender should be suspended for any period or that the whole or part of the work should not be carried out at all, he shall give to the contractor a notice in writing of such desire and upon the receipt of such notice the contractor shall forthwith suspend or stop the work wholly or in part as required, after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury to the work already done or endanger the safety thereof, provided that the decision of the Engineer in Charge as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the contractor. The contractor shall have no claim for payment or compensation whatsoever by reason of or in pursuance of any notice aforesaid, on account of any suspension stoppage or curtailment except to the extent specified hereinafter.

2) Where the total suspension of the work ordered as aforesaid continued for a continuous period exceeding 90 days, the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving a 10 day's prior notice in writing to the Engineer in Charge, within 30 days of the expiry of the said period of the 90 days, of such intention and requiring the Engineer to record the final measurement of the work already done and to pay final bill. Upon giving such notice, the contractor shall be deemed to have been discharged from his obligations to complete the remaining unexecuted work under his contract. On receipt of such notice the Engineer in Charge shall proceed to complete the measurements and make such payment as may be finally due to the contractor within a period of 90 days from the receipt of such notice in respect of the work already done by the contractor. Such payment shall not in any matter prejudice the right of the contractor to any further compensation under the remaining provision of the this clause.

3) Where the Engineer in Charge required the contractor to suspend the work for a period in a excess of 30 days at any time or 60 days in the aggregate, the contractor shall be entitled to apply to the Engineer within 30 days of resumption of work after such suspension for payment of compensations to the extent of pecuniary loss suffered by him in respect of working machineryremained idle on the site or on the account of his having and to pay the salary orwages of labour engaged by him during the said period of suspension provided always that the contractor shall not be entitled to any claim in respect of any such working machinery salary or wages for the first 30 days whether consecutive or in the aggregate or such suspension or in respect or any suspension whatsoever occasioned unsatisfactory work or any other default on his part. The decision of the Engineer in Charge in this regard shall be final and conclusive against the contractor.

4) In the event of.....

(i) Any total stoppage of work on notice from Engineer in Charge under Sub clause (i) in that behalf.

(ii) Withdrawal by the contractor from the contractual obligations complete the remaining unexecuted work under sub clause (2) on account of continued suspension of work for a period exceeding 90 days

OR

(iii) Curtailment in the quantity of item or items originally tendered on account of any alteration, omission or substitution in the specifications, drawings, designs or instructions under clause (14) 1 where such curtailment exceeds 25% in quantity and the value of the quantity curtailed beyond 25 percent at the rates for the item specified in the tender is more than Rs.5000/-

4-A) It shall be open to the contractor, within 90 days from the service of (i) the notice of stoppage of work or (ii) the notice of withdrawal from the contractual obligations under the contract on account of the continued suspension of work or (iii) notice under clause 14(1) resulting in such curtailment to produce to the Engineer satisfactory documentary evidence that he had purchased or agreed to purchase material for use in the contracted work, before receipt by him of the notice of stoppage, suspension or curtailment and require the IUCAA to take over on payment of such material at the rates determined by the Engineer, provided, however, such rates shall in no case exceed the rates at which the same was acquired by the contractor. The IUCAA shall thereafter take over the material so offered, provided quantities offered are not in excess of the requirement of the unexecuted work as specified in the accepted tender and are of quality and specification approved by the Engineer.

The limit for unforeseen claims.

Clause 16:- Under no circumstances whatever shall the contractor be entitled to any compensation from IUCAA on any account unless the contractor shall have submitted a claim in writing to the Engineer-in-charge within one monthof the case of such occurring.

Action and compensation payable in case of bad work.

PWD Resolution no. CAT-1087/CR-94/ Bldg-2 Dated 14-6-89

Clause 17:- If at any time before the security deposit or any part thereof is refunded to the contractor, it shall appear to the Engineer-in-charge or his subordinate in charge of the work, that any work has been executed withunsound, imperfect or unskillful workmanship or with materials of inferiorquality, or that any materials or articles provided by him for the execution of the work are unsound, or of a quality inferior to that contracted for, or are otherwisenot in accordance with the contract, it shall be lawful for the Engineer-in-chargeto intimate this fact in writing to the contractor and then notwithstanding thefact that the work, materials or articles complained of many have been inadvertently passed, certified and paid for, the contractor shall be bound forthwith to rectify, or remove and reconstruct the work so specified in whole orin part, as the case may require or if so required, shall remove the materials or articles so specified and provided other proper and suitable materials or articles at his own charge and cost and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in the written intimation aforesaid the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day not exceeding 10 days, during which the failure so continues and in the case of any such failure the Engineer-In-charge may rectify or remove and re-execute the work or remove, and replace the materials or articles complained of as the case may be at the riskand expense in all respects of the contractor. Should the Engineer-in-charge consider that any such inferior work or materials as described above may be accepted or made use of it shall be within his discretion to accept the same at such reduced rates as he may fixed therefore.

Work to be open to inspection

Contractor or responsible agent to be present.

Clause 18:- All works under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer-in-charge and his subordinates, and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer-in-charge and his subordinate to visit the work shall have been given to the contractor, either himself be present to receive orders and instructions or have responsible agent duly accredited in writing present for that purpose. Orders given to the contractor's duly authorized agent shall be considered to have some force and effect as if they had been given to the contractor himself.

Notice to be given before work is covered up

Clause 19:- The contractor shall give not less than five days notice in writing to the Engineer-in-charge or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof taken before the same is so covered or placed beyond the reach of measurement and shall not cover-up or place beyond the reach of measurement any work without the consent in writing of the Engineer-in-charge or his subordinate in charge of the work, and if any work shall be covered up or placed beyond the reach of measurement, without such notice having been given consent obtained the same shall be uncovered at the contractor's expenses, and in default thereof, no payment or allowance shall be made for such work or for the materials with which the same was executed.

Contractor liable for damage done and for imperfections.

Clause 20 :- If during the period of **24 months** from the date of completion as certified by the Engineer-in-Charge pursuant to Clause-7 of the contract or months after commissioning the work, whichever is later in the opinion of the Engineer-in-charge, the said work is defective in any manner whatsoever, the contractor shall forthwith on receipt of notice in that behalf from the Engineer-in-charge, duly commence execution and completely carry out at his cost in every respect all the work that may be necessary for rectifying and setting right the defects specified therein including dismantling and reconstruction of unsafe portions strictly in accordance with and in the manner prescribed and under the supervision of the Engineer-in-charge. In the event of the contractor failing or neglecting to commence execution of the said rectification work within the period prescribed therefore in the said notice and/ or complete the same as aforesaid as required by the said notice, the Engineer-in-charge get the same executed and carried out departmentally or by any other agency at the risk on account and at cost of the contractor. The contractor shall forthwith on demand pay to the Govt., the amount of such costs, charges and expenses sustained or incurred by the IUCAA of which the certificate of the Engineer-in-charge shall be final and binding on the contractor. Such costs, charges and expenses shall be deemed to be arrears of land revenue and in the event of the contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other rights and remedies of IUCAA, the same may be recovered from the contractor as arrears of land revenue. The IUCAA shall also be entitled todeduct the same from any amount which may then be payable or which may thereafter become payable by the IUCAA to the contractor either in respectof the said work or any other work whatsoever or from the amount of security deposit retained by IUCAA.

The defect liabilities period in particular for waterproofing treatment (Building work) shall be 10 years.

Contractor to supply plant, ladder, scaffolding etc.

Clause 21- The contractor shall supply at his own cost all material (except such special materials if any as may in accordance with the contract, be supplied from the stores), plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works requisite or proper for the proper execution of the work, whether, in the original, altered or substituted form, and whether included in the specifications or other documents forming part of the contract or referred to in these conditions or not and which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in- charge as to which under these conditions he is entitled to be satisfied or which he is entitled to be required together with the carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or the failing which the same maybe provided by the Engineer-in-charge at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof, or of a sufficient portion thereof. The contractor shall provide all necessary fencing andlights required to protect the public from accident and shall also be bound tobear the expenses of defense of every suit, action or other legal proceeding, that may be brought by any person for injury sustained owing to neglect of the above precautions, and to pay any damages and cost which may be awarded in any such suit action or proceedings to any such person or which may with consent of the contractor be paid for compromising any claim by any such person.

List of machinery in contractor's possession and which they propose to use on the works should be submitted along with the tender.

Clause 21 A:- The contractor shall provide suitable scaffolds and working platforms, gangways and stairways and shall comply with the following regulations in connections therewith.

a) Suitable scaffolds shall be provided for workmen for all works that cannot be safely done from a ladder or by other means.

b) A scaffold shall not be constructed, taken down or substantially altered except.

1) Under the supervision of a competent and responsible person;
2) As far as possible by competent workers possessing adequate experience in this kind of work.

c) All scaffolds and appliances connected therewith and ladders shall.

1) be of sound material.

2) be of adequate strength having regard to the loads and strains to which they will be subjected and,

3) be maintained in proper condition.

d) Scaffolds shall be so constructed that no part thereof can be displaced in consequence of normal use.

e) Scaffolds shall not be over loaded and so far as practicable the load shall be evenly distributed.

f) Before installing lifting gear on scaffolds, special precautions shall be taken to ensure the strength and stability of the scaffold.

g) Scaffold shall be periodically inspected by the competent person.

h) Before allowing a scaffold to be used by his workmen, the contractor shall, whether the scaffold has been erected by his workmen or not, take steps to ensure that it complies fully with the regulations therein specified.

i) Working platform, gangways stairways shall.

i) be so constructed that no part thereof can sag unduly or unequally.

ii) be so constructed and maintained having regard to the prevailing conditions as to reduce as far as practicable risks of persons tripping or slipping,

iii) be kept free from any unnecessary obstruction.

j) In the case of working platform, gangway, working places and stairways at a height exceeding three meters. (to be specified)

i) every working platform and every gangway shall be closely boarded unless other adequate measures are taken to ensure safety.

ii) every working platform and gangway shall have adequate width and

iii) every working platform, gangway, working place and stairway shall be suitably fenced.

k) Every opening in the floor of a building or in working platform shall except for the time and to the extent required to allow the excess of persons or the transport or shifting of materials be provided with suitable means to prevent the fall of persons or materials.

l) When persons are employed on a roof where there is a danger of failing from a height exceeding 3 meters suitable precautions shall be taken to prevent the fall of persons or materials. (to be prescribed).

m) Suitable precautions shall be taken to prevent persons being struck by articles which might fall from scaffolds or other working places.

n) Safe means of access shall be provided to all working platforms and other working places.

o) The contractor/(s) will have to make payments to the labours as per Minimum Wages Act 1948.

Clause 21 B - The contractor shall comply with the following regulations as regards the Hoisting Appliances to be used by him:

a) Hoisting Machine and tackle, including their attachments, anchorages and support shall

i) be of good mechanical construction, sound material and adequate strength and free from patent defect; and

ii) be kept in good repair and in good working order.

b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of suitable quality and adequate strength and free from patent defect.

c) Hoisting machine and tackle shall be examined and adequately tested after erection on the site and before use and be re-examined in position at intervals to be prescribed by the Engineer in Charge.

d) Every chain, ring, hook, shackle, swivel and pulley block used, in hoisting or lowering materials or as a means of suspension shall be periodically examined.

e) Every crane driver or hoisting appliances operator shall be properly qualified.

f) No person who is below the age of eighteen (18) years shall be in control of any hosting machine, including any scaffold which, or give signals to the operator.

g) In the case of every hoisting machine and of every chain, ring, hook, shackle, swivel pulley block used in hosting or lowering or as means of suspension, the safe working load shall be ascertained by adequate means.

h) Every hoisting machine and all gear referred to in preceding regulation shall be plainly marked with the safe working load

i) In the case of hoisting machine having a variable safe working load, each safe working, load and the conditions under which it is applicable shall be clearly indicated.

j) No part of any hoisting machine or of any gear referred to in regulation(g) above shall be loaded beyond the safe working load except for the purpose of testing.

k) Motors, gearing transmissions, electric writing and other dangerous part or hoisting appliances shall be provided with efficient safeguards.

l) Hoisting appliances shall be provided with such means as will reduce to minimum the risk of the accidental descent of the load.

m) Adequate precaution shall be taken to reduce to a minimum, the risk of any part of a suspended load becoming accidentally displaced.

Measure for prevention of fire.

Clause 22 – The contractor shall not set fire to any standing jungle, trees, brush-wood or grass without a written permit from the Engineer-in-charge. When such permit is given, and also in all cases when destroying cut or drag trees brushwood, grass etc. By fire, the contractor shall take the necessary measure to prevent such fire spreading to or otherwise damaging surrounding property.
The contractor shall make his own arrangements for drinking water for the labour employed by him and provide sanitary and other arrangements.

Liability of contractor for any damage done in or outside work area.

Clause 23– Compensation for all damages done intentionally or unintentionally by contractor's labour whether in or beyond the limits of IUCAA property including any damage caused by spreading of fire mentioned in clause 22 shall be estimated by the Engineer-in-Charge or such other officer as he may appoint and the estimate of the Engineer-in-Charge subject to the decision of the Engineer-in-charge on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand, failing which, the same will be recovered from the contractor as damages in the manner prescribedin the clause 1 or deducted by the Engineer-in-Charge / Estate Manager from any sums that may be due or become due to the contractor under this contract or otherwise.

The contractor shall bear the expenses of defending any action or other legal proceeding that may be brought by any persons for injury sustained by him owing to neglect of precautions to prevent the spread of fire and he shall pay any damages and cost that may be awarded by the court in consequences.

Employment of female labour.

Clause 24 - The contractor shall employ the labours with the nearest Employment Exchange.

Work on Sunday.

Clause 25 – No Work shall be done on a Sunday without the sanction in writing of the Engineer-in-Charge.

Work not to sublet.

Clause 26 – The contract shall not be assigned or sublet without the written approval of the Engineer-in-Charge and if the contractor shall assign or sublet his contract, or attempt to do so or become insolvent or commence any proceedings to get himself adjudicated and insolvent or make any composition with his creditors, or attempt to do so or if bribe, gratuity, gift loan, perquisite ,reward or advantage, pecuniary or otherwise shall either directly or indirectly be given, promised or offered by the Contractor or any of his servants or agents to any public officer or person in the employment of IUCAA in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-Charge may thereupon by notice in writing rescind thecontract, and the security deposit of the Contractor shall thereupon stand forfeited and be absolutely at the disposal of IUCAA , and the same consequences shall ensure as if the contract had been rescinded under Clause 3 thereof and in addition the Contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

Contract may be rescinded and security deposit forfeited for subletting it without approval or for bribing a public officer or if contractor becomes insolvent.

Sum payable by way of compensation to be considered as reasonable compensation without reference to actual loss

Clause 27 :- All sums payable by a contractor by way of compensation under any of these conditions shall be considered as a reasonable compensation to be applied to the use of IUCAA without reference to the actual loss or damage sustained, and whether any damage has or has not been sustained.

Changes in the constitution of firm to be notified

Clause 28 :- In the case of tender by partners, any change in the constitution of a firm shall be forthwith notified by the contractor to the Engineer-in-charge for his information.

Works to be under direction of Engineer-in-charge.

Clause 29 :- All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-charge of the Circle, for the time being, who shall be entitled to direct, atwhat point or points and in what manner they are to be commenced, and from time to time carried on.

Clause 30 (1) :- Except otherwise specified in the contract and subject to the powers delegated to the architect by the IUCAA under the rules in force, the decision of the architect upon all questions relating to the meaning of the specifications, designs, drawings and instructions, hereinbefore mentioned and as to the quality or workmanship or materials used on the work or relating to the contract, designs, drawings, specifications, estimates, instructions, orders orthese conditions or otherwise concerning the work or execution or failure to execute the same whether arising during the progress of work or after thecompletion or abandonment thereof, for the time being, shall be final conclusiveand binding on all parties to the contract.

Disputes to be solved by Building and Works Committee of the IUCAA.

Clause 30 (2) :- All the disputes and differences of any kind whatsoever, arising in relation to or in connection with the contract or in carrying out the works (whether during the progress of the work or after their completion and whether before or after the determination, abandonment or breach of contract) shall be referred to by the contractor or by the Engineer-in-charge of theIUCAA to the subcommittee of the Buildings and Works Committee within 30 days from the date of receipt of the decision of the architect and the Sub- Committee shall decide such disputes/differences as expeditiously as possible.

The tenure of the Sub-Committee will be as per decision of Director IUCAA, Pune. In-case of any vacancy arising in the composition of sub-committee, the Director of IUCAA shall appoint the memberof Buildings and Works Committee on the said sub -committee.

Arbitration

Clause 31 :- If the contractor/the IUCAA is aggrieved by the decision of the Sub-Committee, the Contractor/the Engineer-in-charge of the IUCAA may apply to the Director of the IUCAA, within 30 days from the date of receipt of decision of the sub-committee, for entering into the arbitration. On receipt of such application from the contractor or the Engineer-in-charge of the IUCAA, the Director IUCAA shall appoint a Sole Arbitrator who will be fellow of Indian Institute of Architects Or Institute of Engineers (India) and refer the dispute/difference to him. The decision of the Arbitrator shall be binding and finalon both the parties. The provisions of Arbitration and Conciliation Act, 1996 shall apply to such arbitration. Such arbitration proceeding will be held at Pune.

Lump sums in estimates.

Clause 32 :- When the estimate on which a tender is made includes lump sums in respect of part of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for each item, or if the part of workin question is not in the opinion of the Engineer-in-Charge capable of measurement, the Engineer-in-Charge may as his discretion pay the lump sum amount entered in the estimate and certificate in writing of the Engineer-in- charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provision of this clause (not applicable for this tender).

Action where no specification

Clause 33 :- In the case of any class of work for which there is no suchspecification as is mentioned in rule 1 of form B-2, such work shall be carried out in accordance with the Divisional specifications, and in the event of there being no Divisional specifications, then in such case the work shall be carried out in all respects in accordance with all instructions and requirement of the Engineer-in- charge (not applicable for this tender).

Definition of work

Clause 34 :- The expression "works" or "work" where used in these conditions, shall unless there be something in the subject or context repugnant to such constructions, be construct, to mean the work or works contracted to be executed under or in virtue of the contract, whether temporary or permanent and whether original, altered, substituted or additional.

Contractor's percentage whether applied to net or gross amount of bill.

Clause 35 :- The percentage referred to in the tender shall be deducted from/ added to the gross amount of the bill before deducting the value of any stock issued (not applicable for this tender).

Refund of quarry fees and royalties.

Clause 36 :- All quarry fees, royalties, and ground rent for stacking materials, if any, should be paid by contractor. The contractor will complete all formalities for payment of royalty to the Collector office before carting away the excavated soil. The contractor is expected to submit all Collector's approvals before carting away.

Compensation under Workmen's Compensation Act

Clause 37:- The Contractor shall be responsible for and shall pay any compensation to his workmen payable under the Workmen's Compensation act, 1923 (VIII of 1923), (hereinafter called the said Act) for injuries caused to the workmen, if such compensation is payable / paid by the IUCAA as principal under sub-section (1) of Section 12 of the said act on behalf of the Contractor, it shall be recoverable by the IUCAA from the Contractor under sub-section (2)

of the said section. Such compensation shall be recovered in the manner laid down in Clause 1 above.

Clause 37(A):- The Contractor shall be responsible for and shall pay theexpenses of providing medical aid to any workman who may suffer a bodilyinjury as a result of an accident. If such expenses are incurred by the IUCAA, the same shall be recoverable from the Contractor forthwith and be deducted without prejudice to any other remedy of the IUCAA from any amount due or that may become due to the Contractor.

Clause 37 (B):- the contractor shall provide all necessary personal safety equipment and first aid apparatus available for the use of the persons employed on the site and shall maintain the same in condition suitable for immediate use at any time shall comply with the following regulations in connection therewith.

a) The workers shall be required to use the equipments so provided by the Contractor and the Contractor shall take adequate steps to ensure proper use of the equipment by those concerned.

b) When work is carried on in proximity to any place where there is a risk of drowning all necessary equipment shall be provided and kept ready for use and all necessary steps shall be taken for the prompt rescue of any person in danger.

c) Adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

(Govt. Circular No. PWD CAT-6076/3336/(400)/ Bldg-2. Dated16-08-1985

Clause 37 (C) :- The Contractor shall duly comply with the provisions of "The Apprentices Act, 1961" (III of 1961). The rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so, he shall be subjected to all the liabilities and penalties provided by said Act and said Rules.

No Claim for excess / saving quantities.

Clause 38 :- **1)** Quantities in respect of the several items shown in the tender are approximate and no revision in the tendered rates shall be permitted in respect of any of the items. The Excess / Saving Quantity shall be carried out bycontractor as per Tender Rates. No claim shall be entertained on saving orexcess of the quantities to any extent. The variation of the Quantities will not deviate the Contract.

Employment of famine Labour etc.

Clause 39 :- The contractor shall employ any famine, convict or other labour of a particular kind or class if ordered in writing to do so by the Engineer-in- Charge.

Claim for compensation for delay in starting the work.

Clause 40 :- No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance works, on account of any delay in accordance to sanction of estimates.

Claim for compensation for delay in execution of work.

Clause 41:- No compensation shall be allowed for any delay in the execution of the work on account of water standing in borrow pits or compartments. The rates are inclusive for hard or cracked soil, excavation in mud, sub soil, water

standing in borrow pits and no claim for an extra rate shall be entertained, unless otherwise expressly specified.

Entering upon or commencing any portion of work

Clause 42 :- The contractor shall not enter upon or commence any portion of work except with the written authority and instructions of Engineer-in-Charge or of his subordinate in charge of the work. Failing such authority, the contractor shall have no claim to ask for measurements of or payments forwork.

Minimum age of persons employed, the employment of donkeys and/ or other animals and the payment *of fair wages.*

Clause 43 :- (i) No contractor shall employ any person who is under the age of 18 years.

(ii) No contractor shall employ donkeys or other animals with breaching of string or thin rope. The breaching must be at least three inches wide and should be of tape (Newer).

(iii) No animal suffering from sores, lameness or emaciation or which is immature shall be employed on the work.

(iv) The Engineer-in-Charge or his Agent is authorized to remove from the work, any person or animal found working which does not satisfy these conditions and no responsibility shall be accepted by the IUCAA for any delay caused in the completion of the work by such removal.

(v) The contractor shall pay fair and reasonable wages to the workmen employed by him in the contract undertaken by him. In the event of any dispute arising between the contractor and his workmen on the grounds that the wages paid are not fair and reasonable, the dispute shall be referred without delay tothe Engineer-in-charge, who shall decide the same. The decision of the Engineer-in-charge shall be conclusive and binding on the contractor but such decision shall not in any way affect the conditions in the contract regarding the payment to be made by the IUCAA at the sanctioned tender rates.

(vi) Contractor shall provide drinking water facilities to the workers. Similar amenities shall be provided to the workers engaged on large work in urban areas.

(vii) Contractor to take precaution against accidents which take place on account of labour using loose garments while working near machinery.

Method of payment.

Clause 44 :- Payment to contractors shall be made through NEFT / RTGS only.

Acceptance of conditions compulsory before tendering for work.

Clause 45: - Any contractor who does not accept these conditions shall not be allowed to tender for work.

Employment of scarcity labour.

Clause 46:- If IUCAA declares a state of scarcity or famine to exist in any village situated within 10 miles of the work, the contractor shall employ upon such parts of the work, as are suitable for unskilled labour, any person certifiedto him by the Engineer-in-charge, or be any person to whom the Engineer-in-charge may have delegated this duty in writing to be in need of relief and shallbe bound to pay to such person wages not below the minimum which IUCAA may have fixed in this behalf. Any disputes which may arise in connection with the Implementation of this clause shall be decided by the Engineer-in-charge whose decision shall be final and binding on the contractor.

Maharashtra Act XIX of 1985, Clause regarding Turnover tax vide P. W. D. Circular No. CAT-1086/ CR-330 –ldg-2 Dated 10th, June 1987.

Clause 47 A: - The tendered rates shall be inclusive of all taxes.

Clause 48: - The rates to be quoted by the contractor must be inclusive of sales tax. No extra payment on this account will be made to the contractor.

Clause 49: - In case of materials that may remain surplus with the contractor from those issued for the work contracted for, the date of ascertainment of the materials being surplus will be taken as the date of sale for the purpose of sales tax and the sales tax will be recovered on such sale.

PWD Government Resolution No. CAT/1097/CR-478/ Bldg.-2/Mantralaya/ Dated 23rd March 1998

Clause 50: - The contractor shall employ the unskilled labour to be employed by him on the said work only from locally available Labours and shall give preference enrolled under Maharashtra IUCAA and Self Employment Departments Scheme. Provided, however, that if the required unskilled labour are not available locally, the contractor shall in the first instance employ such number of persons as is available and thereafter may with previous permission, in writing of the Engineer-in-charge-in-Charge of the said work, obtained the rest of requirements of unskilled the labour from outside the above scheme.

Clause 51: - Wages to be paid to the skilled and unskilled laborers engaged by the contractor. The contractor shall pay the labourers skilled and unskilled according to the wages prescribed by the Minimum Wages Act of 1948 applicable to the area in which the work of the Contractor is in progress. The Contractor shall comply with the provisions of the Apprentices Act, 1961, and the rules and orders issued there under from time to time. If he fails todo so, his failure will be a breach of the contract and the Engineer-in-charge, may in his discretion may cancel the contract. The contractor shall also be liable, for any pecuniary liability arising out on account of any violation by him of the provision of the Act. The contractor shall pay the laborers skilled and unskilled according to the wages prescribed by the Minimum Wages act of the 1948 applicable to the area in which the work is in progress.

Government CircularNo. CAT 1274/40364/Desk-2 Mantralaya, Mumbai, 400032. Dated 07-12-1976

Clause 52 :- All accounts whatsoever which the contractor is liable to pay to the IUCAA in connection with execution of the work including the amount payable in respect of (i) materials/ and or stores supplied/issued hereunder bythe IUCAA to contractor (ii) hire charges in respect of heavy plant, machinery and equipment given or hire by the IUCAA to the contractor for execution by him of the work and/or which advances have been given by the IUCAA to the contractor shall be deemed to be arrears of the Land Revenue and the IUCAA may without prejudice to any other rights and remedies ofthe IUCAA recover the same from the contractor as arrears of Land Revenue (not application to this tender).

Government Circular No. CAT 1284(120) Building-2, Mantralaya, Mumbai, 400032. Dated 14-8-85

Clause 53: - The contractor shall duly comply with all the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 (37 of 1970) and the Maharashtra Contract Labour (Regulation and abolition) Rules, 1971 as amended from time to time and all other relevant statues and statutory provisions concerning payment of wages particularly to workmen employed by the contractor and working on the site of the work. In particular the contractor shall pay wages to each worker employed by him on the site of the work at the rates prescribed under the Maharashtra Contract labour (Regulation and Abolition) Rules, 1971.

Clause 54: - The Contractor shall engage apprentices such as brick layer carpenter, wiremen, plumber, as well as blacksmith recommended by the State Apprenticeship Advisor Director of Technical Education, Dhobi Talao,Mumbai-400 001 In the construction work. (As per Government ofMaharashtra, Education Department No.TSA/5170/T/5689, dated, 7.7.72) (Not application to this tender.

Clause 55: - (Government of Maharashtra P.W.D. Resolution No. CAT/1086/CR-243/K/Bldg.2, Mantralaya, Mumbai Dt. 11.8.1987)

CONDITIONS FOR COVID & MALARIA ERADICATION ANTI MALARIA AND OTHER HEALTH MEASURES

a. The anti-malaria and other health measures shall be as directed by the Joint Director (Malaria and Filarial) of Health Services, Pune.

b. The contractor shall see that mosquito-genic conditions are not created so as keep vector population to minimum level.

c. The Contractor shall carry out anti –malaria measures in the area as per guidelines prescribed under National Malaria Eradication Programme and as directed by the Joint Director (Malaria and Filarial) of Health Services, Pune.

d. In case of default in caring out prescribed anti-malaria measures resulting in increase in malaria incidence, contractor shall be liable to pay to IUCAA the amount spent by the IUCAA on anti-malaria measures to control the situationin addition to fine.

e. Contractor is expected to follow all guidelines of measures towards COVID prevention as per State and Central government guidelines, to be included in the quoted rates. No extra charges will be paid towards above measures.

RELATION WITH PUBLIC AUTHORITIES.

The contractor shall make sufficient arrangements for draining away the sewerage water as well as water coming from the bathing and washing places and shall dispose off this water in such a way as not to cause any nuisance. He shall also keep the premises clean by employing sufficient number of sweepers. The contractor shall comply with rules, regulations, bye-laws and directions given from time to time by any local or public authority in connection with this work and shall pay fees or charges which are livable on him without any extra cost to IUCAA. (Government of Maharashtra P.W.D. Resolution No. CAT – 1086/CR-243/D/Bldg. 2 Mantralaya, Mumbai. Dated 11-9-1987).

Clause 56: - CONDITIONS RELATING TO INSURANCE OF CONTRACT WORK

The Contractor shall take Contractor's All Risk (CAR) Insurance Policy / Policies so as to provide adequate insurance cover for execution of the awaited contract work for total contract value and complete contract period from the "Directorate of Insurance, Maharashtra state, Mumbai only. Its postal address for Correspondence is "264 MHADA, First Floor, Opposite Kalanagar, Bandra (East), Mumbai-400051." (Telephone Nos. 022-26438690/ 26438746 and Fax No. is 022-26438461),Similarly all workmen appointed to complete the contract work are required to insure under workmen's compensation Insurance policy. Insurance Policy / Policies taken out from any other company will not be accepted. **The rates are inclusive of insurance charges.**

ADDITIONAL CONDITIONS FOR PROCUREMENT OF MATERIALS.

1. All the materials such as asphalt, cement steel etc. shall be procured by the contractor from approved Government institutions or as directed by the Engineer-in-charge only. The material shall be brought at the site of the work well in advance by the contractor. The contractor shall be responsible for all transportation and storage of the materials at site and shall bear all the related costs. The Engineer shall be entitled at any time to inspect or examine all such materials. The contractor shall provide reasonable assistancefor such inspection or examination as may be required.

2. After receiving bitumen, the authorized challan/ gate pass should be obtained from the refinery mentioning the quantity of bitumen, rate of bitumen, date of delivery etc. And it should be handed over to the Department for each consignment. Similarly, the invoice of cement etc. Shall be given to the authorized representative of the Engineer-in-charge immediately on procurement of the material.

3. The day-to-day record of the receipt / utility / balance of material should be kept by the contractor in the form of register for each material like asphalt, cement, steel at plant site /site of work/store and the same will be checked by the Engineer-in-charge or authorised Engineer at any time. This register shall be signed daily by the contractor or his representative and representative of Engineer-in-charge. The contractor shall submit periodical as well as on completion of work an account of all· materials used by him on the work to the Engineer-in-charge.

4. While transportation of bouzer, transport pass should be obtained from those corporation / municipality through whose limits the bouzer is passed and should be handed over to the authorised representative of the Department.

5. The procurement of cement/steel/RCC pipes etc., should be from authorised manufacturing company/institutions and vouchers regarding purchase there of shall be submitted to the Engineer-in-charge. The material from any other source other than the approved institutions shall not be allowed unless written permission from theEngineer-in-charge is taken. In such cases certificate for test, quality shall be produced by the contractor and samples of materials shall be tested from any Government laboratory by the contractor at his cost and the test results be supplied to the Department. The materials not conforming to the required standard shall be removed at once from the site of works by the contractor at his own cost. All the materials such as asphalt, cement etc., required for use in the work shall be conforming to the concerning
I.S. / MOST specifications. These materials shall be used on work by the contractor only after the tests thereof are found satisfactory. The responsibility of carrying outtests to the frequencies specified for each material shall rest with the contractor.

6. Any consignment or part of consignment of cement which is deteriorated in any way shall not be used in the works and shall be removed from the site by the contractor without charge to the employer.

7. Cement shall be transported and handled and stored on the site in such a manner as to avoid deterioration, contamination etc., Each consignment shall be stored separately so that it may be readily identified and inspected. Cement shall be used in the sequence in which it is delivered at site.

8. The contractor shall prepare and maintain proper records on site in respect of delivery, handling, storage and use of cement and these records shall be made available for inspection by the Engineer at all times.

9. The contractor shall construct at his own cost shed/ sheds as per directions of the Engineer-in- charge for storing the material and providing double locking arrangements (one lock of the department and the other of the contractor). Material shallbe taken out from store only in presence of an authorised representative of the Engineer-in-charge. The store shed constructed on site shall be removed on completion of work. The contractor shall take all necessary steps to guard the materials brought by him.

10. Cement to be used in the works shall be any of the following types with the prior approval of the Engineer.

(a) Ordinary Portland cement conforming to is 8112 (latest edition)

(b) Ordinary Portland cement conforming to is 12269 (latest edition).

(c) Minimum 43 grade of cement or higher grade of cement should be used.

11. Steel TMT (FE – 500/500D) Bars grade conforming to is IS 1786 shall be used.

12. Emulsion R-70 grade confirming to is 8887 of 1995 shall be used.

13. The contractor shall make his own arrangement for the safe custody of the materials brought by him on the site of work.

14. The charges for conveying of the material from the place of the purchase by the contractor to the site of work and the actual spot of work shall be entirely borne by the contractor. No claim on this account shall be entertained.

15. Register showing dispatch of bituminous load from the plant, vehicle No., time of dispatch, temperature at the time of dispatch etc. Shall be kept in prescribed form at hot mix plant, site. Similarly register showing the time, temperature of the mix etc. At site shall be kept. The authorized representative of the contractor shall fill both these registers. These shall be signed by the Contractor every day in token of acceptance. The maintenance of these register does not absolve the contractor of his contractual obligation towards quality of the work.

16. The contractor should ensure that all safety precautions are observed by the labourers while handling the materials and precautions are taken in cases of injuries etc. For their labour at the cost of the contractor and the contractor will bear all the expenses, compensation etc. If any accident occurs to the labour etc. no claim in this regard whatsoever shall be entertained and the decision of the IUCAA will be final and conclusive.

17. In case the materials become surplus owing to the change in the design of the work after the materials are brought by the contractor, no claim in this regard will be entertained and the contractor will be required to take away such materials from the site.

18. The contractor should arrange for weighment of the bouzer if desired by the Engineer-in charge. The weighment shall be done in the presence of representative of the Department at the cost of the contractor.

19. The weight of the steel bars used on the work will be calculated on the basis of standard weight per unit length vide I.S. 1732. No wastage of steel will be considered at all. Cut Pieces of the steel irrespective of the length will be the property of the Contractor and no claim whatsoever in this regard shall be entertained. The consignment of the steel brought by the contractor having weight less than the standard weight per unit length of the bar as mentioned above will not be accepted. For this purpose, random sample will be tested by the Engineer-in-charge and the decision of the Engineer-in-charge shall be binding on the contractor. If the steel received is over weight (more than standard weight per running meter length) no extra payment will be made and no claim in this regard whatsoever shall be entertained.

20. No claims on account of cement or steel rods used for ancillary works on site of work shall be entertained.

21. All the materials to be brought on site shall be brought only on working days and in presence of an authorized representative of the Engineer-in-charge.

22. The material advance of 75% will be paid if recommended by the Architect and Project Management Consultant of approved materials for cement, steel & tiles only. The minimum assessed RA bill value should be Rs. 1 Crores.

SECTION-VI

ADDITIONAL GENERAL CONDITIONS AND SPECIFICATIONS

INDEX

Sr. No.	Description
1	2
1.	General.
2.	Contractor to study site conditions.
3.	Declaration of Contractor.
4.	Indemnity.
5.	Definitions.
6.	Errors, omissions and discrepancies.
7.	Working methods and progress schedule.
8.	Agent and work order book.
9.	Setting out.
10.	Leveling instruments.
11.	Authority of representative of Engineer-in-charge.
12.	Co-ordination.
13.	Assistance in procuring priorities/permits etc.
14.	Quarries.
15.	Collection of materials.
16.	Temporary Quarters and Site Office.
17.	Treasure- Trove.
18.	Patented Device.
19.	Explosives.
20.	Damage by flood for accident.
21.	Police Protection.
22.	Traffic regulations.
23.	Supervision and Inspection of work and Quality control.
24.	Initial measurements for record.
25.	Samples and testing of materials.
26.	Change in cement contents etc.
27.	Cement concrete/form work for concrete.
28.	Miscellaneous.
29.	Medical and sanitary arrangement for labour.
30.	Safety Code.
31.	Scope of rates for different items of works.
32.	Payments.
33.	Handing over of work.
34.	Claims.
35.	Quality assurance and maintenance.
36.	Maintenance.

ADDITIONAL GENERAL CONDITIONS AND SPECIFICATIONS

1. These are to apply as additional specifications and conditions unless otherwise already provided for contradictorily elsewhere in his contract.

2. CONTRACTOR TO STUDY SITE CONDITIONS:

The contractor shall be deemed to have carefully examined the work and site conditions including labour, the general and the special conditions, specifications, schedules and drawings and shall be deemed to have visited the site of the work and to have fully informed himself regarding the local conditions and carried out his own investigations to arrive at rates quoted in the tender. In this regard, he will be given necessary information to the best of knowledge of Department but without any guarantee about it.

If he shall have any doubt as to the meaning of any portions of these general conditions or the special conditions, or the scope of work or the specifications and drawings or any other matter concerning the contract, he shall in good time, before submitting his tender, set forth the particulars thereof and submit them to the Engineer-in-charge, IUCAA, Pune in writing in order that such doubts may be clarified authoritatively before tendering. Once a tender is submitted, the matter will be decided according to tender conditions in the absence of such authentic pre-clarification.

3. DECLARATION OF THE CONTRACTOR

The contractor should sign the declaration form.

4. INDEMNITY:

The contractor shall indemnity the IUCAA against all actions, suits, claims and demands brought or made against him in respect of anything done or committed to be done by the Contractor in execution of or in connection with the work of this contract and against any loss or damage to the IUCAA in consequence of any actionor suit being brought against the Contractor for anything done or committed to be donein the execution of the work of this contract.

5. DEFINITIONS:

Unless excluded by or repugnant to the context.

(a) The expression "IUCAA" as used in the tender papers shall mean the IUCAA, Pune – 411 007.

(b) The expression "Architect" as used anywhere in the tender papers shall mean the Architect appointed by the IUCAA for this work.

(b-i) The expression "Electrical Consultant of Architect" as used in the tender papers shall mean the Electrical Consultant appointed by the Architect, and approved by the Engineer-in-charge, IUCAA.

(c) The expression the "Department" as used in the tender papers shall mean the Estate Department of IUCAA.

(d) Project Management Consultant (PMC) means project manager team appointed by IUCAA for day-to-day supervision, recording measurements for bills and monitoring time, cost & quality.

(e) The expression "Engineer" or "Engineer -in-charge" as used in the tender papers shall mean the Estate Manager, IUCAA, Pune - 7.

(f) The expression "Contractor" used in the tender papers shall mean the successful tenderer whose tender has been accepted, and who has been authorized to proceed

with the work.

(g) The expression "Contract" as used in tender papers shall mean the deed to contract together with its original accompaniment and those latter incorporated in it bymutual consent.

(h) The expression "Plant" as used in the tender papers shall mean every machinery, necessary or considered necessary by the Engineer to execute, construct, complete and maintain the works and used in, altered, modified, substituted and additional work ordered in the time and the manner herein provided and all temporary materials and special and other articles of appliances of every sort, kind and description whatsoever intended or used thereof.

(i) "Drawings shall mean the drawings referred to the specifications and any modifications of such drawings approved in writing by Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer.

(j) 'Provisional sum' or 'Provisional lump sum' shall mean lump sum included by IUCAA in tender documents and shall represent the estimated value of work for which details are not available at the time of issue of tender.

(k) "Provisional items" shall mean items for which approximate quantities have been included in the tender documents.

(l) The "Site" shall mean the lands and/or other places, on, under, in or through which the work is to be executed under the contract including any other lands or places which may be allotted by IUCAA or used for the purpose of contract.

(m) The "Work" shall mean the works to be executed in accordance with the Contract or part (s) thereof as the case may be and shall include all extra or additional, altered or substituted works as required for performance of the Contract.

(n) The "contract sum" shall mean the sum for which the tender is accepted.

(o) The "Accepting Authority" shall mean the committee competent to accept the tender.

(p) The "Day" shall mean a day of 24 hours from midnight to midnight respective of the number of hours worked in any day in the week.

(q) "Temporary Works" shall mean all temporary works of every kind required in or about the execution, completion, or maintenance of the works.

(r) "Urgent Works" shall mean any measure which, in the opinion of the Engineer-in-charge, become necessary during the progress of the works to obviate any risk or accident or failure or which become necessary for security of the work or the persons working, thereon.

Where the context so requires words importing the singular only also include the plural and vice- versa.

Heading and marginal notes, if any, to the general conditions shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof of the contract.

Wherever there is mention of "Schedule of Rates" or simply D.S.R. in this tender, it will be taken to mean as "the Schedule of the rate of the Pune District in whose jurisdiction the work lies".

6. ERRORS, OMISSIONS, AND DISCREPANCIES:

(a) In case of errors, omissions and / or disagreement between written and scaled dimensions on the drawing or between drawings and specifications etc. The following order of preference shall apply.

(i) Between actual scaled and written dimensions or descriptions on a drawing the latter shall be adopted.

(ii) Between the written or shown description or dimensions in the drawings and corresponding one in the specifications, the latter shall apply.

(iii) Between the quantities shown in schedule of quantities and those arrived at from the drawings, the latter shall be preferred.

(iv) Between the written description of the item in the schedule of quantities and the detailed description in the specifications of the same items, the latter shall be adopted.

(b) In case of discrepancy between percentage rate quoted in figures and words, the lowest of the will be considered for acceptance of tender.

(c) In all cases of omissions and / or doubts or discrepancies in the dimensions or description of any item or specification a reference shall be made to the **Estate Manager, IUCAA, Pune - 7** whose elucidation, elaboration or decision shall be considered as authentic. The contractor shall be held responsible for any errors that may occur in the work through lack of such reference and precaution.

7.1 PROGRAMME OF WORK:

The works is required to be completed within a period of **24 months** (including the monsoon period).

7.2 (a) METHODOLOGY OF CONSTRUCTION AND CONSTRUCTION EQUIPMENTS:

Contractor shall furnish at least 15 days in advance, his programmed of commencement of item of work, the details of actual methods that would be adopted by the contractor for the execution of various items of work such as special scaffolding, well sinking, cast-in-situsuperstructure for Bridge work and Earth work, W.B.M, Black topping items etc. For roads works supported by necessary detailed drawings and sketches including those of the plant and Machinery that would be used, their locations, arrangement for conveying and handling materials etc. And obtain prior approval of the Engineer-in-charge well in advance of startingof such item of work. The Engineer-in-charge reserves the right to suggest modifications or make complete changes in the method proposed by the contractor, whether accepted previouslyor not, at any stage of the work, to obtain the desired accuracy, quantity and progress of the work which shall be binding on the contractor, and no claim on account of such change in method of execution will be entertained by the Government so long as specifications of the item remain unaltered. The sole responsibility for the safety and adequacy of the methods adopted by the contractor will however rest on the contractor irrespective of any approval given by the Engineer.

In case of slippage from the approved work program at any stage, the contractor shall furnish revised program to make up the slippage within the stipulated time schedule and obtainthe approval of the engineer to the revised program.

(b) CONSTRUCTION EQUIPMENT:

The contractor shall be required to give a trial run of the equipment's for establishing their capability to achieve the laid down specifications and tolerance to the satisfaction of the

Engineer before commencement of the work. All equipment provided shall be of proven efficiency and shall be operated and maintained at all times, in a manner acceptable to the Engineer and no equipment or personnel will be removed from site without permission of the Engineer.

(c) PROGRESS SCHEDULE:

The contractor shall furnish within the period of one month of the order to start the work, the program of work in CPM/PERT charts in quadruplicate indicating the date of actual start, the monthly/progress expected to be achieved and the anticipated completion date of each major item of work to be done by him, also indicating dates of procurement and setting up of materials, plant and machinery. the schedule is to be such as is practicable of achievement towards the completion of the whole work in the time limit, the particulars items, if any, on the due dates specified in the contract and shall have the approval of the engineer-in-charge. no revised schedule shall be operative without such acceptance in writing. The engineer is further empowered to ask for more detailed schedule or schedules say; week by week for any item or items, in case of urgency of work as will be directed by him and the contractor shall supply the same as and when asked for.

The contractor shall furnish sufficient plant, equipment and labour as may be necessary to maintain the progress of schedule. The working and shift hours restricted to one shift a day for operations to be done under the government supervision shall be such as may be approved by the Engineer-in-charge. They shall not be varied without the prior approval of the engineer. Night work which requires supervision shall not be permitted except when specifically allowed by engineer each time, if requested by the contractor. The contractor shall provide necessary lighting arrangements etc. for night work as directed by Engineer without extra cost.

Further, the contractor shall submit the progress report of work in prescribed forms and charts etc. at periodical intervals as may be specified by the engineer-in-charge. Schedule shall be in form of progress charts, forms, progress statement and / or reports as may be approved by the Engineer.

The contractor shall maintain proforma, charts, details regarding machinery, equipment, labour, materials, personnel etc. as may be specified by the engineer and submit periodically return thereof as may be specified by the Engineer-in-charge.

8. AGENT AND WORK ORDER BOOK:

The contractor shall himself manage the work or engage an authorised all time agent onthe work capable of managing and guiding the work and understanding the specifications and contract conditions. A qualified and experienced. Engineer shall be provided by the contractor as his agent for technical matter in case the Engineer-in-charge considers this essential for the work and so directs contracts. He will take orders as will be given by the Engineer-in-chargeor his representative and shall be responsible for carrying them out. This agent shall not be changed without prior intimation to the Engineer-in-charge and his representative on the work site. The contractor shall supply to the Engineer the details of supervisory and other staff employed by the contractor and notify changes when made, and satisfy the engineer regarding the quantity and sufficiency of the staff thus employed. The Engineer will have the unquestionable right to ask for changes in the quality and numbers of contractor’s supervisory staff and to order removal from work of any of such staff. The contractor shall comply with such orders and effect replacements to the satisfaction of the Engineer.

A work order book shall be maintained on site and it shall be the property of IUCAAand the contractor shall promptly sign orders given therein by Engineer-in-charge or his representative and his superior officers, and comply with them. the compliance shall be

reported by the contractor to the Engineer in good time so that it can be checked. The blank work book with machine numbered pages will be provided by the department free of chargefor his purpose. the contractor will be allowed to copy out instructions therein from time to time.

9. SETTING OUT:

(i) SETTING OUT FOR (BUILDING WORKS):

The Engineer-in-charge shall furnish the contractor with only the four corners of the works site and a level bench mark and the contractor shall set out the works and shall provide an efficient staff for the purpose and shall be solely responsible for the accuracy of such settingout. The setting out will be approved by the Architect of project in writing.

The contractor shall provide, fix and be responsible for the maintenance of all stacks, templates, level marks, profiles and other similar things and shall take all necessary precautions to prevent their removal or disturbance and shall be responsible for the consequence of such removal or disturbance should the same take place and for their efficient and timely reinstatement. The contractor shall also be responsible for the maintenance of all existing survey marks, boundary marks, distance marks and Centre line marks, either existingor supplied and fixed by the contractor. The work shall be set out to the satisfaction of the Engineer-in-charge. The approval thereof or joining with the contractor by the Engineer-in- charge in setting out the work shall not relieve the contractor of any of his responsibilities.

Before beginning the work, the contractor shall at his own cost provide all necessary reference and level posts, pegs, bamboos, flags, ranging rods, strings and other materials for proper layout of the work in accordance with the scheme for bearing marks acceptable to the Engineer-in-charge. The Centre longitudinal or face lines and cross lines shall be marked by means of small masonry pillars. Each pillar shall have distinct mark at the Centre to enable the oolite to be set over it. No work shall be started until all these points are checked and approved by the Engineer-in-charge in writing but such approval shall not relieve the contractor of any of his responsibilities. The contractor shall also provide all labour, material and other facilities, as necessary, for the proper checking of layout and inspection of the points during construction.

Pillars bearing geodetic marks located at the sites of units of works under construction should be protected and fenced by the contractor.

On completion of works, the contractor must submit the geodetic documents according to which the work was carried out.

RESPONSIBILITIES FOR LEVEL AND ALIGNMENT:

The contractor shall be entirely and exclusively responsible for the horizontal and vertical alignment, the levels and correctness of every part of the work and shall rectify effectively any errors or imperfections therein. Such rectifications shall be carried out by the contractor, at his own cost, when instructions are issued to that effect by the Engineer-in- charge.

10. LEVELLING INSTRUMENTS:

If measurements of items of the work are based on volumetric measurements calculated from levels taken before and after construction of the item a large number of leveling staves, tapes, etc. Will have to be kept available by the contractor at the site of work for this purpose. Lack of such leveling staves, tapes etc. In required numbers may cause

delay in measurements and the work. The contractor will have therefore to keep sufficient number of these readily available at site.

11. AUTHORITIES OF THE ENGINEER IN CHARGE'S REPRESENTATIVE:

The duties of the representative of the Engineer-in-charge are to watch and supervisethe work and test and examine any material to be used or workmanship employed in connection with the works. The Engineer-in-charge may from time to time, in writing delegate to his representative any powers and authorities vested in the Engineer-in-charge and shall furnish to the contractor a copy of all such delegations of powers and authorities. Any written instructions of approval given by the representative of the Engineer-in-charge to the contractor within the terms of such delegations (but not otherwise) shall bind the contractor and the department as though it had been given by the Engineer-in-charge, provided always as follows.

Failure of the representative of the Engineer-in-charge to disapprove any work or materials shall not prejudice the power of the Engineer-in-charge thereafter to disapprove such work or materials and so order the putting down, removal or breaking up thereof.

12. CO-ORDINATION:

When several agencies for different sub-works of the project are to work simultaneously on the project site, there must be full co-ordination and co-operation between different contractors to ensure timely completion of the whole project smoothly. The scheduled dates for completion specified in each contract shall therefore be strictly adhered to. Each contractor may make his independent arrangements for water, power, housing, etc. If they so desire. On the other hand, the contractors are at liberty to mutual agreement in this behalf and make joint arrangements with the approval of the Engineer. No single contractor shall take or cause to be taken any steps or action that may cause disruption, discontent or disturbance to work, labour or arrangement etc. Of other contractors in the project localities. Any action by any contractor which the Engineer in his unquestioned discretion may consider as infringementof the above code would be considered as a breach of the contract conditions and shall be dealt with as such.

In case of any dispute disagreement between the contractors, Architect, Consultant etc., the Engineer's decision regarding the co-ordination, co-operation, and facilities to be provided by any of the contractors shall be final and binding on the contractors, Architect, Consultant etc., concerned and such a decision or decisions shall not vitiate any contract nor absolve the contractor (s) of his / their obligations under the contract not consider for the grant for any claim or compensation.

13. ASSISTANCE IN PROCURING, PRIORITIES, PERMITS ETC.

The Engineer on a written request by the contractor will if in his opinion, the request is reasonable and in the interest of work and its progress, assist the contractor in securing the priorities for deliveries, transport permits for controlled materials etc. Where such are needed. The IUCAA will not however be responsible for the non-availability of such facilities or delay in this behalf and no claims on account of such failure or delays shall be allowed by the IUCAA.

The contractor shall have to make his own arrangement for machinery required for the work. However, such machinery conveniently available with the Department may be spared as per the rules in force on recovery of necessary security Deposit and rent with agreement in the prescribed form. Such an Agreement shall be independent of this contract and the supply of machinery shall not form a ground for any claim or extension of time limit for this work.

14. QUARRIES:

14.1 No Quarries are available with this IUCAA. The contractor (s) shall have to arrangethe same himself / themselves.

14.2 The quarrying operations shall be carried out by the contractor with proper equipment such as compressors, jack hammers, drill bits, explosives etc. And sufficient number of workmen shall be employed so as to get the required out-turn.

14.3 The contractor shall carry out the works in the quarries in conformity with all the rules and regulations already laid down or that may be laid down from time to time by Government. Any cost incurred by IUCAA due to non-compliance of any rules or regulations or due to damages by the contractor shall be the responsibility of the contractor.

The Engineer-in-charge or his representative and Architect of the project shall be given full facilities by the contractor for inspection at all times of the working of the quarry, records maintained, the stocks of the explosives and detonators etc. So as to enable him to check that the working records and storage are all in accordance with the relevant rules. The Engineer-in-charge or his representative and Architect shall at any time be allowed to inspect the work, building, and equipment at the quarters.

14.4 The contractor shall maintain at his own cost the books, registers etc., required to be maintained under the relevant rules and regulations and as directed by the Engineer-in-charge. These books shall be open for inspection at all times by the Engineer-in-charge or his representative and Architect and the contractor shall furnish the copies or extracts of books or registers as and when required.

14.5 All quarrying operations shall be carried out by the contractor in organized and expeditious manner, systematically and with proper planning, the contractor shall engage licensed blaster and adopt electric blasting and / or any other approved method which would ensure complete safety to all the men engaged in the quarry and its surroundings. The contractor shall himself provide suitable magazines and arrange to procure and store explosivesetc., as required under the rules at his own cost. The designs and the location of the magazine shall be got approved in advance from the chief Inspector of Explosives and the rules and regulations in this connection as laid down by the chief Inspector of Explosives from time to time shall be strictly adhered to by the contractor. It is generally experienced that it takes time to obtain the necessary license for blasting and license for storage of material from theconcerned authorities. The contractor must therefore take timely advance action for procuring all such licenses so that work progress may not be hampered.

14.6 The approaches to the quarrying place from the existing public roads shall have to be arranged by the contractor at his own cost, and the approaches shall be maintained by the contractor at his own cost till the work is over.

14.7 The quarrying operations shall be carried out by the contractor to the entire satisfaction of the Engineer-in-charge and the development of the quarry shall be made efficiently so as to avoid wastage of stones. Only such stones as are of the required quality shall be used on the work. Any stone which is in the opinion of the Engineer-in-charge or Architect, not in accordance with the specifications or of required quality, will be rejected at any time, at the quarry or at the site of work. The rejected stones shall not be used on the work and such rejected materials shall be removed to the place shown at the contractor's cost.

14.8 Since all stones quarried from Government quarry (if made available) by the contractor including the excavated over burden are the property of the Government no stones or earth shall be supplied by the contractor to any other agencies of works, are allowed to be taken away for any other works. All such surplus quarry materials not required for work under this contract shall be the property of the Govt. and Shall be handed over by the contractor to Government free of cost at quarry. Site duly heaped at the spots indicated by the Engineer-in- charge. The contractor will be entitled to the refund of royalty if any, paid by him for such

quantity handed over to Govt. For which necessary certificate will be issued by Engineer-in-charge as per usual procedure. If however, the Government does not require such surplus material, the contractor may be allowed to dispose off or use such material elsewhere with prior written permission of the Engineer-in-charge. Leaving off a quarry face or opening of a new quarry face shall be done only on the approval of the Engineer-in-charge.

14.9 Quarrying permission will have to be directly obtained by the contractor, from the collector of the District Concerned for which purpose the Department will render necessary assistance. All quarry fees, royalty charges, octroi duties, ground rent for stacking material etc., if any to be paid, shall be paid directly by the contractor as per rules in force.

14.10 The contractor will be permitted to erect at his own risk and cost at the quarry site if suitable vacant space in Government area is available for the purpose, his own structures for stores, offices, etc., at places approved by the Engineer-in-charge. On completion of the work the contractor shall remove all the structures erected by him and restore the site to its original condition.

14.11 The contractor shall not use any land in the quarry either for cultivation or for any other purpose except that required for breaking or stacking or transporting stones.

15. TREASURE TROVE

In the event of discovery by the contractor or his employees, during the progress of the work of any treasure, fossils, minerals or any other articles of value or interest, the contractor shall give immediate intimation thereof to the Engineer and forthwith hand over to the Engineer such treasure or things which shall be the property of Government.

16. PATENTED DEVICES:

Whenever the contractor desires to use any designed devices, materials or process covered by the letter of patent or copy right, the right for such use shall be secured by suitable legal arrangement and agreement with patent owner and the copy of their agreement shall be filled with the Engineer-in-charge if so desired by the later.

17. EXPLOSIVES:

IUCAA will not allow any explosives and magazines on the construction site

18. DAMAGE BY FLOODS OR ACCIDENTS:

The contractor shall take all precautions against damage by floods or five or from accident etc. No compensation will be allowed to the contractor on this account or for correcting and repairing any such damage to the work during construction. The contractor shallbe liable to make good at his cost any plant or materials belonging to the IUCAA, lost or damaged by floods or from any other cause which is in his charge.

19. POLICE PROTECTION:

For the Special Protection of camp of the contractor's works, the Department will help the contractor as far as possible to arrange for such protection with the concerned authorized if so required by the contractor in writing. The full cost of such protection shall be borne by the contractor.

20. TRAFFIC REGULATION FOR ROAD WORKS:

20.1 Unless separately provided for in the contract, the contractor shall have to make all necessary arrangements for regulating traffic day and night during the period of construction to the entire satisfaction of the Engineer. This includes the construction and maintenance to diversions if necessary. The contractor shall have to provide necessary caution boards, barricades, flags, lights and watchman etc. So as to comply with the latest motor vehicles rules and regulation and for traffic safety and he shall be responsible for all claims from accidents which may arise due to his negligence whether in regulating the traffic or in stacking material on the roads, or due to any other reasons.

20.2 The contractor shall at all times carry out the work on the road in a manner creating least Interference to the flow of traffic while consistent with the satisfactory execution of the same. For all works involving improvements to the existing road, the contractor shall in accordance with the directives of the Engineer-in-charge, provide and maintain during the execution of work a passage for traffic, either along or part of the existing carriage way under improvement, or along a temporary diversion constructed close to the road.

21. SUPERVISION AND INSPECTION OF WORKS AND QUALITY CONTROL:

21.1 SUPERVISION:

The contractor shall either himself supervise the execution of the works or shallappoint the competent agent approved by the Engineer-in-charge to act on his behalf. If in the opinion of the Engineer-in-charge/Architect, the contractor has himself no sufficientknowledge and experience of receiving instructions or cannot give his full attention to the works, the contractor shall at his own, expenses, employ as his accredited agent a qualified Engineer approved by the Engineer-in-charge.

Orders given to the contractor's engineer / staff shall be considered to have the force as if these had been given to the contractor himself. If the contractor fails to appoint suitable engineer / staff as directed by the Engineer-in-charge, the Engineer-in-charge/ Architect shall have full power to suspend the execution of the work until such date a suitable engineer / staff is appointed and thecontractor shall be responsible for the delay so caused to the works and the contractor shall not be entitled for any compensation on this behalf. Minimum requirements of Engineers by the Contractor on site are as follows:

A. **Project Engineer (1 No)**:

A full day availability of Project Engineer at site having qualification B.E(Civil) degree and not less than Ten Years' experience or Diploma in Civil Engineering with not less than fifteen years' experience of building construction. He should be conversant with CPM, PERT with MS Project/Primavera software. If contractor fails to appoint such Engineer, he may penalize Rs. 3000 / per day.

B. **Billing Engineer (1 No):**

Availability of Billing Engineer having minimum qualification of B.E. (Civil) degree and not less than five years' experience or Diploma in civil engineering with not less than ten years of experience of Building construction, taking joint measurements, rate analysis and billing work as per the site. If contractor fails to appoint such engineer, he may be penalized by the Engineer in Charge with penalty of Rs. 2000 / per day.

C. **Junior Engineer (2 NOS.):**

A full day availability of two Junior Engineer at site having qualification B.E(Civil) degree and not less than three Years' experience or Diploma in Civil Engineering with not less than eight years' experience of building construction. He should be conversant taking joint measurements, day to day supervision, helping to Project Engineer and Billing Engineer, He will do the coordination of testing of materials at site. If contractor fails to appoint such Engineer, he may penalize Rs. 1500 / per day per Engineer.

21.2 INSPECTION:

The contractor shall inform the Engineer-in-charge/ Architect / PMC in writing when any portion of the work is ready for inspection giving him sufficient notice to enable him to inspectthe same without affecting the further progress of the work. The work shall not be consideredto have been completed in accordance with the terms of the contract until the Engineer-in- charge/ Architect / PMC shall have certified in writing to that effect. Approval of materials or workmanship or approval of part of the work during the progress of execution shall not bind the Engineer-in-charge/ Architect or in any way affect him even to reject the work which is alleged to be completed and to suspend the issue of his certificate of completion until such alteration and modifications or reconstruction have been affected at the cost of the contractor as shall enable him to certify that the work has been completed to his satisfaction.

The contractor shall provide at his cost necessary ladders and such arrangements as to provide necessary facilities and assistance for proper inspection of all parts of the work at his own cost.

22. INITIAL MEASUREMENTS FOR RECORD:

Where for proper measurement of the work, it is necessary to have an initial set oflevels or other measurements taken, the same as recorded in the authorized field book or measurement book of IUCAA by the PMC and will be signed by the contractor who willbe entitled to have a true copy of the same made at his cost. Any failure on the part of the contractor to get such levels etc. recorded before starting the work will render him liable to accept the decision of the Engineer as to the basis of taking measurements. Likewise, the contractor will not cover any work which will render its subsequent measurements difficult or impossible without first getting the same jointly measured by himself and the authorized representative of the Engineer-in-charge/ Architect / PMC. The record of such measurements on the IUCAA side will be signed by the Contractor and he will be entitled to have a true copy of the same made at his cost.

23. SAMPLES AND TESTING OF MATERIALS:

FIELD LABORATORY:

The Contractor shall arrange to provide a well- furnished and fully equipped field laboratory which shall be manned by adequately qualified technical staff. The laboratory shall preferably be located adjacent to the site and shall be provided with amenities like water supply, electric supply, toilet block etc. The list of equipment is enclosed (Annexure 'B'). This shall be considered as incidental to work and no separatepayment whatsoever will be made for the same.

Annexure 'B'

Sr.	Name of Apparatus	No. (min) required
1.	30 m and 50 m tape	2 No.
2.	Automatic leveling instrument/ Tachometer with all accessories like 5.00-meter staff	2 Nos.
3.	Vernier calipers	1 No.
4.	Cube moulds for concrete/ Cube moulds for cement mortar	6 Sets
5.	Silt jar for sand silt testing.	4 Sets
6.	Oven- Electrically operated, thermostatically controlled, range up to 200 ^{0}C sensitivity 1^{0}C.	1 No.
7.	Platform balance 300 kg capacity	
8.	Balance 20 kg capacity - self indicating type	1 No.
9.	Electronic Balance 5 kg capacity, accuracy 0.5 gm	2 No.
10.	Water bath- electrically operated and thermostatically controlled with adjustable shelves, sensitivity 1^{0}C.	1 No.
11.	Thermometers: Mercury-in-glass thermometer, range 0^0 to 250^{0}C Mercury-in-steel thermometer with 30 cm stem, range up to 300^{0}C.	4 Nos.
12.	Kerosene or gas stove or electric hot plate.	1 No.
13.	Set of IS sieves with lid and pan: 450 mm diameter, 200 mm diameter 63 mm, 53 mm, 37.50 mm, 26.50 mm, 13.20 mm, 9.50 mm, 6.70 mm, and 4.75 mm size 2.36 mm, 2.0 mm, 1.18 mm, 600-micron, 425-micron, 300-micron, 150 micron, and 75 microns	 1 Sets 2 Sets
14.	Water testing Kit	1 Set
15.	Atterberg's Limits (liquid and plastic limits) Determination apparatus	1 Set
16.	Dry Bulk Density Test apparatus (sand pouring cylinder, tray, etc.).	1 Set
17.	Speedy Moisture Meter complete with chemicals	1 Set
18.	Aggregate Impact Value Test apparatus/ Los Angles Abrasion Test apparatus.	1 Set
19.	Flakiness and Elongation Test Gauges	1 Set
20.	Vicat apparatus for testing setting times	1 Set
21.	Slump testing apparatus	4 Sets
22.	Compression and Flexural strength testing machine, 200 tonne capacity with additional dial for flexural testing.	1 No.

i) All materials to be used on work shall be got approved in advance from the Engineer-in-charge and shall pass the test and / or analysis required by him which will be:

(a) As specified in the specification for the items concerned and/or

(b) I.S.I. Specifications (Whichever and wherever applicable) or

(c) such recognized specifications acceptable to Engineer-in-charge/ Architect as equivalent there to or in absence of such authorized specification.

(d) such requirement test and/or analysis as may be specified by the Engineer-in-charge/ Architect in order of precedence given above.

(ii) The contractor shall at his risk and cost make all arrangement and/or shall provide for all such facilities as the Engineer-in-charge/ Architect may require for collecting preparing required number of samples for tests or for analysis at such time and to such place or places may be directed by the Engineer and bear all charges and cost of testing. Such samples shall also be deposited with the Engineer-in-charge.

(iii) The contractor shall if and when required submit at his cost the samples of materials to be tested or analysis and if, so directed, shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and the materials, finally accepted by the Engineer-in-charge.

(iv) The contractor shall not be eligible for any claim or compensation either arising out of any delay in the work of due to any corrective measures required to be taken on account of and as a result of testing of the materials.

(v) The contractor or his authorized representative will be allowed to remain present in the departmental laboratory while testing samples furnished by him. However, the results of all the tests carried out in the departmental laboratory in the presence or absence of the contractor or his authorized representative will bebinding on the contractor.

(vi) The contractor shall at his own cost set up laboratory to carry out the routine tests of materials which are to be used on the work. The tests will have to be carried out either in his field laboratory or in an approved laboratory. In case tests are carried out in field laboratory, at least 50% tests should be carried out in nearest quality control laboratory of the Department.

(vii) In case of material procured by the contractor, testing as required by the codes and specifications shall be arranged by him at his own cost. Testing shall be done in the presence of authorized representative of the Engineer-in-charge at the nearest approved laboratory. If additional testing other than as required by specification is ordered, the testing charges shall be borne by the IUCAA if the test results are satisfactory. **The frequency of testing of materials as per IS code shall be carried out by the contractors at his own cost**.

(viii) In case of materials supplied by the IUCAA, if the contractor demandscertain testing, the charges thereof shall be paid by the contractor if the testing results are satisfactory and by the Department if the same are not satisfactory.

REJECTION OF MATERIALS NOT CONFORMING TO SPECIFICATIONS:

Any stock or batch of material(s) of which sample(s) does not confirm to the prescribed test and quality, shall be rejected by the Engineer or his representative and such materials shall be removed from site by the Contractor at his own cost. Such rejected materials shall not be made acceptable by any modifications.

Materials not corresponding in character and Quality with approved samples will be rejected by the Engineer or his representative and shall be removed from site at the Contractor's own cost.

24. CHANGE OF CEMENT CONTENT ETC.

(i) The tendered rates for any item involving the use of cement, shall apply to the quantity of cement specified for the mix for that item in the specifications. If for any reasons except those required for compensating the deficiencies in the components, the cement content and the properties are altered by the Engineer (Engineer-in-charge) at any time or from time to time the tendered rates for that particular item and quantity or quantities shall be duly enhanced or reduced only to account for the addition or reduction in cost of the cement content from that laid down in the specifications at the rates specified in the schedule of the contract plus 10% to cover all other incidental charges whatsoever likewise if any additives compounds, water proofing material etc., are ordered by theEngineer to be added to the mortar or concrete, no extra rate shall be payable for this change which shall be carried out as per direction by the Engineer-in-chargeprovided cost of such additives etc., is born by the contractor.

25 CEMENT CONCRETE

25.1 GENERAL

(a) All concrete shall be controlled concrete and machine mixed unless otherwise directed by Engineer-in-charge for controlled or high-grade concrete the grading of aggregates shall be got approved from the Engineer.

(b) The correct proportions and the total amount of water for the mix will be determined by means of preliminary tests and shall be got approved by the Engineer. However, such approvals do not relieve the contractor from his responsibility regarding the minimum work strength requirements work testshall be taken in accordance with relevant codes and specifications.

All proportioning of aggregates shall be done by weight if so, ordered by the Engineer

I All mixing shall be done by mechanical means in approved mixers. The Engineer may at his description allow in writing hand mixing of concrete for final items where small quantities are involved but in that case the contractor shall increase the cement content of the mixture by 10% without any extra cost.

(d) The form work used shall be made preferably of new marine ply. Plywood shuttering and MS cup locks framing Centering shall be used for footing, beams and columns etc. & new marine ply for slabs.

(I) The concrete shall be mechanically vibrated for proper compaction by the method approved by the Engineer/ Architect.

(f) The concrete shall be cured only by a sweet potable water for full 21 days after the time of the period specified in the detailed specification or as may be directed by the Engineer-in-charge.

26. MISCELLANEOUS

26.1 Rate shall be excluding of GST. GST is to be added at the end of total amount as per format.

26.2 For providing electric wiring or waterlines etc. Recesses shall be provided necessary through walls, slabs, beams etc. And later on, refilled up with bricks or stone chipping, cement mortar without any extra cost.

26.3 The special provision in detailed specifications or wording of any item shall gain precedence over corresponding contradictory provision (if any) in the standard

specifications or P.W.D. Hand Book where reference to such specifications is given without reproducing the details in contract.

26.4 Suitable separating Barricades and enclosures shall be provided to separate material brought by contractor and material issued by IUCAA to contractor under schedule, same applies for the material obtained from difference sources of supply.

26.5 The stacking and storage of construction material at site shall be in such a manner as to prevent deterioration or intrusion of foreign matter and to ensure the preservation of their quality, properties and fitness for the work, Suitable precautions shall be taken by the Contractor to protect the material against atmospheric actions, fire and other hazards. The materials likely to be carried away by wind shall be stored in suitable stores or with suitable barricades and where there is likely; -hood of subsidence of soil, such heavy materials shall be stored on approved platforms.

26.6 The Contractor shall be responsible for making good the damages done to the existing property during construction by his men.

26.7 If it is found necessary from safety point of view to test any part of the structure, the test shall be carried out by the Contractor with the help of the Department at his own cost.

26.8 Defective work is liable to be rejected at any stage. The contractor, on no account can refuse to rectify the defects merely on reasons that further work has been carried out. No extra payment shall be made for rectification.

26.9 In the schedule, the work has been divided into sections but notwithstanding this, every part of it shall be deemed supplementary to and complementary of every other part.

26.10 General directions or detailed description of work, materials and items coverage of rates given in the specification are not necessarily repeated in the Bill or Quantities. Reference is, however, drawn to the appropriate section clause (s) of the General specifications in accordance with which the work is to be carried out.

26.11 In the absence of specific directions to the contrary, the rates and prices inserted in the items are to be considered as the full inclusive rates and prices for the finished work described there under and are to cover all labour, materials, wastage, temporary work, plant overhead charges and profits, as well as the general liabilities, obligations and risks arising out of the General Conditions of contract.

26.12 The quantities set down against the item in the Schedule are only estimated quantities of each kind of work included in the Contract and are not to be taken as a quarantine that the guarantee scheduled will be carried out or required or that they will be exceeded.

26.13 All measurements will be made in accordance with the methods indicated in the specification and read in conjunction with the General Conditions of Contract.

26.14 The details shown on drawings and all other information pertaining to the work shall be treated as indicative and provisional only and are liable to variation as found necessary while preparing working drawing which will be supplied by the IUCAA during execution. The Contractor shall not, on account of such variation be entitled to any increase over the ones quoted in the tender which are on quantity basis.

26.15 The recoveries if any due from contractor will be affected as arrears of land revenue through the Collector of the District.

26.16 Clause 101 to 107 of Specifications of Road and Bridge Works adhered herewith will be applicable to works as per Schedule ‘B’ unless specified otherwise in the detailed specifications of the relevant items.

26.17 All material used in the construction shall conform to the requirement of Specification Clause under Section – 1000 "Materials for structures" of Specification of Road and Bridge Works, M.O.S.T.& H. New Delhi, August 2001 Edition (Fourth revision)

26.18 Extraneous materials and steps to minimize dust nuisance during construction shall be as per Clause 111 of M.O.S.T.& H. Fourth Revision, August 2001 Specification.

26.19 The offer quoted by contractor shall exclusive of Service tax. Service Tax payable as per Central government norms for this shall be reimbursed to contractor if contractor produces documentary evidence for this work as regard payment made by him towards Service Tax to the Government.

27. PROTECTION OF UNDERGROUND TELEPHONE CABLE AND AERIAL TELEPHONE WIRES AND POLES, TRANSMISSION TOWERS, ELECTRIC CABLES AND WATER SUPPLY LINES.

During the execution of work, it is likely that the contractor may meet with telephone cable, electrical cables, water supply lines etc. It will therefore be the responsibility of the contractor to protect them carefully. All such cases should be brought to the notice of the Engineer-in-charge/ Architect by the contractor and also to the concerned Department. Any damage what-so-ever done to these cables and pipe lines by the Contractor shall be made good by him at his cost.

MEDICAL AND SANITARY ARRANGEMENTS TO BE PROVIDED FOR LABOUR EMPLOYED IN THE CONSTRUCTION BY THE CONTRACTOR.

(a) The contractor shall provide an adequate supply of potable water for the use oflaborers on work and in Camps.

(b) The contractor shall construct trench or semi-permanent latrines for the use ofthe Laborers, Separate latrines shall be provided for men and women.

(c) The contractor shall make his own arrangement for labour working at site and no space/ land provide by IUCAA for hutment / sheds for labour. No residential labour allowed at site.

(d) The contractor shall engage a Medical Officer with a traveling dispensary for a Site containing 500 or more persons if there is no Government or other private dispensary situated within 8 kilometers from the Camp. In case of emergency the contractor shall arrange at his cost for transport for quick medical help to hissick worker.

(e) The contractor shall provide the necessary staff for effecting a satisfactory drainage system and cleanliness of the site to the satisfaction of the Engineer. Atleast one sweeper per 200 persons should be engaged.

(f) The Assistant Director of Public Health shall be consulted before opening a labour camp and his instruction on matters such as water supply, sanitaryconveniences, the camp site accommodation and food supply shall be followed by the contractor.

(g) The contractor shall make arrangements for all anti-malaria-measures to be provided for the labour employed on the work. The anti-malaria measure shall be provided as directed by the Assistant Director of Public Health.

28. SAFETY CODE:

Suitable scaffolds shall be provided for workmen for all works that cannot safely be done from the ground or from solid construction except such short period work as can be done safely from ladders. When ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable foot holds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1 to 4. (1 horizontal and 4 vertical).

Scaffolding or staging more than 3.25 meters above the ground or floors, swing or suspended from an overhead support or erected with stationery supports shall have a guard rail properly attached, bolted, braced and otherwise assured at least one meter high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the buildingor structure.

Working platform, gangways and stairways shall be so constructed that they do not sag unduly or is more than 3.25 meters above ground level or floor level. It shall be closely boarded, have adequate width and suitably fenced as described in 2 above.

Every opening in floor of the building or in a working platform shall be provided with suitable protection to prevent fall of persons or materials by providing suitable fencing or railing with minimum height of 1 meter.

Safe means of access shall be provided to all working platform and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 meters inlength, width between side rails in a rung ladder shall in no case be less than 30 cms. For ladders upto and including 3 m in length. For longer ladders this width shall be increasedat least 6 mm for each additional 30 cms. Of length. Uniform step spacing shall not exceed 30 cms.

Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the site shall be stacked or placed as to cause danger or inconvenience to any person or the Public. The contractor shall provide all necessary fencing and lights toprotect public from accident and shall be bound to bear expenses of defense of every suit, action or other proceedings of law that may be brought by any person for injury sustained owing to neglect of the above precaution and to pay any damages and costs which may be awarded in any such suit action or proceedings to any such person or which may with the consent of the contractor, to be paid to compromise any claim by any such persons.

EXCAVATION AND TRENCHING:

All trenches, 1.5 meters or more in depth, shall at all times be supplied with at least oneladder for each 30 meters in length or fraction thereof. Ladder shall be extended from bottom of trench to at least 1 meter above surface of the ground. Sides of a trench which is 1.5 meters or more in depth shall be stepped back to give suitable slope, or security held by timber bracing, so as to avoid the danger of sides collapsing. Excavated materials shall not be placed within 1.3 meters of edge of trench or half of depth of trench whichever is more. Cutting shall be done from top to bottom under no circumstances shall undermining or undercutting be done.

DEMOLITION

Before any demolition work is commenced and also during the process of the work:-

(a) All roads and open areas adjacent to the work site shall either be closed or suitably protected.

(b) No electric cable or apparatus which is liable to be source of danger or a cable, apparatus used by operator shall remain electrically charged.

(c) All practical steps, shall be taken to prevent danger to person employed, from risk or fire or explosion or flooding. No floor, roof or other part of a building shall be so over loaded with debris of materials as to render it unsafe.

(d) All necessary personal safety equipment's as considered adequate by the Engineer-in-charge shall be available for use of persons employed on the site and maintained in a condition suitable for immediate use and the contractorshall take adequate steps to ensure proper use of equipment by those concerned.

(e) Workers employed on mixing asphaltic materials, cement or lime mortars concrete shall be provided with protective footwear and protective goggles.

(f) Those engaged in handling any materials, which is injurious to eyes shall be provided with protective goggles.

(g) Those engaged in welding works shall be provided with welder's protective eye shields.

(h) Stone breakers shall be provided with protection goggles and protective clothingand seated at sufficiently safe intervals.

(i) When workers are employed in sewers and manholes which are in use, the contractor shall ensure that covers are opened and manholes are ventilated at least for an hour before workers are allowed to get into them. Manholes opened shall be cord-ended off with suitable railing and provided with warning signals or boards to prevent accident to public.

(j) The contractor shall not employ, men below the age of 18 and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precautions shall be taken.

(k) No paint containing lead or lead product shall be used except in the form of paste or ready made paint.

(l) Suitable face masks shall be supplied for use by workers when paint is applied in the form of spray or a surface having lead paint, dry rubbed and scrapped.

(m) Overalls shall be supplied by the contractor to workmen and adequate facilities shall be provided to enable working painters to wash during and on cessation of work.

(n) When work is done near any place where there is risk of drowning all necessary equipment shall be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

(o) Use of hoisting machines and shackles including the attachments, anchorage, support shall conform to the following.

(p) (i) These shall be of good mechanical construction, round materials and adequate strength and free from potent defects and shall be kept in good repair and in good working order.

(ii) Every rope used in hoisting or lowering materials or as a means of suspensions hall be of durable quality and of adequate strength and free form potent defects.

(q) Every crane driver or hoisting appliance operator shall be properly qualified andno person under the age of 21 years shall be in charge of any hoisting machine including any scaffolding.

(r) In case of every hoisting machine and of every chain, ring, hook, shackle ownerand pulley block used in hoisting or lowering or as means of suspension, safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be particularly marked with safe working load.

In case of hoisting machine having a variable safe working load, each state working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or of any gear referred to above in this paragraph shall be loaded beyond safe working load except for the purpose of testing.

(s) In case of departmental machines safe working load shall be notified by the Engineer-in-charge. As regards contractor's machines, the contractor shall notify safe working load of each machine to the Engineer- in- charge whenever, he brings it to site of work and get it verified by the Engineer-in-charge.

Motors, gearing transmission, electric wiring and other dangerous parts of hoisting appliances shall be provided with such means as will reduce to the minimum risk of accidental descent of load. Adequate precautions shall be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced, when workers are employed. On electrical installations which are already energized insulating materials wearing apparel such as gloves, sleeves and coats as may be necessary, shall be provided. Workers shall not wear any rings, watches and carry keys and other materials which are good conductors of electricity.

All scaffolds, ladders, and other safety devices mentioned or described here in shall be maintained in a safe condition and no scaffold ladder or equipmentshall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near places of work.

These safety provisions shall be brought to the notice of all concerned bydisplay on a notice board at a prominent place at the work spot, Persons responsible for ensuring compliance with the safety code shall be named there in by the contractor.

(t) To ensure effective enforcement of the rules and regulations relating to safety precautions, arrangements made by the contractor shall be open to inspection bythe Engineer-in-charge or his representative and the inspecting officers.

(u) Failure to comply with the provisions hereunder shall make the contractor liableto pay to the department as penalty an amount not exceeding Rs. 50/- for each default and decision of the Engineer-in-charge shall be final and binding.

Notwithstanding the above conditions 1 to 14 the contractor is not exempted from the operation of any other Act or Rules in force.

29. SCOPE OF RATES FOR DIFFERENT ITEMS OF WORK:

For item rate contracts, the contract unit rates for different items of work shall be payment in full for completing the work to the requirements of the specification including full compensation for all the operation detailed in the relevant sections of these specifications under "rates." In the absence of any directions to the contrary, the rates are to be considered as the full inclusive rate for finished work covering all labours, materials, wastage temporary work, plant, equipment, overhead charges and profit as well as the general liabilities, obligations and risks arising out of the general conditions of contract.

The item rates quoted by the contractor shall, unless otherwise specified, also include compliance with supply of the following: -

(i) General works such as setting out, clearance of site before setting out and clearance of works after completion.

(ii) A detailed programme for the constructions and completion of the works (using CPM/PERT techniques) giving, in addition the construction activities, detailed network activities for the submission and approval of materials, procurement of critical materials and equipment, fabrication of special products/ equipment's and their installation and testing and for all activities of the employer that are likely

to effect the progress of work, etc. including updating of all such activities on the basis of the decisions taken at the periodic site review meeting or as directed by the Engineers.

(iii) Samples of various materials proposed to be used on the work for conducting tests thereon as required as per the provisions of the contract.

(iv) Design of mixes as per the relevant clauses of the specifications giving proportions of ingredients, sources of aggregates and binder along with accompanying trial mixes as per the relevant clauses of these specifications to be submitted to the engineer for his approval before use of the works.

(v) Detailed design calculations and drawings for all temporary works (such as formwork, staging centering, specialized constructional handling and launching equipment and the like)

(vi) Detailed drawings for templates support and end anchorage, details for pre-stressing cable profiles, bar bending and cutting schedules for reinforcement, material lists for fabrication of structural steel etc.

(vii) Mill test reports for all mild and high tensile steel and cast steel as per the relevant provisions of the specifications.

(viii) Testing of various finished items and materials including bitumen, cement, concrete, bearings as required under these specifications and furnishing test reports/certificates.

(ix) Inspections Reports in respect of formwork, staging, reinforcement and other items of work as per the relevant specifications;

(x) Any other data which may be required as per these specifications or the conditions of contract or any other annexure/schedules forming part of the contract.

(xi) Any other item of work which is not specifically provided in the Bill of quantities but which is necessary for complying with the provisions of the contract; and

(xii) All temporary works, formwork and false work

Portions of load works beyond the limits and or any other work may be got constructed by the employer directly through other agencies. Accordingly, other agencies employed by the Employer may be working in the vicinityof the work being executed by the contractor. The contractor shall liaise with such agencies and adjust his construction program for the completion of the work accordingly and no claim or compensation due to any reason whatsoever will be entertained on this account. The employer will be indemnified by the contractor for any claims from other agencies on his account.

30. HANDING OVER OF WORK:

All the work and materials before finally taken over by IUCAA will be the entire liability of the contractor for guarding, maintaining and making good any damages of any magnitude. Interim payments made for such work will not alter this position. The handing over by the contractor and taking over by the Engineer-in-charge/Architect or his □authorized representative will be always in writing of which copies will go to the Engineer-in-charge/Architect or his authorized representative and the contractor, it is, however understood that before taking over such work Government will not put it into regular use as distinct from causal or incidental one. Except as specifically mentioned elsewhere in this contract or as mutually agreed to.

31. CLAIMS:

Bills for extra work or for any claim shall be paid separately apart from the interim bills for the main work. The payment of bills for the main work shall not be withheld for want of decision on the extras or claims not covered in the appendices. Claims for extra work shall be registered within 30 days of occurrence of the event. However, bills for these claims including supporting data / details may be submitted subsequently.

32. QUALITY ASSURANCE AND MAINTENANCE –

(For works costing more than 100 lakhs)

1) To ensure the specified quality of work which will also include necessary surveys, temporary works etc., the contractor shall prepare a quality assurance plan and get the same approved from the Engineer-in-charge within one month from the date of work order. For this, the contractor shall submit an organization chart of his technical personal to be deployed on the work along with their qualifications, job descriptions defining the functions of reporting, supervising inspecting and approving. The contractor shall also submit a list of tools, equipment and the machinery and instrumentation which he proposes to use for the construction and for testing in the field and / or in the laboratory and monitoring. The Contractor shall modify / supplement the organization chartand the list of machinery, equipment etc., as per the directions of the Engineer-in-charge and shall deploy the personnel and equipment on the field as per the approved chart and list respectively. The contractor shall submit written methodstatements detailing his exact proposals of execution of the work in accordance with the specification. He will have to get these approved from the Engineer-in- charge. The quality of the work shall be properly documented through certificates, records, check-lists and log books of results etc. Such records shall be complied from the beginning of the work and be continuously updated and supplemented and this will be the responsibility of the contractor. The forms should be got approved from the Engineer-in-charge

2) The frequency of the testing of construction material shall be as per Annexure (A) attached herewith.

33. MAINTENANCE:

The contractor shall maintain the finish and completed item of civil work as per schedule and specification for a period of **Two years** from virtual completion date, ten years for water proofing, two years for internal electrification and two years for Air-conditioning and lift after the completion of the work without extra cost to IUCAA irrespective of the design standard Specification etc. The contractor shall rectify the civil work damages as per specification and drawing and keepthe building in good condition throughout Ten years for water proofing and two years for remaining items.

33.1 On completion of the work in all respects, necessary certificates will be issued by the concerned Engineer-in-charge and the defects liability period will becounted from the date of issue of such certificate.

33.2 All damages during execution shall be made good by the contractor at his cost. He will be responsible for any damages to the road surface including B.T. surface in rainy seasons and during construction and guarantee maintenance period and no separate payment will be made for restoring such damages

33.3 Defective work is liable to be rejected at any stage. The contractor on no account can refuse to rectify the defects merely on reasons that further work has been carried out. No extra payment shall be made for such rectification.

34. <u>SUPPLY OF COLOURED RECORD PHOTOGRAPHS AND ALBUMS</u>:

The Contractor shall arrange to take dated post card size colored photographs at various stages/facts of the work including interesting and novel features of the work as desired by the Engineer-in-charge andsupply them in five copies each in separate albums of appropriate size.He shall also arrange for the Video Filming of important activities of thework during the currency of the contract and edit it to a video film of 60to 180 minutes playing time. It shall contain narration of the various activities in English/Marathi by a competent narrator. The cassette shall be of acceptablequality and the film shall be capable of producing colour pictures. This shall be considered as incidental to the work and no additional payment whatsoever will be made for the same.

35. <u>APPOINTMENT OF ENGINEERS BY THE CONTRACTOR ON SITE</u>–

<u>Project Engineer (1 No):</u>

A full day availability of Project Engineer at site having qualification B.E(Civil) degree and not less than Ten Years' experience or Diploma in Civil Engineering with not less than fifteen years' experience of building construction. He should be conversant with CPM, PERT with MS Project/Primavera software. If contractor fails to appoint such Engineer, he may penalize Rs3000/per day.

<u>Billing Engineer (1 No):</u>

Availability of Billing Engineer having minimum qualification of B.E. (Civil) degree and not less than five years' experience or Diploma in civil engineering with not less than ten years of experience of Building construction, taking joint measurements, rate analysis and billing work as per the site. If contractor fails to appoint such engineer, he may be penalized by the Engineer in Charge with penalty of Rs. 2000/- per day.

Junior Engineer (2 NOS.):

A full day availability of two Junior Engineer at site having qualification B.E(Civil) degree and not less than three Years' experience or Diploma in Civil Engineering with not less than eight years' experience of building construction. He should be conversant taking joint measurements, day to day supervision, helping to Project Engineer and Billing Engineer, He will do the coordination of testing of materials at site. If contractor fails to appoint such Engineer, he may penalize Rs. 1500/per day per Engineer.

SECTION-VII

LIST OF APPROVED MAKES

1. The Engineer-In-charge is at liberty to select any of the brands indicated below. The Contractor should obtain prior approval from Engineer-In-charge before placing theorder for any specific material. Engineer/ Architect may approve any of the "Makes" or "Brands" out of the list below.

2. All material should confirm to relevant standards and codes of BIS and shall have ISI mark.

3. In the case of items for which approved make / vendor is not given below. The Contractor shall with the prior approval of the Engineer-In-charge/Architect procure the same of the first quality and satisfy the Engineer-In-charge/ Architect before use in the works.

4. In case of Contradiction between the approved makes vendors specified below and mentioned in the Specifications / Bill of quantities. The decision of the Engineer-In-charge/Architect shall be final and binding on the Contractor.

SR. NO.	MATERIAL LIST	APPROVED MANUFACTURES
1	Reinforcement Steel FE 500/500D	TATA / SAIL / ISPAT / JINDAL
2	Cement	VASAVDATTA / ULTRATECH / BIRLASUPER / ACC / AMBUJA / JK CEMENT
3	Concrete Admixtures	FOSROC / PIDILITE / DR. FIXIT
4	Vitrified Tiles / Ceramic Tiles	JOHNSON / KAJARIA / R.A.K.
5	Water Proofing Compound	FOSROC / PIDILITE / DR. FIXIT
6	Plasticizers, etc.	DR. FIXIT / FOSROC / LATICRETE
7	Aluminum Sections	JINDAL / EURO
8	Al. Glass Track Louvers	RATHOD / Equivalent
9	Glass / Tinted Glass / Mirrors	SAINT GOBAIN / MODI GUARD
10	Hydraulic Door Closer	EVEREST / OZONE / GODREJ
11	Hardware Fittings	ENOX / KICH / GODREJ / SUZU / EBCO / HAFELE
12	Mortise Lock & Latch	GODREJ / HARISON / EUROPA
13	Laminate Sheets	GREENLAM / MARINO
14	Plywood	GREENLAM / ARCHID / CENTURY / KITPLY
15	Flush Doors	EVEREST GOLD / CENTURY / ANCHOR
16	Adhesive	PIDILITE / ARALDITE
17	Gypsum & Gypsum Board	SAINT GOBAIN / MEGASIGN

18	Bitumen Impregnated Board	SHALITEX (M/S SHALIMAR)
19	Primer	ASIAN / ICI/ JOTUN
20	Putty	ASIAN / ICI/ JOTUN
21	All Internal Paints	ASIAN / ICI/JOTUN
22	All External Paint	ASIAN / ICI/ JOTUN
23	Synthetic Enamel Paint	ASIAN / ICI/ JOTUN
24	Sanitary Ware	CERA MAKE AS PER DRAWINGS
25	C. P. Fittings	JAQUAR OPAL SERIES
26	G.I. Pipes	TATA / PRAKASH (SURYA) / ZENITH, JSW
27	CPVC / UPVC Pipes	SUPREME / PRINCE / ASTRAL
28	PVC Pipes	PRINCE / FINOLEX / SUPREME
29	Soil & Waste Pipes	PRINCE / FINOLEX / SUPREME
30	Flush Valves	JAQUAR / HINDWARE / CERA
31	RCC Hume Pipes	EVEREST / KK / BHARAT
32	Manhole / Drainage Covers	EVEREST / KK / BHARAT / NECO
33	Stainless Steel Pipes 304 Grade	JINDAL / TATA
34	Kitchen S.S. Sink	NIRALI GRACE DELUX (BIG) or EQUIVALENT
35	Polycarbonate Sheet	GE MAKE - LEXAN or EQUIVALENT
36	Mild Steel Structural Sections	TATA / JSW / SAIL / APL APOLLO
37	Profiles Sheets (G.I. Sheets)	ESSAR / TATA BLUESCOPE
38	Flooring Grout	MYK LATICRETE / DR. FIXIT, FOSROC,
39	Rebaring Chemical	HILTI / FOSSROCK
40	Friction Hinges	EBCO / KITCH / HETICH
41	Artificial Marble	KALINGA / BELLEZA
42	Vitrified Step tiles	RESTILE or EQUIVALENT
43	Lift	KONE / SCHINDLER / OTIS / JOHNSON

SECTION-VIII
SPECIAL CONDITIONS OF CONTRACT

1. The successful tenderer shall have to work in co-ordination and co-operation with any other contracting agency appointed by IUCAA to work simultaneously in the same or adjoining area. The decision of the IUCAA Engineer – in case of any disputes between the different agencies appointed by IUCAA shall be final and binding on all parties.

2. Temporary Office, Temporary safety fencing, Temporary gate and Stores on the Site: The Contractor shall erect and maintain entirely at his own expense properly lighted and waterproof lock-up offices for the Clerk of Works and for his own staff, respectively, in such parts of the site as the IUCAA Architects may indicate and to their satisfaction. The former offices shall be provided by the Contractor will also provide at his own expense lock-up store rooms for neeru, cement, etc. and other store rooms as directed by the IUCAA Architects for the use of the sub-contractors. At completion, the materials and furniture shall be removed and will be the property of the Contractor.

3. The Contractor shall construct semi-permanent site office for the use of IUCAA Engineers, Architects and Consultants as directed by the Engineer-in-charge at no extra cost.

4. The Contractor should obtain necessary permission from IUCAA Engineer as well as

5. P.M.C. officer for the temporary construction of office, stores, go downs proposed to be erected on the site of work and bear the rent etc. if any. In case, the land required by the Contractor belongs to private/ public body, the rent etc. shall be paid by the Contractor directly for which no reimbursement shall be given by IUCAA.

6. Income Tax at the rate as per rules in force from time to time shall be recovered from the gross amount of every R.A. bill of the Contractor, whether for work done or advance payment, unless the Contractor is exempted from such deduction at source by the Income Tax department for which the Contractor shall have to produce the documentary proof.

7. The contractor will have to make his own arrangement of power supply through connection or sub meter through client's connection with commercial rate for construction purpose as per MSEDCL only.

8. For civil work electrical connection shall be approved by MSEB with Sub Meter and MSEB charges for construction shall be paid by monthly and paid bill submitted to IUCAA.

9. The water for construction will not be supplied by IUCAA. Agency has to make his own arrangement through borewell/tankers or any other source.

10. Latrines: - The Contractor is to provide at his own expense for the use of workmen, temporary latrines to the satisfaction of the authorities, keep them in a perfectly sanitary condition. The position of the same to be settled with the IUCAA & Architects.

11. The Contractor should also make necessary drainage/ Sewer disposal arrangements and pay necessary Sewerage charges etc. to Pune Municipal Corporation.

12. The rates for Extra items/ non-tendered items, if any shall to derived from similar tendered items. In case there is no provision for similar items in the tender, the rates shall be as per the latest DSR rates or derived on the basis of actual cost of materials used and labour engaged for that time plus/minus for hire charges of Plant and Machinery, for overhead and profit 10% of the Accepted percentage and supervision etc. if not mentioned in DSR. For the Non-DSR item the rate approved by IUCAA Authority will be final and binding on Contractor.

13. All taxes leviable by State/Central Government and Local Bodies including GST shall be borne by the Contractor. The percentage rates quoted will deem to include the expenditure on account of payment towards taxes. The offer quoted by contractor shall exclusive of GST payable as per Central government norms for this shall be reimbursed to contractor if contractor produces documentary evidence for this work as regard payment made by him towards GST to the Government.

14. The mode of measurement shall be as per PWD Red Book / I.S. Specifications. All work shall be carried out as per standard specifications of P.W.D. and where the specifications from any work/ material are not available in Maharashtra

15. P.W.D. then relevant I.S. Specifications shall be applicable. The decision of IUCAA Engineer shall be final and binding in this matter.

16. The Contractor will not be allowed to set up any labour camps within the campus of the IUCAA.

17. The necessary clearance of site by cutting of small trees, shrubs, etc. will be done bythe Contractor. The rates quoted by the Contractor in the schedule of rates deem to include all the expenditure on this account. Big trees required to be cut, if any, will be indicated by the Contractor to the IUCAA Engineer who in turn will make arrangements to get the necessary permission from the competent authorities through Architect. The trees will be cut and up-rooted by the Contractor as per the direction of the Engineer-in-charge and all shrubs, trees big or small after cutting will be disposed off as per the instructions of the Engineer-in-charge. No claim on account of delay due to above will be entertained by the IUCAA authorities.

18. Only materials of make, pattern and design, specified & recommended by the Architect and approved by Engineer-in-charge shall be used in the work. If particular specification for any work is not given, the work shall be carried out in all respects in accordance to the instructions of Engineer-in-charge.

19. The Contractor shall have to extend his full co-operation to another agency executing the work of electrification. The touching up of the civil work and finishing etc. willhave to be done by the main civil Contractor. The rates quoted by him, in this tender will be deemed to include all expenditure on this account. No claim will be entertained on account of any expenditure done by the Contractor for touching up of the civil work and of finishing work etc.

20. Successful Contractor should submit **Bar Chart/CPM PERT** before starting the work.

21. Quality Assurance:
A specialized PMC agency will be appointed by the IUCAA for Quality Assurance of this project. The Contractor shall work under the instructions of authorized representative of the Quality Assurance Agency. These instructions shall be in writing. All payments shall be made by the contractor. The frequency of the testing shall be as per Indian Standard Codes. In case of any dispute, regarding material or workmanship between Quality Assurance Agency, Architect, Contractor, the decision of the Engineer-in-charge will be final and binding on all the parties.

22. The contractor shall no sublet this work or any part of this work to any sub-contractor without prior permission of IUCAA.

23. The work will only be executed by the contractor himself; he shall not make use of power of attorney for execution of work.

24. The Contractor shall apply & obtain N.O.C. from Drainage, Water supply, Encroachment, Garden, Road & Vermiculture Department of the P.M.C. as per relevant item. The rates

quoted shall be inclusive of all above N.O.C. & if any other N.O.C. required to the obtained during execution or completion of the work as desired by Architect/ Engineer in charge. No extra payment shall be made to the contractor for obtaining all the above N.O.C.

25. Agency will have to produce documentary evidence to the Estate Manager, IUCAA as regards payments made by Agency to Revenue Department towards royalty charges. If such documentary evidence is not produced the component of Royalty charges at the prevailing rates decided by the Government of Maharashtra, will be recovered from the bills of the Agency.

26. Contractor should use new quality plywood/steel shuttering material for formwork of all RCC items and M.S. adjustable props for support and get approved from Architect/Engineer in charge / Structural Consultant.

27. As per Govt. in Industries & Power G.R. No.BCA-2009/CR-108/Labour 7-A dated 17/06/2010, 1% cess on labour welfare is considered while arriving the rate. The same is added in the rate analysis while framing the estimate and the amount will be deducted from contractor's bills as prescribed in the said G.R.

28. **PRE-BID MEETING**: Pre-bid meeting shall be arranged at IUCAA Office on **11/10/2022 at 1100 hrs**. Contractor is expected to inspect the premises, understand the working condition and handover written queries for meeting. Written reply to queries shall be send by e-mail.
29. RATE ANALYSIS: Contractor must submit Rate Analysis of all items by e-mail and in sealed separate envelop before accepting work order. Any tender without Rate Analysis shall be rejected.
30. WATER: Water for construction purpose, to be arranged by the contractor including the storage, pumps, piping etc. The contractor will have to obtain NOC from Water Department, P.M.C. for Occupancy Certificate before submitting final bill.
31. FINAL BILL : Any bill submitted after the completion of 90% of the total tender work will be treated as final bill. At the time of final bill, contractor is required to submit all PMC NOC's, adjust the amount towards water and electricity if any etc.

32. **PRICE ESCALATION CLAUSE**: <u>No price escalation clause shall be accepted by the IUCAA under any circumstances.</u>

33. GOVERNMENT TAXES : All rates shall be quoted without GST. 18% GST to be added in the summary sheet only. Rate to include all taxes, levies, royalties, etc. as per State and Central Government Rules and guidelines.

34. PROVIDENT FUND : All the rules of provident fund acts are applicable to all the persons working on site. Contractor will have to complete all formalities, make necessary payment and be responsible for provident fund of his employers. The papers of payments of Provident Fund and ESI to be submitted to the Client as applicable.

35. SITE FACILITIES: The Contractor will have to make his own arrangement for site office (350 Sq.ft.) cement godown (200 Sq.ft.) and Project Engineer's office with light fitting, fan, drinking water, table and chairs. The material guard to be demarcated with temporary GI sheets partitions. Temporary toilet facilities for staff to be provided & removed after completion by contractor. No labour camp shall be permitted in the campus under any circumstances due to security reasons.

36. LABOUR QUARTERS: No labour quarters shall be permitted in the campus.

37. ACCESS TO SITE AND ENVIRON: The Contractor is expected to visit the site, check the ground levels, access, plot boundaries and other site environs before filling tender.

    Contractor will provide temporary GI sheet enclosure (8' high) around construction material storage with gate etc. and will have to take all care regarding security of construction material.

38. CONSTRUCTION PROGRAMME : The Contractor will have to submit detailed construction program within first week of allotment of work, showing detailed bar chart, progress of work, financial flow, decision required and the number of skilled/unskilled laborers to be provided.

39. SECURITY : The Contractor will have to make his own security arrangements for protection of construction material, equipment and labors. The Client will not be responsible for any theft.

40. SAND FOR CONCRETE AND MORTER : The fine M Sand / River Sand shall be used in internal, external plaster, waterproofing and flooring. For all the other activities like RCC, Masonary, PCC etc. approved crush sand can be used.

41. CEMENT, CONCRETE AND STEEL TESTING : For the purpose of assuring desired concrete strength the mix design is to be obtained from the approved laboratory, well in advance before first concreting is done. All concreting shall be done by weigh batcher only as per design mix recommended by the laboratory. Volumetric batching will not be permitted for mixing the material for concrete. The Contractor will be responsible for achieving minimum desired concrete strength. Contractor has option of providing situ concrete (on site mixer) or ready mix concrete provided the satisfactory concreting is done as per schedule.

42. In case of readymade concrete one higher grade than the situ concrete shall be used without any additional cost (M30 concrete instead of M25 as per tender).

43. CEMENT AND STEEL : Cement and steel shall be purchased by the contractor on site. All cement consumption will be made as per the cement constant attached as per DSR. Contractor will be responsible for the optimum use of cement. Contractor will have to keep up to date cement consumption record and will not be permitted to take any cement or steel outside the site premises. Cement of 43 / 53 grade shall be used. Preferred brand for steel & cement for cement & steel, please use following recommended brand only. In case of new brand written permission to be taken from Society. Only TMT steel (Fe-500) & Mild steel (Fe-250) shall be procured as per IS code from the approved manufacturer with Test Certificate. For concrete IS 456 -2000 code shall be applied.

44. BASIC RATES: The basic rates of the important building materials are given separately. Basic rates to include cost of material, taxes, external transport, at site. Unloading charges at site shall be included in the quoted rates. The owner will have a liberty to supply these materials at his own cost. In this case contractor will deduct the cost of basic rate material from the total rate quoted. The owner also reserves to fix higher or lower quality of same material.

    Before doing the actual purchase of basic material contractor has to take written permission from the clerk of work towards quality and market rate. The suitable adjustment of higher or lower prices of the approved market rate to be submitted with every bill.

SECTION-IX
LIST OF BASIC RATE OF THE MATERIALS

NO.	DESCRIPTIONS	UNIT	BASIC RATE IN RS.
1	Cement	Bag	340.00
2	Steel TMT	M.T.	68,000.00
3	Flush Door 32mm. thick	Sqm.	1,350.00
4	Hardwood Door Frames 50mm thick (finished width on both side	R.M.	760.00
5	Structural Steel	M.T.	80,000.00
6	Vitrified Tiles 600 x 600 – 10mm. – Gloss	Sqm.	650.00
7	Vitrified Tiles 600 x 600 – 10mm. – Matt	Sqm.	700.00
8	Vitrified Tiles 800 x 800 – 10mm. – Gloss	Sqm.	750.00
9	Vitrified Tiles 800 x 800 / 600 x 1200-10mm. – Matt	Sqm.	900.00
10	Artificial Marble for item no 72,76	Sqm.	2,100.00
11	Vitrified Step Tile	Sqm.	1,000.00
12	Polished Granite	Sqm.	1,900.00
13	Polished Kotah (Uncut)	Sqm.	550.00
14	Paving Block 250x250x65mm thick	Sqm.	650.00

45. NOC FROM PUNE MUNICIPAL CORPORATION: Contractor is required to submit N.O. C's from the Rainwater Harvesting, drainage, water, road, firefighting, lifts license from PWD Garden & Vermiculture Department along with submission of final bill or any bill after completion of 95% of the tender value (Please refer BOQ zone, Miscellaneous Item.)

46. Payments to the PMC and charges shall be paid by IUCAA after submitting necessary challan from P.M.C. The expenses towards necessary site visit, follow up with P.M.C is included in the rates.

47. EXTRA ITEMS
All extra items shall be approved in advance before construction. Extra items must be approved before claiming tin the R. A. Bill. Unapproved extra items should be removed from the R. A. Bill.

Maximum 10% overheads & profit shall be chargeable on the actual cost, material labour & overheads. Rate analysis with all supporting documents of purchase of material shall be submitted for approval.

SECTION-X

Quality Control Tests and its Frequency.

1. Overall quality of the work depends on the quality of ingredient material being used in the work and exercising adequate control over it. It is therefore prime responsibility of the Contractor to get the ingredient material and product tested strictly as per the frequencies stipulated in the Annexure.

2. The Quality Control tests shall be carried out at various stages of work viz. selection of material to be procured for work, acceptance of procured material before its use on the work, control over procedures & methods to be followed for execution of the work, after completion of work in view of its strength, durability, serviceability etc. and as directed by Engineer-in-charge for any other reasons of Public interest.

3. The entire material testing charges towards testing such as sampling, carrying samples to Lab., testingof samples etc. will be included in the quoted rates.

4. The right of acceptance/rejection of the material/work done specified above is reserved by Engineer-in-charge, in view of non-confirmation to frequency of testing.

5. In case of failure to observe the frequency of testing by the contractor the Engineer-in-charge will be at liberty to recover testing charges fixed by the dept. at penal rate. The penal rate will be two times the prevailing testing charges.

ANNEXURE 'A'

QUALITY CONTROL TESTS & THEIR FREQUENCIES

Sr. No.	Material	Test	Frequency as per VQC circular
1.	Plinth filling	Proctor density	Each type of soil /one test per 1000 cum
2.	Sand	Fineness Modulus , Silt Content.	1 per source
3.	Masonry Stone.	Crushing value , Specific Gravity , Water Absorption.	1 per source
4.	Crushed Metal.	A) Crushing value, Impact value, Abrasion value, Specific Gravity , (Basic tests) . B) Gradation.	One test per 1000 cum /source/change insource One test per 200 m3
5.	Bricks.	Crushing value , Water Absorption, Efflorescence	1 test per 50,000 consignment or part
6.	Mangalore Tiles.	Flexural strength , Water Absorption ,Permeability	For each 50,000 Tilesor part thereof.
7.	Ceramic /Vitrified Flooring Tiles.	Flexural strength , Water Absorption, Resistance to wear	For each 2,000 Tiles orpart thereof
8.	Concrete.	Mix Design	One per 500 cum of concrete.
9.	Concrete.	Concrete cube Comp. Strength.	0 - 5 cum. – 1 set. 6-15 cum. – 2 sets. 16-30 cum. – 3 sets. 31-50cum – 4 sets. 51 cum & above –1 setfor additional 50 cum.
10.	Cement.	Compressive strength , Consistency, Setting Time , Specific Gravity , Fineness.	One test per 50 M.T. (for each 1000 bags)
11.	Steel.	Wt. per running meter. Ultimate Tensile stress , Yield stress , Elongation.	One for 10 M.T. & Onefor each diameter used.

ADDITONAL SPECIFICATIONS

The contractor shall achieve that following requirements in respect of quantity ofwork and his contract rate shall provide for the same.

1.1 ADMIXTURES:-

Whenever necessary the admixture should be used to achieve the required workability. The type of admixture should be got approved from Engineer-in-charge. The rate is inclusive of all admixtures etc. if found necessary.

1.2 CEMENT CONTENT IN CONCRETE:

For this purpose, the conditions mentioned in additional specifications shall be applicable.

1.3 WATER / CEMENT RATIO:

For high quality concrete of low permeability, the water/cement ratio shall not be more than 0.45 and preferably 0.40 or less subject to the attainment of adequate workability.

1.4 CURING FOR CONCRETE:

Special attention shall be paid to curing of concrete in order to ensure maximum durability and no minimize cracking. Concrete shall be cured with fresh water whenever it is possible to ensure that the concrete surface can be kept wet despite wind, etc. care shall be taken on avoid rapid lowering of concrete temperatures caused by applying cold water to hot concrete surface (thermal shock) Sea water shall not be used for curing reinforced concrete or prestressed concrete. Where there is doubt aboutthe ability to keep concrete surface permanently wet for the whole of the curing period heavy duty membranes curing compound shall be used.

1.5 CONCRETE COVER TO REINFORCEMENT:

(i) The cover concrete must be of the same quality, impermeability and strength as the rest of the concrete. Special mix design should be carried out for the concrete to be used for making concrete cover blocks.

(ii) The concrete cover must develop sufficient alkalinity, and protect the steel. The alkalinity developed shall not be less than 0.04N & shall not more than 0.08 N.

(iii) The cover must be uniform throughout and it's thickness shall be exclusive of plaster or other decorative finishes.

(iv) The concrete cover shall be as per the relevant clause of IS codes. In the case of poles the cover thickness shall be separately decided by the Engineer in charge.

1.6 DETAILING OF MISCELLANEOUS ITEM :

Binding Wires : All ends of binding wires shall be carefully turned inwards so that they do not project out of concrete and start rusting action. Plastic coated galvanized wires shall be used. Wherever possible polythene binding string and polythene bar grips shall be used, after making sure that these do not result in loss of bond or chemical reaction with concrete. The use is subject to approval of Engineer-in-charge.

1.7 **BAR SPACING:** As per relevant I.S. codes and as detailed design drawing or as directed by Engineer-in-charge.

1.8 **HOLLOWS IN CONCRETE:** After concreting is complete the concrete surface particularly where there is congestion of reinforcement, shall be tested by light hammering or if possible by Schmitz hammer. Any portion showing signs of hollowness should be grouted immediately.

SPECIFICATION FOR FORMWORK AND STEEL, CENTERING :-

I) FORMWORK:-

1.1 Formwork: - Formwork shall include all temporary forms of moulds required for forming the concrete which is cast-in-situ, together with all temporary construction required for their support. Unless otherwise stated all formwork shall conform to I.S. Specification.

1.2 Design of Formwork: - Formwork including complete false work shall be designed by the contractor in accordance with I.S.: 2750 (1964), 4041 (1987) and all other relevant I.S. codes without any extra cost to the IUCAA and these shall be got approved from Engineer before any formwork is taken up.

1.3 The contractor shall entirely be responsible for the adequacy and safety for false work not-withstanding any approval or review by the Engineer of his drawing and design. Proprietary system of formwork if used a detailed information shall be furnished to the Engineer for approval.

QUALITY OF SHUTTERING: The Shuttering shall have smooth and even surface and its joints shall not permit leakage of cement slurry.

2. TOLERANCE:-

2.1 The formwork shall be made so as to produce form finished concrete true to shape, lines, levels plumb and dimensions as shown on the drawings, subject to the following tolerance unless otherwise specified in these documents or drawings or as directed by the Engineer :

a)	Section dimension	=	5 mm
b)	Plumb	=	1 in 1000 of height
c)	Levels	=	3 mm before any deflection takes place.

2.2 Tolerance given above are specified for local aberrations in the finished concretesurface and should not be taken as tolerance for the entire structure taken as a whole or for the setting and alignment of formwork which should be as accurate as possible to the entire satisfaction of the Engineer, Errors if noticed in any lift/ tilt of the structure after stripping of forms, shall be corrected in the subsequent work to bring back the surface of the structure to its true alignment.

3. **SPECIAL PROVISION: -** Whenever the concreting of thinner members in required to be carried out within shutters of considerable depth, temporary openings in the side of the shutters shall, if so directed by the Engineer be provided to facilitate the poring and consolidation of the concrete. Small temporary openings shall be provided as necessary at the bottom of shutters of walls and deep beams to permit the expulsion of rubbish etc.

4. **REMOVAL OF FORMWORK: -** The formwork shall be so removed that it shall not cause damage to concrete. Centering shall be gradually and uniformly lowered in such a manner as to avoid any shock or vibrations. Supports shall be removed in such a manner as to permit the concrete to take stresses due to its own weight uniformly and gradually. The whole of the formwork removal should be planned and definite scheme of operation shall be worked out. Under no circumstances forms be struck until theconcrete reaches a strength of at least twice the stress to which the concrete may be subjected at the time of striking but not before the period as mentioned in IS:456-2000 where ordinary Portland cement is used.

II) STEEL CENTERING:-

1. **Work include :-** Erecting steel centering with contractor's material comprising of standard steel adjustable props and standard steel trusses / joists / spans, centering plywood for bottom of slab and plywood for bottom of beams etc. of adequate strength properly balanced for obtaining adequate rigidity to with stand all loads coming on it including permanent and temporary fixtures and fastenings etc. complete for R.C.C. member like beams slabs and canopy including its removal after the specified period, stacking making good the damaged parts / its replacement before its next use with all leads and lift.

2. For R.C.C. works formwork shall be prefab interlocking of adequate thickness and grade only. The centering and supporting arrangement such as standard steel trusses/ joists/ spans standards adjustable/ fixed props. H type frames etc shall be designed by the Contractor and approved from the Engineer before commencement of its erection. The Contractor with the prior approval of the Engineer shall use standard steel centering arrangement which may be manufactured by the reputed firm.

3. The supporting arrangement designed by the contractor shall conform to the relevant I.S. code and Standard practice adopted in this type of work. The centering arrangement shall be adequately braced and properly secured by using appropriate type of fastenings and fixtures to ensure stability and rigidity of the centering to withstand all loads coming on it. The entire responsibility for design, erection, maintenance and safety etc. will exclusively rest with the contractor. The Engineer reserves right to call detailed design calculations of the entire centering or part thereof to verify its stability and also reserve tight to reject entire centering arrangement or part thereof and any material usedfor the centering in the event of which the contractor shall have to arrange for its replacement at his own cost.

SPECIFICATIONS FOR CONCRETE WORKS: -

1 DESIGN OF CEMENT CONCRETE MIXES:

a) All the cement concrete of grade M-15 and higher strength shall be done with proper mix design as per IS: 10262 - 1982 and shall confirm to the durability and other requirements of IS 456 2000. The mix design shall be got approved from the Engineer-in-charge from time to time whenever there is change in the source

and type of cement and aggregates and change in the gradation of aggregates.

b) The design of concrete mixes for various concrete items in the work shall be obtained by the contractor at his cost from and approved laboratory. The contractor shall submit in advance details of such design to the Engineer-in-charge for his prior approval.

c) For concrete of Grade M-25/ M-30/M-35.
Preliminary mix design must be carried out from an approved laboratory, for subsequent changes field mix design shall be acceptable. However, in case the Engineer-in-charge has got difficulty in acceptance of the field mix design, laboratory mix design shall be got done by the contractor from approved laboratory at his own cost. Cement, find aggregate and coarse aggregate must be used by weight only according to the requirement of the approved mix design.

d) The concrete mix design shall give target strength of 1.33 times the working strength.

e) The minimum size of aggregate permissible shall be as per Para A-7 of Page - 8 f of standard specification book of 1979 Edition Vol. 1.

f) The provision of the specification No. B-7 at page - 38 to 40 of Vol. 1 1979 Edition of standard specification book for controlled concrete shall be applicable for all the structural concrete items. The maximum water cement ratio shall be 0.45. The mix design shall be done accordingly.

g) All the expenses of preliminary mix design, subsequent field/ laboratory mix design, work tests, shall be borne by the contractor will be reimbursed by the IUCAA after receipt of documentary evidence

2. **FROMWORK FOR CONCRETE WORK: -** The forms of concrete shall be of the materials as directly by the Engineer-in-charge and shall be of special plywood with special coatings, Forms shall beof the required shape, profile and lines. Suitable devices shall be used to hold corners, adjacent ends, edges of panel or other forms together in accurate alignment. The forms and joints shall tight enough. Forms used for circular curved or structures of unusual shape, petal dome etc. shall be of such a character that will result in form finish, smoothconcrete surface and exact shape. They shall be prepared such that they will not warp ordistort during erection or while placing concrete. Their design and layout shall be got approved form the Engineer-in-charge-in-charge in advance.

3. **ERECTION AND REMOVAL OF FORM WORK: -** The centering and strutting shall be of steel exclusively for concreting. The design and drawing should be got approved in advance from the Department. The centering and shuttering shall be close and tight to prevent leakage of cement slurry. The centering shall have the necessary props, bracing and edges sufficiently strong and stable which shall not yield or displacewhile or after lying of concrete. They shall be made in such way that they can be slackened and removed gradually and slowly without distributing the concrete. Centering and shuttering shall not be removed before the design strength is achieved.

4. **MIXTURE OF CONCRETE: -** Design mix concrete as well as nominal mix concrete shall be mixed by following the provision in Standard specification at B. 6.4 unless otherwise directed by the Engineer.
Unless otherwise agreed by the Engineer concrete shall be mixed in a batch type mixer of such other type of mixer as the Engineer may approve.
During hot weather the Contractor shall ensure that the constituent materials are sufficiently cool to prevent the concrete from stiffening in the intervals between its

discharge from the mixer and its final position.

5. **TRANSPORTATION, PLACING AND COMPACTION OF CONCRETE: -** The method of transportation placing and compaction of concrete shall be followed as per section B.6.6, 6.7 and 6.8 of Standard Specification unless otherwise directed by the Engineer. The compaction shall be done with surface float vibrators for slabs and with pin vibrators for columns and beams. Vibrators of adequate vibrating capacity shall be employed for all types of works.

6. **CURING: -** Curing shall be done by following provision of Section B.6.9 of Standard Specification and as directed by the Engineer.

7. **WORKING IN EXTREME WEATHER:** During windy weather sufficient protection shall be provided to prevent the cement from being blown away during the process of proportioning and mixing. During wet weather, the concrete shall be adequately protected as soon as it is placed in position.

   No concreting shall be carried out during period of continuous heavy rains unless, it is completely covered during mixing, transporting and placing, In extreme hotweather, concreting shall be restricted to morning and evenings The time between mixing and placing of concrete shall be kept to the minimum and formwork shall be cooled by sprinkling with water.

8. **FINISHING:** Finishing shall be form finish and Finishing work shall comply with requirement of section B.6.10 of Standard Specification unless otherwise specified herein below:

   Immediately on removal of forms, the R.C.C. work shall be examined by the Engineer before any defects are made good.

   a) The work that has sagged or contains honey combing to an extent detrimental to structural safety or architectural concept shall be rejected.
   b) Surface defects of a minor nature shall be rectified generally as indicated below by the contractor.
   i) Surface defects which require rectification when forms are removed usually consist of bulges due to movement of forms, ridges at form joints, honeycombed areas, damage resulting from the stripping of forms and bolt hole. Bulges and ridges shall be removed by careful chipping or tooling and the surface is then rubbed with a grinding stone. Honey combed and other areas shall be chipped out,the edges being cut as straight as possible and perpendicular to the surface, or preferably slightly under cut to provide a key at the edge, of the patch. Bolt holes shall be closed by cement mortar to ensure thorough filling.
   ii) Shallow patches shall be treated with a coat of thin grout composed of one part of cement and one part of sand and then filled with mortar similar to that used in concrete. The mortar is placed in layers not more than 10 mm thick and each layer shall be given a scratch finish to secure bond with the succeeding layer. The last layer shall be finished to match the surrounding concrete by floating, rubbing or tooling on formed surfaces by pressing the form material against the patch while the mortar is still plastic.
   iii) Large and deep patches requires filling up with concrete held in place by forms. Such patches shall be reinforced and carefully dowelled to the hardened concrete.
   iv) The same amount of care to cure the material in the patches shall be taken for the whole structure. Curing shall be started, as soon as possible after the patch is finished to prevent early drying. Damp Hessian cloth may be used. But in some locations it may be difficult to hold it in place, a membrane curing compound in

these cases will be most convenient.

9. **CONSTRUCTIONS JOINTS:** Construction joints shall be provided and treated following the provisions of Specification and as directed by the Engineer-in-charge.

10. **DURABILITY: -** Minimum cement contents for different exposures and sulphate attack re given in Tables 4 and 5 o I.S. 456, 2000 shall be followed for design mix.

11. TESTS AND STANDARD OF ACCEPTANCE:-

11.1 Tests and Standard of acceptance criteria of design mix concrete and nominal mix concrete shall be as follows:

Sampling and testing of Concrete shall be done as per provision of section B.6.12 of Standard Specifications. Acceptance criteria for strength of concrete shall be as per IS 456-2000.

Case falling outside the above limit shall be examined by the Engineer on Merits in each case.

11.2 **DEFECTIVE CONCRETE :** Any concrete which gives substandard results, or is severely damaged due to cracking or shows excessive honey combing and exposure of reinforcement, if exhibits any fault which in the opinion of the Engineer, seriously impairs its function, may be declared as defective concrete. Such non acceptable concrete shall be removed from the site and replaced by fresh concrete of the specified quality by the contractor at his own expenses. Alternatively in case of acceptable concrete, the Contractor shall carry out whatever other remedy the Engineer mayreasonably suggest "Small rendering shall be done by the Contractor without extra cost."

12 **KEEPING RECORDS:** The record of mix design, mixing, slum, testing of C.C. cubes etc. shall be maintained in accordance with Section B-6.13 of the Standard Specification along with records of concrete pour, details of Cube Test issued for testing & testing records to be countersigned by IUCAA.
Contractor will maintain Hindrance register on site giving details of Hindrance to the construction on account of weather or IUCAA / Architect decisions & drawings. All entries shall be jointly signed by IUCAA estate department. The accepted Hindrance will be used for determining timely/delayed construction of the project.

GENERAL SPECIFICATION FOR WATERPROOFING

(1) The work of waterproofing described in the following items shall be carried out by the contractor only through a renowned specialist waterproofing agency using cement waterproofing compounds, as approved in writing by the Engineer-in-charge.

(2) The Contractor shall give before execution, detailed specifications for each item of works of waterproofing to be executed according to the specifications of the specialized agency, he proposes to employ, for approval. The work shall not be started unless approval in writing is given by the Engineer in charge to the said specification.

(3) The Contractor shall give a guarantee bond on requisite stamp paper for a minimum period of 10 years for all the items of waterproofing done. During the guarantee period the Contractor shall entirely be responsible to rectify any defect at his own cost to maintain the work in waterproof condition. The waterproofing Contractor shall also haveto make good all the surroundings disturbed by him during the rectification work at his own cost. The form of written guarantee shall be on a legal stamped agreement acceptable to the IUCAA. The Guarantee shall be given within one month from the date of completion of water proofing treatment but any delay in furnishing the guarantee shall not relieve the contractor from implications of the clause.

(4) 10% (Ten percent) of the cost of the waterproofing work executed shall be retained as "Retention Money" for a period of 10 years covering the guarantee, and the same shall be released only after satisfactory performance of the treatment during guarantee period of 7 years. This amount may be converted into any approved interest bearing security (for 7 years after completion of defect liability period), in the name of **Estate Manager IUCAA, Pune** on receipt of such written request from the contractor.

(5) The waterproofing agency as approved by Engineer-in-charge shall provide and install at his own cost the following for his own use and remove the same after completion of the work:

I) Two pumps electrical/ diesel operated for watering and curing of work at any level in the building. Curing for all items shall be carried out for a minimum period of 14 days.

II) Temporary Mild Steel Water storage tanks.

III) Temporary galvanized iron piping's and fittings for water line.

IV) Flexible hose lengths.

V) Cement Go-down, site office.

(6) Injections to reinforced cement concrete slab, wherever required, have to be undertaken by the Contractor free of cost.

(7) Before starting the waterproofing work, the surface receiving the treatment shall be cleaned properly.

(8) The item of waterproofing as given in the Schedule 'B' applies for work in any position and on any floors and at any heights. The lift of materials shall not form any criteria for extra payment.

(9) For the reference of contractor, general guideline specifications for waterproofing are attached herein with the general specification for waterproofing.

GENERAL GUIDELINES FOR WATERPROOFING WORK

For reference of contractor.

(Note: The contractor is required to give detailed specification for each item ofwaterproofing work).

1. Roof, Slab and terrace:

Providing. average 112 mm thick cement based Indian waterproofing treatment with Brick Bat Coba beading by keeping the treatment minimum 75 mm thick at the rain water pipe point and keeping the gradient not flatter than 1 in 100.

a) Cleaning the surface to the requirements.
b) Giving a coat of wash mixed with cement.
c) Providing 12mm thick cement mortar bed, with admixture of waterproofing compound to form a bed for brickbats. Special care shall be taken at the junction of parapet and terrace slab to ensure gaps, if any, are properly sealed.
d) Placing brickbats of varying size (average 80 mm thick) to proper slope and grouting their joints with chemical process in cement mortar with 2% of waterproofing compound.
e) Providing all around the terrace large waterproof wattas (rounding's) up to a height of 30 cm in PCC or as directed above the finished level of waterproof treatment.
f) Finishing: Finishing the top surface with average 20 mm thick layers of cement mortar 1:3 added with jute fibre at one kilogram per bag, including finishing the surfacesmooth with cement slurry mixed with approved waterproofing compound, marking finished surface with false squares of 300 mm x 300 mm.
g) Curing: Curing shall be done *for* 14 days. Curing of top surface shall be done by making base (wattas) with lean cement mortar to keep water standing on the surface.
h) Carrying out the test: The test shall be carried out by pounding method. Payment for the item shall be released only after results of pond test are satisfactory.

2. Toilets:

a) Cleaning the surface to the department's requirements.
b) Giving a coat of wash mixed with cement.
c) Providing average 15 cm thick waterproofing treatment to the bottom of toiletfloors.
d) Providing 20 mm to 25 mm thick cement mortar waterproof treatment to the walls of toilets up to the height of 0.30 meter above the finished floor level.
e) Providing waterproof wattas all around the toilets.
f) Grouting the mouths of inlets and outlets
g) Filling sunk portion with brickbats including waterproof mortar and the top surface left rough to form a key for tiles.

3. Overhead tanks:

Work under some items in Schedule 'B' of the tender pertains to construction overhead water tank. After completion of the work, water tank as a whole shall be tested forwater tightness and leakages if any shall be rectified forthwith 'without any extra cost tothe department**.**

QUALITY ASSURANCE AND MAINTENANCE

To ensure the specified quality of work which shall also include necessary surveys, temporary works etc., and the contractor shall prepare a quality assurance plan and get thesame approved from the **Engineer-in-charge** within eight days from the date of work order.For this, contractor shall submit an organization chart of his technical personnel to be deployedon the work along with their qualification, job descriptions defining the functions of reporting, supervising inspecting and approving. The contractor shall also submit a list of tools, equipment's and the machinery and instrumentation which he proposes to use for the construction and for testing in the field and/or in the laboratory and monitoring. The contractor shall modify/supplement the organization chart and the list of machinery, equipment etc. as perthe direction of the Engineer-in-charge and shall deploy the personnel and equipment on the field as per the approved chart and list respectively. The contractor shall submit written methodstatements detailing his exact proposals of execution of the work in accordance with the specifications. He shall get these approved from the **Engineer-in-charge**. The quality of the work shall be properly documented through certificates, records, check-lists and logbooks of results etc. Such records shall be compiled from the beginning of the work and be continuouslyupdated and supplemented and this shall be the responsibility of the contractor. The forms should be got approved from the **Engineer-in-charge**.

The contractor shall prepare detailed completion drawings after completion of thework. He shall also prepare and submit a maintenance manual giving procedure for maintenance, with the period of maintenance works including inspections, tools and equipmentto be used, means of accessibility for all parts of the structure. He shall also include in the manual, the specifications for maintenance work that would be appropriate for his design and technique of construction. This manual shall be submitted within the contract period.

FORM I

Technical Bid Form

1	Bidder's Name (firm/company Name) and Address	
2	Company registration / Shop Act License No. and Validity Period/Date (If applicable)	
3	Valid Government registration certificate PWD/CPWD/MES/BSNL/Railway	
4	Nature of Business & Establishment Year	
5	**Telephone Nos.** *Mobile No.* *Fax Nos.* *E-mail*	
6	**Contact Person** *Name* *Designation* *Mobile* *E-mail*	
7	EMD Paid (Proof to be Attached)	
8	NSIC / MSME Registration Certificate (valid certificate to be attached if any)	
9	**PAN Details** PAN no. (Photocopy to be attached)	
10	**PF/ESI/GST/Professional Tax details** Reg. no. PF (copy to be attached) Reg. no. ESI (copy to be attached) Reg no. GST (copy to be attached) Reg no. Profession Tax (copy to be attached)	
11	**Valid Labour License** (Photocopy to be attached)	
12	**Organizational Capability (staff strength)** *No. of Civil Engineers …* *No of other Staff…*	
13	**Financial capacity over last 5 years (Income tax return/Certified balance sheet of the firm along with CA's certificate for the respective year's turnover)** FY 2017-2018 FY 2018-2019 FY 2019-2020 FY 2020-2021 FY 2021-2022	

14	Last Five years continuous experience of the firm in the field of providing such services in Central Govt. establishment / Autonomous bodies of GOI/Corporation of GOI/Reputed Public or Private Organizations (Provide details in enclosed tabular form)	
15	Provide following details of Similar **Institutional** civil projects completed within the last 5 years of similar nature: 1) Minimum three **Institutional** civil projects costing more than Rs **10 Crore** OR 2) Minimum two **Institutional** civil projects costing more than **16 Crores** OR 3) Minimum one **Institutional** civil project costing more than **20 crores**. Client Certificate to be attached for all the works *a) Name & address of the project* Type of Work Start date Completion date Final Bill Value Scope of work *Client contact details (Name, tele, fax, e-mail).*	
	b) Name & address of the project Type of Work Start date Completion date Final Bill Value Scope of work *Client contact details (Name tele, fax, e-mail).*	
	c) Name & address of the project Type of Work Start date Completion date Final Bill Value Scope of work *Client contact details (Name tele, fax, e-mail).*	
16	List of Clients for whom the bidder has executed works of similar nature	
17	List along with details of any arbitration cases / legal disputes on Current / previous projects – (Mention name of project, reason for dispute, party filing the suit and its current status)	

18	List any awards, recognitions on previously executed projects	
19	Prepared and submitted by (Name & Signature)	

Notes –

1. The Inter-University Centre for Astronomy & Astrophysics, Pune reserves the right to accept or reject any or all applications without assigning any reason.
2. The vendors/bidder has to fill/complete the technical bid form in all respects. Every statement made in the technical bid format should be supported by documentary proof for consideration and all pages of the tender should be verified and signed by the authorized person in this behalf. Otherwise the tender is liable to be rejected.
3. Please support Work in hand (Form No. III) and completed work (Form No. II) information with copy of the Work order/Contract from the client.

Yours faithfully,

(Signature of the Authorized person)

Date: **Name:**

Place: **Designation:**

Seal:

FORM II

DETAILS OF WORKS OF ALL SIMILAR TYPE AND MAGNITUDE CARRIED OUT BY THE CONTRACTOR (REFER ELIGIBILITY CRITERIA (SECTION II – Point No. 3) OF **COMPLETED WORKS**)

(DETAILS OF PROJECTS SHALL BE FILLED IN THE CHART AS PER REQUIREMENT WITH PROOF)

NAME OF THE CONTRACTOR:

Sr. No.	Name of work	Name and address of the organization from whom the work was done	Place and Country	Agreement No.	Date of commen-cement	Tendered cost (In lakhs)	Total cost of work done (In lakhs)	Date of Completion	Principle Features in brief
1	2	3	4	5	6	7	8	9	10

Signature of Contractor

Note: - This is only a standard form. Details are to be furnished in this format in the formd type written statements which shall be scanned and attached in COVER No. I. The work done certificates shall be attached in support of the works claimed in this form. Thework done certificates shall be duly signed by the officer not below the rank of Deputy Engineer.

FORM III

STATEMENT SHOWING **ONGOING WORK** IN ALL CLASSES OF CIVIL ENGINEERING WORK
(DETAILS OF PROJECTS SHALL BE FILL IN THE CHART AS PER REQUIREMENT WITH PROOF)

NAME OF CONTRACTOR: -

Sr. No.	Nam of work	Amount Put to Tender/ Tenderedcost	Agreement No.	Date of Commen-cement And Date of Completion (If work completed)	Amount ofwork still remaining to be executed (Rs. In lakhs)	Remarks
1	2	3	4	5	11	12
Grand Total						
Average Annual Turnover						

Signature of Contractor

Note: - This is only a standard form. Details are to be furnished in this format in the formof typewritten statements which shall be scanned and attached in COVER No. I. Thework done certificates shall be also attached in support of the works claimed in this form.The work done certificates shall be duly signed by the officer not below the rank of Deputy Engineer.

FORM IV
WATERPROOFING GUARANTEE BOND

(On non-judicial stamp paper worth Rupees 500/- notarized)

NAME OF WORK:

NAME OF CONTRACTOR:

AGREEMENT :

The contractor hereby declares that the water proofing work carried out under this contract shall be of the best quality and workmanship and shall strictly in accordance with the specifications and particulars contained/ mentioned in the clause hereof and the contractor hereby guarantee that the said work would continue to conform to the description and quality aforesaid for a period of Ten years from the date of handling over the said workto the Department and notwithstanding the fact that the Department may have inspected and or approved the said work. If during the aforesaid period of Ten years, the said work be discovered not to conform to the description and quality aforesaid or have deteriorated (and the decision of the Engineer in charge in that behalf will be final and conclusive) the Department will be entitled to reject the said work or such portion thereofas may be discovered not to conform to the said description and quality. On such rejection, the work will be at the Contractor's risk and all the provisions herein contained relating to rejection of work etc. shall apply. The contractor shall, if so called upon, have to make good the work etc. or such portion thereof, as is rejected by the Engineer in charge, otherwise the contractor shall pay to the Department, such damages, as may arise by the reason of the breach of the condition herein contained. Nothing herein contained shall prejudice any other right of the Department in that behalf under this contract or otherwise.

Date :

PLACE : CONTRACTOR.

FORM V

Undertaking / Acceptance

(On non-judicial stamp paper worth Rupees 100/- and notarized)

1. I, _____ son/ daughter/ wife of Shri. _____ Proprietor /Director / authorized signatory of the Company / Firm mentioned above, is competent to sign this declaration and execute this tender document.

2. I have carefully read and understood all the terms and conditions of the tender and undertake to abide to them.

3. The information / documents furnished along with the above tender form are true and authentic to the best of my knowledge and belief. I am well aware of the fact that furnishing of any false information / fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.

Place: Pune **Authorised Signatory**

Date : **Sign and seal**

FORM VI

Declaration

(On non-judicial stamp paper worth Rupees 100/- and notarized)

Declaration letter on official letter head stating the following:

1. We are not involved in any major litigation that may have any impact of affecting or compromising the delivery of services as required under this tender.

2. We are not black-listed by any Central / State Government / Public Sector Undertaking in India.

3. I/ We hereby declare that I/ We have read and studied in detail the all instructions and conditions of this Contract in the above Clauses, and understood the scope of the project/ work and my/our fundamental duties and responsibilities under this Contract. I/ We unconditionally accept and agree to abide by them.

Yours faithfully,

(Signature of the Authorized person)

Date: **Name:**

Place: **Designation:**

Seal:

FORM VII

(To be printed on letterhead)

EMD Refund Request

To

Estate Manager
Inter-University Centre for Astronomy & Astrophysics
Post bag -4, Ganeshkhind,
Pune University Campus,
Pune - 411007.

Sub: - Request for refund of EMD deposited for tender for Construction of Proposed Academic and Research Centre-IUCAA 2, at S. No. 25/1/1/1/1/2, Aundh, IUCAA, Campus, Pune.

Sir,

I/We request you that EMD deposited by me/ us against the tender above tender due on 04/**11/2022** vide UTR No dated for **Rs.44,00,000/-** for providing **Construction of Proposed Academic and Research Centre-IUCAA 2, at S. No. 25/1/1/1/1/2, Aundh, IUCAA, Campus, Pune**, may kindly be refunded.

Yours faithfully,

(Signature of the Authorized person)

Date: **Name:**

Place: **Designation:**

Seal:

FORM VIII

ARTICLES OF AGREEMENT

AGREEMENT

This AGREEMENT made on ……. Day of.....2022.

BETWEEN

Senior Administrative Office, Inter IUCAA Center for Astronomy & Astrophysics, Pune – 411 007, (hereinafter called "The Employer")

AND

_____, Pune –

(hereinafter referred to as 'the Contractor', which expression shall, where the context so admits or implies, be deemed to include his heirs, executors and administrators), of the Other Part.

WHEREAS IUCAA is desirous of constructing the building of ……. (hereinafter referred to as the "said work") as shown and indicated in the Drawings, Specifications and Bill of Quantities (BOQ) which are part of the Tender document.

AND WHEREAS IUCAA invited tenders for the purpose of awarding the said work.

AND WHEREAS the Contractor submitted her/his tender for the said work which has beenconsidered and accepted by IUCAA.

AND WHEREAS IUCAA has placed the work order No. ..... dated …… and the Contractor has communicated his acceptance of the said work order.

AND WHEREAS the Contractor has agreed to execute the said work estimated to Rs…….. as per his Acceptance letter dated …….

NOW IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES AS UNDER:

1) The following documents shall form part of this Agreement and parties hereto shall abide with the same:

a. B-2 form item rate tender and contract for works
b. Bill of Quantities (Schedule-B).
c. Drawings.
d. All additional terms and conditions mentioned in the Tender Document subsequently submitted by the Contractor while submitting his offer.
e. Minutes of Pre-bid meeting and the common set of conditions and deviations issued with reference to Pre-bid Meeting.
f. Letter of Negotiations.
g. Work Order.

2) In consideration of the payments to be made to the Contractor, s/he shall subject to the conditions of this Agreement, Tender Document and as per the common set of conditions and deviations issued with reference to pre-bid meeting, execute and complete the said work.

3) The Contractor shall execute and complete all the allied works connected with the said work, as may be ordered from time to time by IUCAA, even though such works may not be shown in the Tender Document.

4) IUCAA shall pay the Contractor such sums as shall become payable, hereunder at the times and in the manner specified in the Tender Document.

5) The term 'the Architect' means the Architect appointed by IUCAA for the said work and in the event of him ceasing to be the Architect, such other person appointed as the Architect by the IUCAA for the said work. The Contractor shall not object this appointment of the new Architect unless there are sufficient and valid grounds acceptable to IUCAA, provided always that no person, subsequently appointed to be the Architect for the purpose of the said work, shall be entitled to overrule, any decision, approval or direction given in writing by the earlier Architect.

6) The term 'Project Management Consultant' means the Consultant appointed by IUCAA for the said work. All the payments shall be made to the Contractor only after the certification of material and workmanship from the Project Management Consultant to the effect that they are as per the specifications and have quality of desired standards.

7) IUCAA, through the Architect, reserves the right of altering the drawings and the nature of the work and adding to or omitting any items of the work or of having portions of the same carried out departmentally and such alterations and variations shall be carried out by the Contractor without prejudice to this Agreement.

8) The Contractor shall at the first instance and at her/his own cost and expenses, arrange for all the material whatsoever, necessary for the said work and also tools, instruments, machinery etc. whatsoever, necessary for the same and in case, any material is rejected by IUCAA, the Contractor shall forthwith, at his own expenses replace the same with the quality material duly approved by IUCAA.

9) The Contractor shall not on any account, whatsoever, sublet the said work, in part or in full, except with the previous approval of IUCAA.

10) The Contractor shall remain liable to and shall indemnify IUCAA in respect of all causes or actions, claims, damages, compensations, or charges and expenses arising out of any accident or injury, sustained by any workman or any other person while executing the said work.

11) The workers employed by the Contractor for providing the said services shall be the employees of the Contractor and not of IUCAA.

12) The Contractor shall be solely responsible for the selection, appointment of the workers and for disciplinary action, if any, against her/his workers.

13) If any worker employed by the Contractor causes any damage to the property of IUCAA, the Contractor shall make good the loss suffered by IUCAA.

14) IUCAA shall not be responsible for any claim arising out of any loss or injury caused to the workers employed by the Contractor for carrying out the said work.

15) The Contractor shall be responsible for payment of wages to each worker employed by her/him pursuant to this Agreement regularly and according to the rates of wages prevailing in the market or as fixed by the Government, from time to time.

16) The Contractor shall observe and perform all the requirements of applicable laws and shall comply with all provisions of Contract Labour (Regulation and Abolition) Act 1970, ESI Act, 1948, Minimum Wages Act, 1948, Payment of Bonus Act, 1965 and other Acts applicable to the Contractor for the time being in force. The Contractor shall

indemnify and keep indemnified IUCAA against any loss, costs, charges or expenses, suffered or incurred by IUCAA on account of breach thereof by the Contractor.

17) All disputes arising out of or in connection with this Agreement shall be deemed to have arisen in Pune and only the Courts in Pune shall have the jurisdiction to determine the same.

IN WITNESS WHEREOF both the parties hereto have set their hands, the date and year hereinabove mentioned.

For and on behalf of	For and on behalf of
Inter-University Centre for Astronomy and Astrophysics (IUCAA)	The Contractor

Witnesses :

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