

JIWAJI UNIVERSITY, GWALIOR

1. Name of tender / suppliers M/S,.....
.....
2. Name of Work Water proofing treatment of
different Building of Jiwaji
Gwalior.
3. Approximate cost Rs. 50.00 lakhs/-
4. Cost of tender form (in form of D.D.) Rs. 5,000/-
(enclosed with tender form)
5. Earnest money in form of D.D./FDR in favour of Rs. 1.5 lakhs
Registrar, Jiwaji University, Gwalior
6. Time of Completion 09Months
7. Rate quoted on M.P. PWD SOR 1-6-2009 Percentage rate tender
8. Date of received of Tender by Speed/Registered Post up to 21-9-2011 at 5:00 PM
9. Detail of sites & items can be seen in the office of University Engineer
10. Royalty shall be deducted from the bills as per Govt. order.

Water proofing work shall only be carried out from registerd agency of water proofing work & ten year gurantee bond should be submitted before payment.

Registrar

JIWAJI UNIVERSITY, GWALIOR

S.No./FJU/Engg./2011/531

Dated:302/08/2011

TENDER NOTICE THIRD CALL

Sealed percentage rate tenders on form 'A' are invited by the Registrar, Jiwaji University, Gwalior from the eligible contractors registered in appropriate category in MPPWD/CPWD and other govt. department for the following work :-

S.No.	Name of Work	Approximate cost	EMD	Completion Time
1.	Water proofing treatment of different Building of Jiwaji University, Gwalior.	Rs. 50.00 lakhs/-	Rs.1.5lakhs/-	09 month

Detail of terms & condition can be down loded from university website www.jiwaji.edu.

REGISTARA

THE ELIGIBILITY CRITERIA:

Contractors who full fill the following requirements shall be eligible to apply.

1. Joint ventures are not accepted.
2. Should have relevant evidence from an officer of rank of Executive Engineer or above in original of having satisfactorily completed at least one water Proofing Treatment work not less than Rs.50 Lakhs in a year in any Govt./Semi Govt. department during last three year. Submit attested copy of TDS certificate of the same work.
3. Should have an average annual financial turnover of Waterproofiug work Rs.50 lakhs during the last three year. The contractor shall submit the CA Report & TDS. Certificate in support of his claim.
4. Should have revenue solvency/ current bank solvency certificate of Rs. 10 lakhs not letter not letter then 12 months old.
5. should have valid registration in Sales Tax & other relevant department.
6. Should not have incurred any loss in more than two year during the last five years ending 31 st march 2010 in supports of this the contractor shall submit annual balance sheet of 3 years.
7. Should have relevant plant and machinery available on hand (own) and willingness to be inducted (own and hired) if instructed by University for the subjected work.
8. The contractor should be Registered in P.W.D./C.P.W.D. and other Government. Department. as Specialised agency for Carrying out water proofing work.

SUBMISSION PROCEDURE:-

The proposal will be submitted in two separate sealed envelopes Viz **Envelop** (1) cost of tender form, earnest money, certificate of eligibility and Prequalification documents, **Envelop** (2) prize bid.

- The prize bid the of the tender shall be sought only tenderer qualified for the work at a later date after evaluation of pre-qualification document.
- the tender document of above works can be downloaded from university website. and the cost of the tender document should be paid at the time of submission of the tender.
- if the date of submit and ,opening happen to be holiday the tender from will be submit/opened on the next working day at the same time with out any

REGISTRA

SUBMISSION PROCEDURE:-

Envelop for part-(1):- shall contain

1. Tender cost in the form of Bank draft / Bankers Cheque (Non refundable) in favour of Registrar Jiwaji University Gwalior
2. Earnest money in form of Bank draft/Bankers cheque ,FDR in favour of Registrar Jiwaji University Gwalior.
- 3 All relevant document in support of eligibility for tender.
4. The Duly filled and signed downloaded (unreadable prints are not be accepted)

Envelop for part —2:-shall contain

- 1.Original downloaded prize bid document (unreadable prints are not acceptable)

The contractors are required to submit the tender cost in the manner as detailed above ,The contractors are also required to submit the attested copies of the certificate document as desired in tender notice, in support of their eligibility in view of the term and conditions of the tender notice & these papers should be kept in “Envelop-1” Please note the Envelop-2 of the tender . Containing all the terms and conditions & schedules of quantities /prize bid of the tender. Tenderer’s not submitting the above details shall not be considered.

The Tenderers downloading the tender document form the Jiwaji University website shall be responsible for the downloading the entire tender document form the website. incomplete unreadable / edited or any over writing tender documents submitted with the bid shall be summarily rejected & no claim in this regards shall be entertained,

whosoever the reason may be . the tender document form website will be considered legally valid for participation in the tender process.

The agencies participating in the tender should intimate the University Engineer in Writing before submitting the tender and to the office if any clarification is required in this matter.

The agencies /firms / tender are advised to submit the completed tender document in the desired manner . if any document in the information submitted by the tender is discovered at any later stage. the concerned contractor shall be summarily disqualified for doing business with Jiwaji University and their earnest money may be forfeited for their misconduct.

The Registrar Jiwaji University, reserves the right to reject any or all tenders without assigning any reasons there of , University will not responsible any postal Delay

REGISTRAR

JIWAJI UNIVERSITY, GWALIOR

**ENVELOP – I
(PRE-QUALIFICATION DOCUMENT)**

NAME OF WORK : Water proofing treatment of different Building of Jiwaji University, Gwalior.

1.
ISSUED TO : (Name of Tenderer)

.....
.....

JIWAJI UNIVERSITY, GWALIOR

ENVELOP - II (PRIZE BID DOCUMENT)

NAME OF WORK : Water proofing treatment of different Building of Jiwaji University, Gwalior.

1
ISSUED TO : **Name of Tenderor**

.....

.....

JIWAJI UNIVERSITY, GWALIOR

(in Form A, B and C)

DETAILED NOTICE INVITING TENDERS

Date of issue of N.I.T. *FJU/Engg/2011/ 531* *Dt.30-08-2011*
Date of Receipt of Tender 21-09-2011 up to 05:00 P.M. By Speed/Regd. Post
Date of opening of Tender Ist envelopes (A) on 23-09-2011 on 3:00 pm

1. INTRODUCTION

1. Sealed tenders are invited on behalf of the **Registrar** for the following work in form "A" Percentage Rate Tender and will be received at the office of the Registrar / University Engineer up to 03:00 P.M. on 21/09/2011 from the appropriate class of PWD/CPWD contractors.

Name of work : Water proofing treatment of different Building of Jiwaji University, Gwalior.

6.
 - (2) Amount of estimate **Rs. 50 Lakhs**
 - (3) Probable amount of contract **Rs. Lakhs**
 - (4) Amount of earnest money . **Rs. 1.50 Lakhs**
 - (5) Time allowed for completion 9 Month including rainy season from the date of written order to commence the work.
1. 2. The electrical work shall be executed only through the contractors who posses proper valid electric license from the Chief Electrical Adviser to the Government. He should also attach a copy of the license, and waterproofing work shall be executed through the specialized contractor who has registered in appropriate department as specialized work of waterproofing treatment.
1. 3. Not more than one tender shall be submitted by a contractor/by a firm of contractors.
1. 4. Not two or more concerns in which in individual is interested as a proprietor and/or partner shall tender for the execution of the same work. If they do so all such tenders shall be liable to be rejected.
1. 5. The Registrar, Jiwaji university Gwalior_ shall be accepting officer hereinafter referred to as such for the purpose of this contract.
1. 6. Application for issue of tender documents shall be submitted to Registrar, Jiwaji university Gwalior so as to reach the office not later than 21-9-2011.
1. 7. Tender documents consisting of plans specifications, schedules, of quantities of the various classes of work to be done, the conditions of contract and other necessary documents together with addressed envelopes to be used for return of form and other

documents, will be open for inspection and issued, for sale on payment of Rs. 5000/- on or before 21-09-2011 and up to 3.00 P.M. from university website.

1. 8. The copies of other drawings and documents pertaining to the work assigned for the purpose of identification by the accepting officer or his accredited representative and samples of materials to be arranged by the contractor will be open for inspection by tenderness at the following office during working hours between the dates mentioned in clauses – 1.7 above.

2. RATES :

2.1 The schedule of items :-

The schedule of main items of work to be executed is enclosed as Annexure – (F).

2.2 Item Rate tender in form “A” or “C”.

2.2.1. In respect of percentage rate tenders, contractor should quote his separate tender percentage rate above or below the following schedules of rates.

(a) **Building work** – The current schedule of rates issued by the E-in-C M.P. .P.W.D. Bhopal in force from 01-11-1999 and its amendments up to date issued up to date of N.I.T.

(b) **Electric fittings** – The current schedule of rates issued by the E-in-C M.P. .P.W.D. Bhopal in force from 01-07-1992 and its amendments up to date issued up to the date of issue of N.I.T.

(c) **Water supply and sanitary fittings** - The current schedule for rates issued by E -in-C M.P. .P.W.D. Bhopal in force from 01-11-1999 and its amendments up to date issued up to the date of issue of N.I.T.

(d) **Road works** - The current schedule of rate issued by the Engineer-in-chief M.P.P.W.D. Bhopal in force from Ist June 2000 and its amendments issued up to the date of issue of N.I.T.

2.2.2. (For Form “A” only). The percentage of tender above/below or at par with the relevant schedule rates inclusive of amendments and correction slips issued up to the date of the notice inviting tenders should be expressed on the tender form itself both in words and figures in such a way that interpolation is not possible and all over writing should be neatly scored out and rewritten and the corrections should be duly attested prior to the submission of tender. Tenders not specifying percentage in words will summarily be rejected.

2.2.3. Any amendments to the schedule of rates after the date of issue of this tender notice or the date of issue of any amendments to the N.I.T. specifically notifying the said amendment to the current schedule of rates, shall not apply to this tender.

2.2.4. The percentage tendered by the contractor will apply to those rates which find place in the current schedule of rates mentioned in clause 2.2.1. or have been derived from the said current schedule of rates and not to other items of work.

2.2.5. The percentage tendered by the contractor shall not be altered by the contractor during the terms of contract. The deduction or addition as the case may be of the percentage will be calculated on the amount of the bill for the work done, after deducting the cost of materials supplied departmentally at rates specified in the agreement.

- 2.3.1 Item Rate Tenders in form – “B”. In respect of item rate tenders, contractor should quote his rates for the items mentioned in the schedule of item in Annexure F of this N.I.T. Only rates quoted shall be considered. The rates should be expressed in figures as well as words and the unit should be as given by the Department. The contractor will not have the freedom to change the unit. No percentage above or below the schedule be quoted.
- 2.3.2 The rates quoted in the tender for the various items of work will not be altered by the contractor during the term of contract.
- 2.4. Lead and lift of water – No lead and lift for carting of water will be paid.
- 2.5 Lead and lift of materials – No lead and lift for carting of materials shall be payable to the contractor except in case of such items for which specific lead and lift are provided in the current schedule of rate mentioned in clause – 2.2.1. of the N.I.T. or in the schedule of items in respect of item rate tenders.
- 2.6 Non-schedule items of works – During the execution of the work there is likelihood of such items of work, which do not find place in the current schedule of rates, referred to above in respect of percentage rate contracts or such items which are given in the schedule of items in respect of item rate contracts, for which contractor has not quoted his rates. Contractor will have to carry out these items of work.

Rates of such items of work which do not find place in the current schedule of rates referred to above, in respect of percentage rate contracts or such items in respect of item rate contracts shall be decided by the University Engineer and the decision of the Register shall be binding on the contractor. The quantum of such work will not exceed 10% of amount of contract unless accepted by the department and the contractor.

3. SUBMISSION OF TENDER :

- 3.1 Earnest money - No tender will be received without a deposit of earnest money of Rs. 4.60 Lakhs which will be returned to the unsuccessful tenderness on the rejection of their tenders or earlier as may be decided by the competent authority and no production of a certificate of _____ that all tender documents have been returned, and will be retained from the successful tenders as part of the security deposit.
- 3.2 Form of Earnest Money.
- 3.2.1 Where the amount of Earnest money is more than Rs.500/- the same shall be accepted only in the shape of Bank drafts of any schedule Bank in favour of Registrar, Jiwaji University, Gwalior.
- 3.2.2 the intending tenderer from other states may remit E.M. in the from of the Bank draft of any schedule bank to the Registrar Jiwaji University Gwalior.
- 3.3 **Earnest Money is separate covers.** The Earnest Money in one of the prescribed forms should be produced/sent separately and not kept in the covers containing the tender and if the earnest money is not found in accordance with the prescribed mode in the tender will be returned unopened to the tenderer.
- 3.4 **Adjustment of Earnest Money** – Earnest money, which has been deposited for a particular work, will not, ordinarily, be adjusted towards the earnest money for another

work, but if the tender of contractor for a work in the same division has been rejected and the earnest money has not been refunded to him due to any reason, it may be so adjusted by the University Engineer.

3.5 **Security Deposit** – (a) The Security Deposit shall be recovered from Running bills, @ 5.00 per cent as per clause –I of the agreement read with para 3.5 of the N.I.T.

(b) The amount of the E.M. shall not be adjusted when value of work done reaches the limit of the amount of Contract of exceeds the Probable amount of the contract.

3.6 **Implication of submission of Tender** – Tenderers are advised to visit site sufficiently in advance of the date fixed for submission of the tender. A tenderer shall be deemed to have full knowledge of the relevant documents, samples, site, etc whether he inspects them or not.

3.7 The submission of a tender by a contractor implies that he has read the notice, conditions of tender and all other contract documents and made himself aware of the standard and procedure, in this respect, laid down in the National Building Code of India 1970/Indian Standards the scope and specification of the work to be done and the conditions and rates at which stores tools and plant etc. will be issued to him by the university has seen the quarries with their approaches, site of work etc, and satisfied himself regarding the suitability and availability of the materials at the quarries. The responsibility of opening new quarries and construction and maintenance of approaches there to shall lie wholly with the contractor / Tenderes.

3.8 **Income Tax Clearance Certificate** – A tenderer purchasing tender documents for works exceeding Rs. 200 lacs shall submit either an Income Tax Clearance Certificate in the form printed as Annexured or a certificate from the Income Tax authority that the assessment is under consideration. No tender documents can be issued/sold to him unless such certificate is submitted.

3.9 **List of work in progress** - Tenders must be accompanied by a list of Contract already held by the tenderer at the time of submitting the tender, in the Department and elsewhere showing therein-

- a. the amount of each contract.
- b. Balance of work remaining to be done, and .
- c. The amount of solvency certificate produced by him at the time of enrolment in the concerning department
- d. detail of work where he with draw his offer or did not.

3.10 **Relationship** - The contractor shall not be permitted to tender for works in the university (responsible for award and Execution of contract) in which his near relative is posted in university. He shall intimate the names of his near relative working in university. He shall also intimate the name of persons who are working with him in any capacity or subsequently employed by him and who are near relatives to any gazette officer in the university. Any breach of this condition by the contractor would render himself liable to be removed from the approved list of contractors of the P.W.D.

Note – By the term near relative is meant wife, husband, parents and son, grand son, brothers, sisters, brother-in-laws, father-in-law and mother-in-law.

- 3.11** The tender for the works shall be witnessed by a contractor. Failure to observe this condition shall render the tender of the contractor liable to rejection.

4. OPENING AND ACCEPTANCE OF TENDER :

- 4.1 Place and Time of opening -** The tender shall be opened at time and place stated in para 1. by the U.E. in the presence of the tenderer or their duly authorized agent who may choose to attend. The U. Engineer under unavoidable circumstance, may deput another officer in his absence to receive and open tenders on his behalf.
- 4.2 Powers of University Engineer -** The U. Engineer does not bind himself to accept or recommend for the acceptance to the Registrar or other higher authority, the lowest or any tender or to give any reasons for his decision.
- 4.3 Conditional Tender -** Conditional tenders are liable to be rejected.
- 4.4 Canvassing –** Canvassing for support in any form for the acceptance of any tender is strictly prohibited. Any tenderer doing so will render himself liable to penalize which may include removal of his name from the register of approved contractors or penal action under section –8 of the M.P. Vinirdishtha Bhrasta Acharan Nivaran Vidheyak 1982.
Execute the agreement, as well as where this contractors were rescinded in format in the duly certified by the concerned department
- 4.5 Unsealed Tender -** The tenders shall be rejected, if not properly sealed.
- 4.6 Authority of University Engineer –** The authority competent to accept a tender reserve the right of accepting the tender for the whole work or for a distinct part of it, or distributing the work between one or more tenderers.
- 4.7 Validity of offer –** Tender shall remain open upto four months from the date of receipt of tender and in the event of the tenderer withdrawing the offer before the aforesaid date, for any reason whatsoever, earnest money deposited with the tender shall be forfeited by the U.E.

5. SPECIFICATIONS :

- 5.1 Brief Specification –** A brief note on construction and specifications of the work is enclosed in Annexure – E.
- 5.2 Material of Construction –** The materials of construction to be used in the work shall be governed by the provision of part-V of the National Building code of India, 1970 and the relevant Indian Standard specification with amendments and revisions issued up to the date of tender notice.
- 5.3 Workmanship-**The work shall be carried out according to the specification referred to herein after and according to sound engineering practice. The decision of the U. Engineer, in respect of workmanship will be final.
- 5.4 Specification for Building Works –** (Including water supply and sanitary fittings.)

5.4.1. The Contractor shall execute the work in conformity with the standards and procedure laid down in the Morth National Building Code of India, 1970, and C.P.W.D. specification for works in force, or special specification whenever enclosed separately, and in accordance with the approved drawing.

5.4.2. Concrete – All concrete shall be mixed in hopper concrete mixers with mearushing Boxes and compacted by mechanical Vibrators, Slump test shall be carried out during concreting and sample test cubes prepared and tested in due course the testing will be carried out by t he Department.

The results of the tests shall conform with the required standard and if the Engineer-in-Charge considers that a structural test in necessary the same shall be carried out as instructed by the Engineer-in Charge at the contractor's expense and should the result of this be unsatisfactory the contactors, will be bound to take down and reconstruct the particular portion of work which has given unsatisfactory test results.

5.4.3 Bricks – The contractor should use the bricks manufactured on the metric measures as far as possible. In case of non availability of metric size bricks in particular time area the British size bricks shall be allowed by but mode of measurements and payment shall be made considering motive size bricks and extra brickwork shall be at the cost of contractor.

5.4.4 All timber used in the wood for all new works must be properly seasoned. In case of important building mechanical seasoning should be done in good seasoning plant.

In case the contractor does not procure good seasoned wood, he may be asked to get it seasoned in plant at his own expense but no certificate is required where an additional rate is paid.

5.4.5 Maintenance of Roofs – Subject to the provision in the agreements, it will be the responsibility of the contractor to see that the building does not leak, during the period of the fittest rainy season in respect of tile and sheet roofing and two consecutive rainy seasons in respect of lime concrete and cement concrete terrace roof, after its completion and he will make good and replace all the defective work on this account.

5.5 Specification of Electrical Works.

5.5.1. The work will be carried out as per the approved drawing and as directed by the U.E.

The word will be governed by “General Specification” for the Electrical Works in Governments buildings in Madhya Pradesh in force from 1972. and CPWD department specification.

5.5.2. All samples of electrical accessories should be got approved from the Engineer-in-charge. Contractor will have to arrange and afford all facilities for their inspection and rectify the defects pointed out by them. A list of accessories is enclosed as Annexure – E.

5.5.3. The period of testing and refund of deposit will be 3 year after completion of work.

- 5.5.4. In case of supply of ceiling fan, table fan, exhaust fan, cabin fan, tube light fixtures will be made by the University as mentioned in the C.S.R. As such lab our rates only as per C.S.R. will be paid for fitting such items in position as per C.S.R.
- 5.5.5. the contractor should submit wiring diagram on tracing cloth showing the point position of switch, length of point, position of D.B. and main switch circuit No. in which points fall at the time of final bill. Otherwise deduction of ½ percent (halt percent) will be made from the bill.

5.6 Specification of works.

(Excluding bridges and culverts)

The road work and collection of materials for road works shall be carried out according to C.P.W. P.W.D. specifications, as adopted for the work or specification enforce, or special specifications wherever enclosed separately, or the relevant specification published by the Indian Road Congress.

- 5.7 Contradictions or amendments – In the event of contradictions between the stipulations of t he current schedule or rates (vide part of this N.I.T.) and aforesaid specification vide para – 5.1 to 5.7 above the stipulations of the current schedule of rates shall gain precedence. In the event of contradictions, if any between different specifications and or codes of practice, referred to above, the decision of the U.E. shall be final subject to appeal in case of dispute before Registrar of University within one month of U.E.’S decision.

6. SUPPLY OF MATERIALS :

- 6.1 Material supplied by the Department – The following materials will be supplied by the department.

	Name of materials	Rate	Place of delivery
(1)	Cement _____ Rs. _____(Including cost of containers).	Per bag.	_____
(2)	_____		_____
(3)	_____		

- 6.1.1 The Contractor shall be liable to return unused cement bags after due allowance of limit of variation prescribed in the C.S.R. to the stores of the University failing which cost of unused cement bags shall be recovered from contractor at double the agreement rates/issue rate which ever is more.

- 6.2 Return to Empty Cement Bags – It shall be compulsory on the apart of the contractor to preserve and return empty cement bags in sound conditions to the extent of at least 75 percent of the bags issued to him, to the _____ engineer in charge of work at the place of issue for which no transportation will be payable. The rebate for such bags will be as per rates fixed by D.G.S.&D. from time to time. In case

the empty bags are not required by the University the contractor will have to sell these to the authorized collecting agents at the price fixed by the D.G.S. &D. from time to time and produce receipts in support.

- 6.3 **Penalty for Non-Return of Bags-** For each bag not so returned to the extent of issues, in sound condition a rate of Rs._____ per bag will be charged. The decision of the Engineer-in-charge whether or not a bag is in sound conditions shall be final.
- 6.4 In case of the departmental supply of Iron/Steel to the contractor the lab our rate will be paid for cutting, banding and placing with binding wire as provided in C.S.R. (with due allowance for the percentage above or below C.S.R. tendered and accepted).
- 6.5 **Delay in Supply** – If the materials are not supplied in time, the contractor will not be allowed any claim for any loss, which may be caused to him, but only extension of time will be given at the discretion of the University Engineer and Registrar if applied for by the contractor before the expiry of the contract.

7. MISCELLANEOUS CONDITIONS :

- 7.1 **Subletting** – The contractor shall not, without the prior approval of the competent authority in writing, sublet or assign to any other party or parties, the whole or any portion of the work under the contract. Where such approval is granted, the contractor shall not be relieved of any obligation or duty or responsibility which he undertakes under the contract.
- Taxes** – All dues regarding taxes, including the sales tax, other duties etc. levied on the contractor's work by Government and local bodies or private individual is will be payable by the contractor. The University Engineer will grant a certificate for the quantities actually used on the work but will not entertain any claim on this account. But University deducted the royalty of material as per M.P.P.W.D. rules.
- 7.2 Minerals extracted for works carried out on behalf of the Government of India from the quarries in possession of and controlled by the State Government is subject to payment of Royalty by the contractor to whom it shall not be refundable. The University Engineer shall not also issue nay certificate in respect of such materials extracted for Government of India work (Applicable to Government of India works only).
- 7.3 **Rules of Lab our Camps** – The contractor will be bound to follow the Madhya Pradesh Model rule relating to lay-out, water supply and sanitation on lab our camps (vide Annexure –A) and the provisions of the National Building Code of India, in regard to constructions and safety.
- 7.4 **Fair Wages** – The contractor shall pay not less than fair wages to labourers engaged by him on the works (rules enclosed vide annexure-B).
- 7.5 **Work in the Vicinity-** The University Engineer reserves the right to take up departmental work or to a work award on contract in the vicinity without prejudice to the terms of contract.
- 7.6 **Best quality of construction materials** – Material's of the best quality will be used as approved by the University Engineer:

- 7.7 **Removal of undesired person-** The contractor shall on receipt of the requisition from the University Engineer at once remove any person employed by him on the work who, if in the opinion of the University Engineer is unsuitable or undesirable
- 7.8 **Amount due from Contractor** – Any amount due to University from the contractor on any account concerning work may be recovered from him as arrear of land revenue.
- 7.9 **Tools and Plants** – The contractor shall arrange at his own cost tools and plant required for the proper execution of the work. No extra cost will be paid for such T&P however.
- 7.10 **Right to increase or decrease work** – The competent reserves the right to increase or work.
- The competent authority reserves the right to increase or decrease any item of the work during the currency of the contract and the contractor will be bound to comply with the order of the competent authority without any claim for compensation.
- 7.11 **Time Schedule** – The work shall be done by the contractor according to the time schedule fixed by the competent authority. Contractor shall furnish the programme of construction for execution of work within the stipulated time schedule together with methodology of construction of each type of work and obtain approval of engineer incharge prior to the execution / commitment of work.
- 7.12 **Time of contract** – Time allowed for carrying out the work as entered in the N.I.T. shall be strictly observed by the contractor and shall be reckoned from the date of work order to commence the work.
- 7.13 **Payment by Cheques** – The payment will be made by cheques on the Scheduled Bank (Central Bank of India) only. No Bank commission charges on realizing such payments will be done by the University.
- 7.14 **Transport of Materials** – The contractor shall made his own arrangement for transport of all materials. The University is not bound to arrange for priority in getting wagon or any other materials though all possible assistance by way of recommendation will be given if it is found necessary in the operation by the Engineer in charge. If it proves to be in effective, the contractor shall have no claim for any compensation on that account.

8. **SPECIAL CONDITIONS :**

To be inserted in the N.I.T. of a particular work if found necessary in the interest of the work.

8.1 Agreement :-

- 8.1.1 Execution of agreement :- The tenderer whose tender has been accepted here in after referred to as the contractor, shall produce an appropriate solvency certificate is so required by the U.Engineer and will execute the agreement in the prescribed form within a fortnight of the date of communication of the acceptance of his tender by competent

authority. Failure to be so will result in the earnest money being forfeited to University and tender being cancelled.

- 8.1.2. (a) The contractor shall employ the following Technical Staff during the Execution of work :-
- (i) One Graduate Engineer when the work to be executed is more than Rs.5 Lakhs.
 - (ii) One diploma Holder, Sub-Engineer when the cost of work to be executed is from Rs.2 lakhs or more but not more than Rs. 5 lakhs.
- (b) The Technical Staff should be available at site whenever required by the Engineer-in charge to take instructions.
- (c) In case the contractor fails to employ the technical staff as aforesaid, the U.E. shall have the right to take suitable remedial measures.
- (d) The contractor should give the names and other detail of the Graduate Engineer/Diploma Holder, Sub-Engineer whom he intends to employ or who is under employment on the work at the time he commences the work.
- (e) The contractor should give a certificate to the effect that the Engineer/Diploma holder, Sub-Engineer is exclusively in his employment.

Provided that :-

- (i) An Engineer or Sub Engineer may look after more than one work in the same locality but the total value of such work under him should not exceed Rs. 25 lakhs in the case of in Engineer and Rs. 5 lakhs in the cash of a Sub-Engineer.
- (ii) It is not necessary for the contractor's partners in case of firm/company who is himself an Engineer, Sub-Engineer to employ another Engineer, Sub-Engineer for the Supervision of work.
- (iii) The Retired Assistant Engineer who is holding a Diploma may be treated at par with a Graduate Engineer are for the operation of the above clause.

In case the contractor fails to employ the Technical staff as aforesaid he shall be liable to pay the University sum of Rs.10,000 for each month of defaults in the case of graduate and Rs. 5000/- for each month of default in the case of Diploma Holder Sub-Engineer.

8.2 **Conditions Applicable for Contract** – All the conditions of the tender notice will be binding on the contractors in addition to the conditions of the contract in the prescribed form:-

Following documents annexed with this N.I.T. shall form a part of the contract.

Annexure – “A” Model Rules relating to lab our, water supply etc.

Annexure – “B” Contractor’s lab our regulations.

Annexure – “C” Sources of materials (not applicable for building work).

Annexure – “D” Form of Income Tax Clearance Certificate. (applicable to works costing more than Rs. 2.00 lakhs)

Annexure – “E” Brief specifications.
Annexure – “F” Schedule of items.
Annexure – “G” Form of Bank Guarantee,

8.3 Test of Material and Methodology

ANNEXURE “A”

MODEL RULES RELATING TO LABOUR, WATER SUPPLY AND SANITATION IN LABOUR CAMPS

Note – These model rules are intended primarily for labour camps which are not of a permanent nature. They lay down the minimum desirable standard which should be adhered to. Standard in permanent or semi permanent labour camps should not obviously be lower than those for temporary camps.

1. **Location-** the camp should be located in elevated and well drawing ground in the locality.
2. **Labour** huts to be constructed for one family of 5 person each. The layout to be shown in the prescribed sketch.

3. **Hutting**-The huts to be built of local materials . Each hut should provided at least 20 sq. meters of living space.
4. **Sanitary facilities** – Latrines and urinals shall be provided at least 15 meters away from nearest quarters separately for man and woman and specially to market on the following scale.
5. **Latrine** – Pit provided at the rate of 10 users or two families per seat, urinals as required as the privy can also be used for this purpose.
6. **Drinking water** – Adequate arrangements shall be made for the supply of drinking water. If practicable filtered and chlorinated supplies be arranged, when supplies is from intermittent sources overhead storage tank shall be provided with a capacity of five litres a person per day. Where the supply is to be made from a well it shall confirm to the sanitary standard laid down in the report of the Rural Sanitation committee. The well should be at least 30 metres away from any latrine or other source of pollution. If possible hand pump should be installed for drawing the water from well. The well should be effectively disinfected once every month and the quality of the water should be got tested at the Public Health Institution between each work of disinfecting.
7. **Bathing and washing** – Separate bathing and washing place shall be provided for men and women for every 25 persons in the camp. There shall be one gap and space of 2 sq. metres for washing and bathing. Proper drainage for the waste water should be provided.
8. **Waste disposal** – Dustbin shall be provided at suitable places in camp and the residents shall be directed to throw all rubbish into those dustbins. The Dustbins shall be provided with cover. The contents shall be removed every day and disposed off trenching.
9. **Medical facilities** – (A) Every camp where 1,000 or more persons reside shall be provided with whole time doctor and dispensary. If there are women in the camp a whole time nurse shall be employed.
(B) Every camp where less than 1,0000 but more than 250 person reside shall be provided with dispensary and a part time nurse/midwife.
(C) If there are less than 250 persons in any camp a first aid kit shall be maintained in charge of the worker, if any, free of cost.

All the medical facilities mentioned above shall be for all residents in the camp including a dependent of the worker, if any, free of cost.

Sanitary Staff – For each lab our camp there should be qualified sanitary inspector and sweepers should be provided in the following scales:-

- (1) For camps with strength over 200 but not exceeding 500 persons one sweeper for every 75 persons above the first 200 for which 3 sweepers shall be provided.
- (2) For camps with a strength over 500 persons one sweeper for every 100 person above first 500 for which 6 sweepers should be provided.
- (3) All payment as per rule to pay EPF & ESI of labour shall be paid by contractor.

ANNEXURE "B"

CONTACTOR'S LABOUR REGULATIONS

The contractor shall pay not less than fair wage to labourers engaged by him in the work.

Explanation – (a) "Fair wages" means wages whether for time or piece work as notified on the date of inviting tenders and where such wages have not been so notified the wages prescribed by the S.E.P.W. department for the circle in which the work is done.

(b) The contractor shall notwithstanding the provisions of any contract to the contrary, cause to be paid a fair wage to laborers indirectly engaged on the work including in labour engaged by his subcontractors in connection with the said work as if laborers had been immediately employed by him.

(c) In respect of all labour directly or indirectly employed on the works or the performance of his contract, the contractor shall comply with or cause to be complied with the Labour Act in force.

(d) The University Engineer shall have the right to deduct from the money due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, non payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of regulations.

(e) The contractor shall be primarily liable for all payments to be made under and for the observance of the regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractors.

(f) The regulations aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

(g) The contractor shall obtain a valid license under the contract (Regulation and Abolition) Act, in force and rules made there under by the competent authority from time to time before commencement of work, and continue to have a valid license until the completion of the work.

Any failure to fulfill this requirement shall attract the penal provisions of this contract arising out of the resulted non-execution of the work assigned to the contractor.

ANNEXURE “C”

STATEMENT SHOWING THE LEAD OF MATERIALS

S.NO.	DESCRIPTION	LEAD
1.	_____	
2.	_____	
3.	_____	
4.	_____	
5.	_____	

Note – This statement is only for guidance of the contractor. The tenderer should satisfy himself regarding the availability of the required quality and quantity of materials.

ANNEXURE “D”

FORM OF CERTIFICATE IN INCOME TAX TO BE SUBMITTED BY CONTRACTOR

TEDNERING FOR WORKS CONSTING Rs. 2.00 LAKHS OR MORE

- (i) Name and style (of the company, firm H.U.F. or individual) in which the applicant assessed to income tax and address for purpose of assessment.
- (ii) The Income Tax Circle/Ward/ District in which the applicant is assessed of income-tax.
- (iii) Following particulars concerning the last income tax assessment made:-
 - (a) Reference No. or (G.I.R.NO.) of the assessment.
 - (b) Assessment year and accounting year.
 - © Amount of total income assessed.
 - (d) Amount of tax assessed I.T., S.T.,E.P.T., B.P.T.
 - (e) Amount of tax paid I.T., S.T., E.P.T., B.P.T.
 - (f) Balance being tax not yet paid and reasons for such arrears .
 - (g) Whether any attachment or certificate proceedings pending in respect of the arrears.

- (h) Whether the company of firm of H.U.F. on which the assessment was made has been or is being liquidated, wound up, dissolved, partitioned or being declared insolvent, as the case may be.
- (i) the position about later assessments namely, whether returns submitted under section 22 (1) or (2) of the income tax act and whether tax paid under section 18-A of the act and the amount of tax so paid or in arrears.
- (iv) In case there has been no income tax assessment at all in the past whether returns submitted under section 21 (1) or (2) and 18-A (3) and if so the amount of income tax returned or tax paid and the income tax circle/ward/District concerned.
- (v) The name and address of branch (es) verified the particulars set out above and found correct subject to the following remarks.

Dated _____

Signature of I.T.O.
Circle/Ward/District

ANNEXURE ‘E’

Specification for the work of construction of Work

University Engineer

ANNEXURE “F”

SCHEDULE OF ITEMS TO BE EXECUTED

S.NO.	Particulars of items	Unit
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ENCLOSED

University Engineer

ANNEXURE “G”

GUARANTEE BOND

(To be used by approved scheduled banks)

1. In consideration of the Jiwaji University Gwalior (hereinfter called the University) having agreed to exempt _____ (hereinafter called the said contractors) from the demand under the terms and conditions of an agreement dated _____ made between _____ and _____ for _____ herein after called the said Agreement) of earnest money deposit for the due fulfillment by the said contractor(s) of the terms and conditions contained in the said agreement on production of a Bank Guarantee for Rs. _____ (Rs. _____ Only). We _____ Bank Limited (hereinafter referred to as “The Bank”) do hereby undertake to pay to University an amount not exceeding Rs. _____ against any loss or damage caused to or suffered or would be caused to or suffered by the University by the reason of any breach by the said contractor(s) of any terms or condition contained in the said agreement.

2. We _____ Bank Limited, do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the University stating that the amount calimed is due by way of loss or damage caused to or suffered by the University by reason of any breach by said Contractor (s) of any of the terms or conditions contained in the said agreement or by reason of the contractor(s) failure to perform the said agreement. Any such demand made on the Bank shall be conclusive as regard the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ .

ANNEXURE “H”

Special Condition

1. The Tenderer of/supplier should have a place of business in the state of M.P. from where the goods would be supplied to various destinations in the state and also should hold a registration Certificate under the M.P. Vanijayack Kar Adhiniyam.
2. The Tenderer/supplier shall also submit the Clearance Certificate as provided under section 36 of the MP Vanijayak Kar Adhiniyam.
3. Work Programme and Methodology of Construction - Contractor shall furnish his programme of construction for execution of the work within due stipulated time schedule together with methodology of construction of each type of work and obtain approval of the Engineer - in - Charge prior to execution/commencement of work
4. Revised programme of work in case of sleep page - In case of sleep page from the approved work at any stage, the contractor shall furnish revised programme to make up the sleep page within the stipulated time schedule and obtain approval of Engineer-in-charge to the revised programme.

8.4 Test of Material and Methodology

1. The materials of the construction shall be got tested by the contractor as per specified test relevant ISI Codes under mandatory tests (as per list enclosed Annexure-JA) and frequency of testing. The frequency of the test shall be governed as specified therein. These tests shall have to be invariable carried out by contractor at his cost in under guidance of Engineer-in-charge.
2. The machinery normally required for different types of work is specified in Annexure-JB. Use of specified machinery and plant shall be compulsory for the work. The machinery in good working condition shall have to be possessed or arranged by the contractor. No Extra payment shall be admissible therein is payable for use of machinery.
3. Steel centering and shuttering materials for buildings work shall have to be used on the work. The quality of centering and shuttering shall be approved by the Engineer - in Charge. The contractor shall have the ensure arrangement of minimum number of says required for staging and shuttering as required for works and as directed by Engineer - in - charge.
4. Watering and Curing
Pumps in good working condition with leads for curing purposes of the work shall to be as per directions of the Engineer-in-charge of work to ensure continuous curing required for the works.
 - (i) Rates include the element of testing of samples of various materials brought by the contractor for use on the work as per list of **Mandatory Test** attached herewith. Frequency of such tests to be carried out shall not be less than the prescribed frequency. Contractor shall also have a establish a field laboratory at site to be approved by the Engineer-in-Charge. The list of the Equipments and for field-testing laboratory is attached in Annexure - JC and JD respectively. The tests shall have to be conducted by the contractor's material under the supervision of Engineer-in-charge or his authorized representative. A record of such tests shall be submitted to Divisional Office along with running account bills. The original register shall also be submitted along with the final bill. Failure to conduct any of the test of not upto the prescribed frequencies would invite following Consequences.
The Engineer-in-charge may reject work, but in his opinion the work can be accepted despite the aforesaid shortcomings, then he may do so subject to a recovery of Rs. 250/- for each default and simultaneously inform the Registrar, Jiwaji University. However, it would be optional for the contractor to se up his own laboratory if the amount of contract (inclusive of tender premium) does not exceed Rs. 5.00 Lakhs.
 - (ii) As regards steel reinforcement:
 - (a) Mild steel and medium tensile steel bars shall conform to IS"433 (Part-I)
 - (b) Hot rolled deformed bars hall conform to IS:1139
 - (c) Cold Twisted bars shall conform to IS:1786
 - (d) Hard drawn steel wire fabric shall conform to IS:1566, and
 - (e) Rolled steel made from structural steel shall conform to IS:226

All reinforcement shall be free from loose mill scales, loose rust and coats of paints, oil mud or other coatings which may destroy or reduce bond.

Only such steel as is obtained from main producers of steel e.g. SAIL, IISCO, TISCO or such steel rolling mills as are having license from the BIS to manufacture steel for reinforcement shall be allowed to be used in the work.

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The contractor shall have to produce Test Certificate in the proforma prescribed/approved by BIS from the manufacturer for every batch of steel brought to site of work by the contractor, the Engineer-in-Charge shall arrange to get samples tested for nominal mass, tensile strength, bend

test and rebound test from any laboratory of his choice at the cost of contractor. The selection of test specimens and frequency shall be as per relevant IS: Specification of steel to be used.

- (iii) Only ISI marked cement to be arranged by the contractor for all work himself of relevant IS standard specifications as mentioned in M.P.P.W.D. SOR 01.11.1999 shall be allowed to be used in the work subject to the following test. The arrangement for necessary equipment and testing shall have to be made by the contractor himself at a site to be decided by the Engineer-in-Charge. All expenses shall be borne the contractor. Any lot of cement bought to site by the contractor would be permitted to be used in the work under the supervision of the Engineer-in-charge or his authorized representative as hereinafter. The record of the tests shall be maintained in the register referred in subsequent para.

Type of Test required on work	Frequency	Minimum Qty. required on work.
(a) Test for initial and final/setting time as per IS: 3536-1966	1 test for 10 tonne or part there of	10 tonne
(b) Test for determination of compressive strength of cement as per IS : 3536-1966	1 test for 50 tonne or part thereof	50 tonne

A duplicate register as per format hereunder shall be maintained at sit of work. Extract Certified copies of the entries for each month shall be submitted to the Engineer-in-Charge by the contractor. The original register shall also be submitted to the Engineer-in-charge on completion of the work by the contractor.

S.N	Date of receipt of cement	No. of bags	Name and address of firm, from whom purchased	Signature of contractor or his authorized representative	Signature of authorized representative of Engineer - in - charge	Result of test for initial and final setting time	Results of test for compressive strength of cement	Remark
1	2	3	4	5	6	7	8	9

Nominal mix would be adopted for cement concrete m-7.5, M-10, M-15 and M-20, Design mix shall have to be adopted fro concrete of higher strengths.

- (iv) if any item of work is found to be substandard but the Engineer-in-Charge is of the opinion that the same is structurally adequate and can be accepted at a reduced rate, then in such cases, the Engineer-in-charge shall have to submit proposals for appropriate reduction of rates supported by an analysis, in justification thereof, through a DO letter to the Registrar, Jiwaji University to obtain his approval expeditiously ordinarily within 15 days. The approved analysis alongwith orders of the Registrar, Jiwaji University shall have to be appended to the bills of the contractor.
- (v) The contractor shall have to be provided a ruled duplicate register at site named "Site Order Book" It shall be in the custody of departmental supervisory staff. The Engineer-in-charge or his authorized representative may record their instructions in this book. which shall be noted by the contractor or his authorized representative for compliance.

ANNEXURE - JA

LIST OF MANDATORY TEST

Material	Test	Relevant is cods of testing	Field / Laboratory Test	Minimum quantity of material work out test	Frequency of testing
Sand	a) Silt content	IS:2386 Part-I	Field	20 cum	Every 20 cum or part thereof more or more frequently as decided by the engineer-in- charge
Stone Aggregate	a) Percentage of soft or deleterious material	IS: 2386 Part- II	Generally visual Inspection laboratory test where required by the engineer-in- charge		a) As required by Engineer-in- - charge
	b) Particle size distribution	IS: 2386 Part - I		45 cum	b) For every 45 cum or part thereof as decided by the Engineer-in- Charge
	c) 10% fine value	IS:2386 Part IV	Laboratory	45 cum	b) Intial test and subsequent test as and when required by Engineer- in-charge.
	d) Aggregate impact value of Los Angles abrasion value	-do-	-do-	-do-	As above

Cement Concrete reinforced cement concrete (not leaner than M- 15	Slump test	IS:1199	Field	15 Cum	15 cum or part thereof or more frequently as required by Engineer-in- charge.
Reinforced Cement Concrete	Cube Strengths	IS:456	Field	As per Annexure - C enclosed	
Steel arranged by the contractor	a) Tensile Strength b) Bend test	IS:1608	Laboratory	As per Annexure C enclosed	Every 20 tonne or part Thereof confirming to IS:1786-1985
Cement arranged by contractor	a) Test for initial and final setting times. b) Test for Determination of compressive strength of Cement	IS:4031	Field	50 tonne	IS: 3031-1988
Brick	Testing of Brick a) Dimension b) Water absorption & efflorescence c) Compressive strength	IS:1077 IS:3495 IS:3495	Laboratory / Field Laboratory Laboratory	Bk. design 100 50000 100 50000 751 501100000 351	
Brick tiles	a) Compressive strength & dimensions b) Water Absorption	IS:3495	Laboratory	50,000	For every 50, or part Thereof. One test for source of manufacture.
Marble	a) Moisture Absorption b) Mohs scale hardness test	IS:1130	Laboratory	Cost of Marble work Rs. 10,000/-	Rs. 10,000/- or part thereof if required by Engineer-in- charge.
Timber	a) Moisture Contents	IS:11215	(By moisture meter field / laboratory test in case of dispute as required by	1 cum	Every one cum or part thereof

			Engineer - in charge		
Flush door	a) Emersion Test b) Knife test c) Adhession	IS:2191 and 22021	Laboratory		For testing of shutters discretion of engineer-in charge may be adopted however a certificate from the manufacture may be taken for the quality of teh product if required necessary testing may be done as per IS: Code.
Aluminum door or windows fittings	Thickness of Anodic Coating	IS: 1948	Laboratory	If the cost of fitting exceed Rs. 3.000/-	Rs. 5,000/- or part thereof required by the engineer- in-charge
Mortise Lock	Testing of Spring		Laboratory	50 Nos.	100 or part thereof.
Terrazo Tiles	a) Transverse Strength b) Water absorption c) Abrasion Test	IS:1237	Laboratory	2000 tiles	2000 tiles of part thereof
White Glazed	a) Water Absorption b) Crazing Test c) Impact Strength test	IS: 777	Laboratory	3000 Nos.	3000 Nos. Or part thereof

ANNEXURE - JB

Plant and Machinery for work

1. Concrete mixer of one cement bag mix capacity one in working condition and other standby 1 Nos. with measuring box for concreting.
2. Pin vibrator (preferably electrically operated 2 Nos.)
3. Platform vibrator 1 No.
4. Small vibratory earth master for floor filling compaction etc. 1 No. if necessary.
5. Pumps with leads etc. for watering and curing 2 Nos.
6. Other necessary plants and machinery with reference to nature of works etc.

Road Works

1. Water tanker with spraying arrangement.
2. Camber Plants.
3. Traffic control signals boards etc.
4. Stacking boxes.
5. Screens of required grades for metal grading
6. Thermo meter, brooms wire and jute pleasures, templates.
7. Ropes or angle iron for edging as required
8. Mixture mashing.
9. Tar boiler with sprayer if asphaltting work or in surface dressing, premix carpet with seal coat etc. is to be done.
10. Field test equipment necessary for the work.
11. Other necessary required plants and machinery with reference to nature of work.

In Case of macadam work wet mixed with hot laid works add the following:

1. Hot mix plant and pavement finisher with equipment as per clause 404.3.4.4, and 404.3.5 of Most specification, needed.
2. Road roller of required capacity.
3. Tar boulders with pneumatic sprayers etc.
4. Dumpers or carries etc.
5. Field test equipments for testing of grading of Asphaltic Mix, bituminous content. Thermo meters for recording and checking temperature etc.
6. Other equipment is needed for this work as per specifications.

ANNEXURE - JC

List of equipment for field Testing Laboratory

A. For Building Work

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

2. Ovens Electrically operated. thermostatically controlled upto 110 Deg. C. Sensitivity loc.
3. Sieves : as per IS:460:
 - (i) IS Sieves - 450mm internal dia of sizes 100mm, 80mm, 63mm, 50mm, 25mm, 20mm, 2.5mm, 10mm, 6.3mm, 4.75mm, complete with lid and pan.
 - (ii) IS Sieve - 200mm internal dia (brass frame) on consisting of 2.36mm, 1.18mm, 500 microns, 425 microns, 300 microns, 212 micron, 150 microns, 90 microns, 75 micron with lid and pan
4. Sieve shaker capable of 200mm and 300mm dia sieve, manually operated with timing switch assembly.
5. Equipment for slump test - Slump Cone, Steel Plate, tamping rod, steel scale, scoop.
6. Dial gauges 25mm travel - 0.01mm/division least count - 2 Nos.
7. 100 tonne compression testing machine, electrical - cum - manually operated.
8. Graduated measuring cylinders 200 ml capacity - 3 Nos.
9. Enamel trays (for efflorescence test for bricks) -
 - (i) 300mmX250mmX40mm - 2 Nos.
 - (ii) Circular Plates of 250mm dia - 4 Nos.

B For Road Works

1. Balance -
 - (i) 7 kg. to 10 Kg. capacity. semi self indicating type - Accuracy 10 gm.
 - (ii) 500 gm. Capacity, semi self indicating type Accuracy - 1 gm.
 - (iii) Chemical balance, 100 gm capacity - Accuracy 0.1 gm.
 - (iv) Pan Balance - 5 Kg. capacity, with 10 gm. Accuracy.
 - (v) Platform scale 300 Kg. capacity.
2. Ovens - electrically operated, thermostatically controlled -
 - (i) Upto 200 Deg. C for determination of loss on heating of bitumen.
3. Sieves as per IS:460-1962
 - (i) IS Sieves - 450mm of internal dia of sizes 100mm, 80mm, 40mm, 25mm, 20mm, 12.5mm, 10mm, 6.3mm, 1.75mm, complete with lid and pan.
 - (ii) IS: Sieves - 200mm internal dia (brass frame) consisting of 2.36mm, 1.18mm, 600 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns and 75 microns with lid and pan.
4. Sieves shaker capable for shaking 200mm and 300mm dia sieves, electrically operated with timer.
5. Dial gauge -
 - (i) 25mm travel - 0.01mm/division.
6. Load frame - 5 tonnes capacity electrically operated with speed control.
7. Aggregate impact test, apparatus as per IS:2386 - Part IV - 1963
8. Compaction apparatus (Proctor) as per IS:2780 - Part -VII-1974
9. Modified ASHO compaction apparatus as per IS:2720 - Part - III - 1974
10. Sand pouring cylinder with control funnel and tube complete as per IS:2720 - Part-XXVIII - 1974.
11. Sampling tins with rods 100mm dia x 50mm ht. 1/2 Kg.. capacity and miscellaneous items like moisture tins. etc.
12. Constant temperature bath for accommodating bitumen test, specimen electrically operated and thermostatically controlled.
13. Penetrometer with automatic time controller and withadjustable weight accessories and needless as per IS:1958

14. Oxhlet extraction apparatus complete with extracextraction thimbles etc.
15. Laboratory meter about 0.20 cum. capacity electrically operated with heating jacket.
16. Hubbard field stability test apparatus complete.
17. Marshall compaction apparatus as per AMT 1559-62T and complete with electrically operated leading unit compaction pedestal bearing head assembly dial micrometer and bracket for flow measurement, load transformer bar, specimen mould (4 inch dia) with baseplate, columns, mould (4 inch dia) with base plate, collars, specien extracted Compaction hammer 4.53 Kg. (10 lb) x457mm (18 inch) fall.
18. Distant reading thermometers.
19. Graduated cylinder 100 ml. capacity
20. Enamel Tray.

ANNEXURE - JD

List of Instruments for Field Testing Laboratory

Field Testing Instruments.

1. **Steel tapes - 3m.**
2. **Vernier calipers**
3. **Micrometer screw 25mm gauge.**
4. **A good quality plumb bob.**
5. **Spirit level minimum 30cm long with 3 bubbles for horizontal vertical.**
6. **Wire guage (circular type) disc.**
7. **Foot**
8. **Long nylon thread.**
9. **Rebound hammer for testing concrete.**
10. **Dynamic penetrometer.**
11. **Magnifying glass.**
12. **Screw driver 30cms long**
13. **Ball Pin hammer 100 gms.**
14. **Plastic bags for taking samples.**
15. **Moisture meter for timber.**
16. **Earth Resistance tests for I**
17. **Megger I Electrical Division**

ANNEXURE - JE

The minimum frequency of sampling of concrete or each grade shall be in accordance with the following.

Quantity of concrete in the work Cum	Number of Samples
1-5	1
6-15	2
16-30	3
31-50	4
51 and above	Plus one additional sample for each additional sample for each additional 50 cum on part thereof.

Note: -

At least one sample shall be taken from each shift. Where concrete is produced at Continuous production unit, such as ready mixed concrete plant, supplier and purchasers may agree upon frequency of sampling mutually.

APPENDIX 2.13
(See paragraph 2.091)
FORM A
JIWAJI UNIVERSITY GWALIOR
PERCENTAGE RATE TENDER AND CONTRACT FOR WORKS
General Rules and Direction for the Guidance of Contractor

1. Tenders must be invited for all works proposed to be given on contract unless the amount of work proposed to be given on contract is Rs, 150000 or less. The N.I.T. shall be posted in public place signed by the University Engineer.

N.I.T. this form will state the work to be carried out as well the date for submitting and opening tenders and the time allowed for carrying out the work , also the amount of earnest money to be deposited with the tender and the amount of the 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 quarry fees, royalties, and ground rents will be granted. Copies of the specifications, designs and drawings and schedule of items and rates of the various description of work, and any other documents required in connection with the work signed for the purpose of identification by the University Engineer.

Further that the schedule of items along with the rates payable shall be attached to the tender documents and in the event of variation in rates given in such list with the Current schedule of Rates, the rates given in the C.S.R. approved by the competent authority shall prevail.

2. In the event of the tender being submitted by a firm, it must be signed separately by each member thereof. In the event of the absence of any partner, it must be signed on its behalf by a person holding a power of attorney authorizing him to do so. Such power of attorney should be produced with the tender and it must disclose that the firm is duly registered under the Indian Partnership Act.

3. Any person who submits a tender, shall fill up above or below the C.S.R. specified in rule I, he is willing to undertake the work. Only one rate of percentage above or below the C.S.R. on all the scheduled items shall be named. Tenders which propose any alteration in the work specified in the said N.I.T. or in the time allowed for carrying out the work , or which contain any other conditions of any sort, will be liable to rejection. No single tender shall include more than one work, but contractors, who wish to tender for two or more works shall submit a separate tender for each. Tenders shall have the name and number of the work to which they refer. Written outside the envelope.

4. The U.E. or his duly authorized assistant, will open tenders in the presence of any intending contractors who may be present at the time, and will enter the amount of the several tenders in a comparative statement in a suitable form. Receipts for earnest money will be given to all tenderers except those whose tenders are rejected, and whose earnest money is refunded on the day the tenders are opened.

5. The Officers competent to dispose of the tenders shall have right of rejecting all or any of the tenders.

6. The receipt of a clerk for any money paid by the contractor will not be considered as any acknowledgement of payment to the Jiwaji University and the contractor shall be responsible for seeing that he procures a receipt signed by U.E. or any other person duly authorized by him.

7. The memorandum of work tendered for, and the schedule of materials to be supplied by the University Engineer and their issue rates be filled in and completed in the office of the University before the tender form is issued. If a form is issued to an intending tenderer without having been so filled in and completed he shall request the office to have this done before he completes and deliver of tender.

Tender for works

I/We hereby tender for the execution, for the Jiwaji University Gwalior of the work specified in the under written memorandum within the time specified in such memorandum at (in figures) _____ (in words) _____ per cent below/above the rates entered in the schedule mentioned in rule 1 and in accordance in all respects with the specification designs, drawings and instructions in writing referred to in rule I thereof and in clause 12 of the annexed conditions and with such materials as are provided for, by, and in all other respects in accordance with such conditions as for as applicable.

Memorandum

- (a) Name of work : Water proofing treatment of different Building of Jiwaji University, Gwalior.
- (b) Cost of work put to tender **Rs. 50,00,000/-**
- (c) Earnest money **Rs. 1,50,000/-**
- (d) Security deposit _____ *percent 5.00 + 3.00 = 8.00*
(including earnest money)
- (e) Percentage, if any to be deducted from bills *5.00 percent*
- (f) Time allowed for the work from the dated written order to commence *9(nine)* months including rainy season.

9. Should this tender be accepted, I/We hereby agree to abide by and fulfill and all terms and provisions of the said condition of the contract annexed hereto as for as applicable, or in default, thereof to forfeit and pay to the Jiwaji University or his successors in office the sums of money mentioned in the said condition. A separate sealed cover duly superscripted containing the sum of **Rs.1,50,000 /-** as earnest money the full value of which is to be absolutely forfeited to the University or his successor in office without prejudice to any other right or remedies of the said University or his successors in office, should I/We fail to commence the work specified in the above memorandum or should I/We not deposit the full amount of security deposit specified in the above memorandum in accordance with clause I of the said condition of the contract otherwise the said sum of **Rs1,50,000 /-** shall be retained by University on account of such security deposit as aforesaid or be full value of which shall be retained by University on account of the security deposit specified in clause I of the said conditions of the contract.

Signature of witness to
Contractor's signature

Signature of the
Contractor before
Submission of Tender

(Name and address of Contractor _____)
Dated the _____ day of _____ Dated the _____ day of _____
_____ 20_____

Name of witness _____

Address of witness _____

Occupation of the witness _____

The above tender is hereby accepted by me on behalf of the Jiwaji University Gwalior
Dated the _____ day of _____
20_____.

Signature of the Officer by Whom accepted.

Conditions of Contract

Definition :

1. The “contract” means the documents, forming the Notice inviting Tenders and tender documents submitted by the tenderer and the acceptance thereof including the formal agreement executed between the Jiwaji University and the contractor.
2. In the contract the following expressions shall unless otherwise required by the context have the meaning, hereby respectively assigned to them:-
 - (a) The expressing “work” or work shall, unless thereby mean something either in the subject on context repugnant to such construction, be construed and taken to mean the works or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered substituted or additional.
 - (b) The “Site” shall mean the land/or other places on, into or through work is to be executed under the contract or any adjacent land, path or street through work is to be executed under the contract or any adjacent land, path or street through which may be allotted or used for the purpose of carrying out the contract.
 - (e) “Government” shall mean the Jiwaji University Gwalior.
 - (f) The term Vice Chancellor means the Vice Chancellor of Jiwaji University Gwalior.

Note:- “words” imparting the singular number include plural number and vice-versa.

SECURITY DEPOSIT

Clause 1. – The person whose tender may be accepted (hereinafter called the contractors, which expression shall unless excluded by or repugnant to the context, include his heirs, executors, administrators, representatives and assigns) shall permit University at the time of making any payments is to him for the value of work done under the contract to deduct the security deposit as under:-

The Security Deposit to be taken for the due performance of the contract under the term & conditions printed on the tender form will be the earnest money plus a deduction of 5 percent from the payment made in the running bills, till the two together amount to 5 percent of the cost of work output to the tender or 5 percent of the cost of the works executed when the same exceeds the cost work put to tender .

Compensation for Delay

Clause 2 – the time allowed for the carrying out the work as entered in the tender form, shall be strictly observed by the contractor and shall be deemed to be the essence of the contract and shall be reckoned from the fifteenth day after the date on which the order to commence the work is issued to the contractor, for a work where completion is up to 6 months.

For works, for which the completion period is beyond six months:- the period will be reckoned from the thirtieth day after the date on which the order to commence the work is issued to the contractor. The work shall throughout the stipulated period of contract be proceeded with all due diligence, keeping in view that time is the \essence of the contract. The contractor shall be bound in all cases, in which the time allowed for any work exceeds one month, to complete 1/8th of the whole work before 1/4th of the whole time allowed under the contract has elapsed, 3/8th of the work before 1/2 of such time has elapsed and 3/4th of the work before 3/4th of such time has elapsed. In the event of the contractor failing to comply with the above conditions, the University Engineer shall levy on the contractor, as compensation and amount equal to.

- (1) 1/2 percent of the value of work per week in respect of work costing up to Rs. 20,00,000
- (2) 3/8 percent of the value of work per week in respect of work costing above Rs.2,00,000 and up to Rs. 5,00,000.
- (3) 1/4 percent of the value of work per week in respect of work costing above Rs. 5,00, 000 and up to Rs.10,00,000.
- (4) 1/8 percent of the value of work per week in respect of work costing above Rs. 10,00, 000 and up to Rs.25,00,000.

- (5) 1/16 percent of the value of work per week in respect of work costing above Rs. 25,00,000 and above.

The total amount of compensation under the provision of the clause shall be limited to 6 percent of the value of work.

The decision of the Registrar shall be final.

The delay in University assistance ingrained in the contract will be taken duly into account while recovering and compensation for the delay in the scales prescribed above. Where the Engineer-in-charge decides that the contractor is liable to pay compensation for not giving proportionate progress under this clause and the compensation is recommended during the intermediate period, such compensation shall be kept in deposit and shall be refunded if the contractor subsequently makes up the progress for the lost time within the period of contract including extension granted, if any.

Action when the Work is Left Incomplete, Abandoned or Delayed beyond the Permitted Limit allowed by the University Engineer.

Clause 3 – In any case in which under any clause or clauses of this contract the contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit (whether paid in one sum or deducted by installments) or committed a breach of any of the rules contained in clauses –24 or in the case of abandonment of the work, except due to permanent disability or death of the contractor, or any other cause, the University Engineer on behalf of the University Engineer shall give a notice before 15 days for work costing up to Rs. 10.00 lacs and before 30 days for works costing above Rs. 10.00 lacs, and in the even of the contractor failing to comply with the directions contained in the said notice, shall have power to adopt any of the following courses, as he may deem best in the interests of the University.

(a) To rescind the contract (of which rescission notice in writing to the contractor under the hand of the U.E. shall be conclusive evidence) and in which case the security deposit of the contractor shall stand forfeited and be absolutely at the disposal of University.

(b) To employ lab our paid by the University and to supply materials to carry out the work or any part of the work debiting the contractor with the cost of the lab our and the price of the materials (of the amount of which cost and price certificate of the U.E. shall be final and conclusive against the contractor) and crediting him with the value of the work done in all respects in the same manner and the same rates as if it had been carried out by the contractor under the terms of his contract or the cost of the lab our and the price of the materials as certified

by the U.E. whichever is less. The certificate of the U.E. as to the value of the work done shall be final and conclusive against the contractor.

© To measure up the work of the contractor and to take such part thereof as shall be unexecuted out of his hands, and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor, if the whole work had been executed by him (of the amount of which excess certificate in writing of the U.E. shall be final and conclusive) shall be borne and paid by the original contractor may be deducted from any money due to him by University under the contract or otherwise or from his security deposit or the proceeds of sale thereof or a sufficient part thereof.

In the event of any of the above courses being adopted by the U.E. the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any agreements or made any advances on account of , or with a view to the execution of the work of the performance of the contract. And in case the contract shall be rescinded under the provision aforesaid the contractor shall not be entitled to recover to be paid any sum for any work there to for actually performed under the contract unless and until the U.E. will have certified in writing the performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value so certified.

Whenever action is taken under clause 3 (a) the contractor's bill shall be finalized up within three months from the date of rescission both in the case of building works and road and bridge works.

Power to Take Possession of or Require Removal of Materials, Tools and Plants or Sale of Contractor's Plants etc.

Clause 4.- In any case in which any of the powers, conferred upon the U.E. by clause-3 hereof, shall have become exercisable and the same shall not be exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such power shall notwithstanding be exercisable in the event of any future case of default by, the contractor for which by any clause or clauses hereof he is declared liable to pay compensation amounting to the whole of his security deposit, and the liability of the contractor for the past and future compensation shall remain unaffected, In the event of the U.E. putting in force either of the power (a) (b) and (c) vested in him under the proceeding clause he may, if he so desire's take possession of all or any tools, plant, materials, and stores, in or upon the works, or 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 case of these not being applicable, at current market rates, to be certified by U.E. whose certificate thereof shall be final, otherwise the U.E. may be notice in writing to the

contractor or his clerk of the works, foreman or other authorized agent require him to remove such tools, plant, 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 U.E. may remove them at the contractor's expenses or sell them by auction or private sale on account of the contractor and at his risk in all respect and the certificate of the University Engineer as to the expense of any such removal, and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

Extension of Time

Clause 5.- If the contractor shall desire an extension of time for completion of the work or the grounds of his having been unavoidably hindered in its execution or any other ground he shall apply in writing to the U.E. within 30 days of the date of hindrance on account of which he desires such extension as aforesaid and the U.E. with whom he has signed the agreement shall if in his opinion, (which shall be final) reasonable grounds are shown therefore, may authorize such extension for a period not exceeding 3 months. Any further extension shall be subject to previous sanction of the Registrar (grounds to be shown therefore) provided always where the U.E. has recommended the grant of the extension/permitted the contractor to carry out the work reserving the right of the University to impose the liquidated damages (as provided for under the agreement) the running bills shall continue to be paid to him.

Provided further if any extension applied for is proposed to be refused, the competent authority shall give the contractor an opportunity to be heard before taking final decision.

Final Certificate

Clause 6.- On completion of the work, the contractor shall be furnished with a certificate by the U.E. (hereinafter called the Engineer-in-Charge) of such completion in the form appended at the end, but no such certificate shall be given, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed, all scaffolding, surplus materials and rubbish, and cleaned off the dirt from all wood-work, doors, windows, walls floors or other parts of any building in, upon or about which the work is to be executed, or of which he may have had possession for the purpose of the execution thereof, nor until the work shall have been measured by the Engineer-in-Charge whose measurements shall be binding and conclusive against the contractor. If the contractor shall fail to comply with the requirements of this clause as to removal of scaffolding surplus materials and rubbish and cleaning of dirt on or before the date fixed the completion of the work, the Engineer-in-Charge may, at the expense of the contractor remove such scaffolding, surplus materials and rubbish, and dispose of the same as he thinks fit and clean off such dirt as aforesaid and the contractor shall forthwith pay the amount of all expense so incurred, and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid, except for any sum actually realized by the sale thereof.

Payments on Intermediate Certificate to be

Regarded as Advances

Clause 7.- No payments shall ordinarily be made for work estimated to cost less than Rs.1,000 (R. One Thousand) till after the whole of the works shall have been completed and certificate of completion given; but if intermediate payment during the course of execution of works is considered desirable in the interest of works the contractor may be paid at the discretion of the Engineer-in-Charge. But in the case of works estimated to cost more than rupees one thousand the

contractor shall on submitting the bill thereof or, be entitled to receive a monthly payment proportionate to the part thereof than 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 final payment for works actually done and completed, and shall not preclude the requiring of bad, unsound, and imperfect or unskillful work to be removed and taken away and reconstructed, or erected or be considered as an admission of the due performance of the contract, or any such part thereof, in any respect or the accruing of any claim, nor shall it conclude, determine, or affect in any way the powers of the Engineer-in-Charge under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for completion of the work, otherwise the Engineer-in-charge's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on all parties.

Bills to be submitted Monthly

Clause 8.- A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer-in-Charge for all work executed in the previous month, and the Engineer-in-Charge shall take or cause to be taken the requisite measurement for the purpose of having the same verified and the claim, as far as admissible, adjusted if possible, before expiry of ten days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid the Engineer-in-Charge may depute a subordinate to measure up the said work in presence of the contractor whose countersignature to the measurement list will be sufficient warrant; and the Engineer-in-Charge may prepare a bill from such list which shall be binding on the contractor in all respects.

Bill to be Submitted on Printed Forms

Clause 9.- The contractor shall submit all bills on printed forms to be had on application at the office of the Engineer-in-Charge, and the charges in the bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions, and not mentioned or provided for in the tender at the rates hereinafter provided for such work.

The deduction or addition as the case may be of the percentage will be calculated on the amount of the bill for the work done after deducting the cost of materials supplied departmentally at rates specified in the agreement.

Receipts to be Signed by Partners or

Persons having Authority to do so

Clause 10 – Receipts for payments made on account of a work when executed by a firm must also be signed by the serve partners, except where the contractors are described in their tender as a firm, in which case the receipt must be signed in the name of the firm by one of the partners, or by some other person having authority to give effectual receipt for the firm.

Stores Supplied by the University

Clause 11. (A). – (a) Materials to be supplied by the University will be shown in the schedule provided in the contract, such materials shall be supplied for the purpose of contract only and the value of materials so supplied shall be deducted at the specified rates and as and when materials are consumed in items of work for which payment are being made. All such materials shall remain the absolute property of the University and shall not be removed from the site.

(b) All such material that are rendered surplus shall be returned by the contractor at the place of issue at his own expenses. Only such materials as are in good condition shall be taken back as decided by the Engineer-in-Charge.

(c) In case of material incorporated in the schedule, proper daily account shall be kept by the contractor. This account shall be open for inspection by the Engineer-in-Charge at all reasonable times. The contractor shall submit a fortnightly report to the Engineer –in-charge of consumptions and balances of materials supplied by the University by 19th and 25th of each month. If any such material, so issued does not tally with the progress or work or University account, the contractor shall be charged for such shortage, at double the issue rate or double the market rate, whichever is more as on the date of such detection.

(d) If at any time subsequent to the execution of a contract on a though rate basis, the contractor desires the issue to him for use on a work, of materials which exist in University Stores, but the supply whereof by University was not provided for in the contract, the materials shall not be issued except with the express authority of the U.E. who, should specify in each case the rate to be charged for the materials inclusive of delivery at the pace where they are stored. The rate charged shall be market rate prevailing at the time of supply or the issue rate whichever is greater. No carriage or incidental charge shall be borne by University in connection with the supply. Such supply of materials by the Department shall not be treated as sale.

(e) For the materials intended to be supplied by the University as mentioned in the schedule in Tender form, could not be given for any reason required as per immediate progress of work, the contractor shall be granted extension of time under Clause-5 of the Agreement. If however, such supplies are not made within 50% extra time beyond the completion period as per contract, it shall be open to the contractor either to determine the contract or request for extension of time.

Advances to contractors

Clause 11.-B- Advances to contractors are as a rule prohibited, and every endeavor should be made to maintain a system, under which no payments are made except for work actually done. Exceptions are, however, permitted in the following cases: -

Cases in which a contractor, whose contract is for finished work, requires an advance on the security of materials brought to sites, U.E. may in such cases, sanction advances up to an amount not exceeding 75% of the value but 90% in the case of steel (as assessed by the U.E.) provided that the rate allowed in no case in more than the rate payable for the finished item as stipulated in the contract of such materials, provided that they are of imperishable nature and that a formal agreement is drawn up with the contractor under which Government secures a lien on the materials and is safeguarded against losses due to the contractor postponing the execution of the work or to the

shortage or misuse of the materials, and against the expense entitled for their proper watch and safe custody.

Payment of such advances should be made only on the certificate of an officer not below the rank of U.E. that the quantities of materials upon which the advances are made have actually been brought to site, that the contractor has not previously received any advance on that security and that all the materials are required by the contractor for use on items of work for which rates for finished work have been agreed upon. Recoveries of advances so made should into be postponed until the whole of the work entrusted to the contractor is completed. They should be made from his bills, for work done as the materials are used, the necessary deductions being made whenever the item of work in which they are used are billed for.

Before granting the above secured advance the contractor shall sign the prescribed indenture Bond in the prescribed form.

Escalation

Reimbursement/Refund on Variation in Prices of Materials/P.O.L and Lab our Wages

Operative Date of Operative Period :-

~~**Clause 11 C.-** The operative date hereinafter referred to means the date of receipt of tenders, if not otherwise mentioned in the contract. The operative period hereafter referred to, means the time of completion of the works mentioned in clause –5 of the contract. For the purpose of calculating adjustment in the tender price by way of payment (s)/ refunds arising out of variations the cost of materials, P.O.L and lab our wages, the operative period shall end on the last date of the completion period as per clause –5 of the contract or with the last date of the veiled time extension granted by the Registrar only to cover the increase in the original scope of the work resulting in increase in the quantum of work over and above the approved design as per terms of the contract and time extension granted, in case work id delayed by the University. This~~

period of extension shall be considered in continuation of the original operative period as mentioned, above.

Provided that no claim for escalation on account of any reason whatsoever shall be entertained where the last date of total operative period is less than twelve months.

In all cases, the decision of the Registrar of Jiwaji University with regard to the operative period shall be final and binding on the original operative period as mentioned above.

In after the operative date and during the total operative period there by any variation in the whole sale price index for all commodities by groups and subgroups (Source being the publication of the Economic Adviser to the Government of India published in the Reserve Bank of India Bulletin and valid for the operative date, the price adjustment on materials (excluding cement, steel and bitumen which are supplied by the Department) shall be calculated in the following manner subject, however, to the provisions of clause.

$$V1 = \frac{0.75 \times P_{ox} \times K1 (M2 - M1)}{M1}$$

Where

V1= the amount of the price adjustment in Rs.

Po= value of work in Rs. executed during the period under consider.

K1= A factor representing all materials to be arranged and supplied for all works connected with the completion for the work under the contract including all allied/ancillary/temporary works and overheads etc. but excluding materials like cement, steel and bitumen.

M1= whole sale price index for all commodities on the operative dates.

M2= whole sale price index for all commodities during the period under considerations.

High Speed Diesel

For working out price adjustment on transportation cases, the representative time for reference shall be the cost of high speed diesel oil only at the nearest H.S.D. Pumps/supply depot. If after the operative date and operative period there be any variation in the price of H.S.D. such variation being duly notified by the Government of India, the price adjustments for transportation component of the work shall be calculated in the following manner:-

$$V2 = \frac{0.75 \times P_o \times K2 (D2 - D1)}{D1}$$

Where

V2= the amount of the price adjustment in Rs.

Po= the value of work in Rs. executed during the period under consideration.

K2= a factor representing the component of transportation cost of the entire completion of the work.

D2= price per litre of H.S.D. during the period under consideration.

D1= price per litre of H.S.D. on the operative date.

Lab our

In after the operative date and during the total/operative period \, thereby any variation in the Consumer Price Index for Industrial Workers at the town nearest to the site, of the work, the source for such indices being publications of Lab our Bulletin Bureau, Government of India published in the Reserve Bank of India Bulletin, the price adjustment on component representing lab our cost including all types of benefits and amentias etc. shall calculated in the following manner:-

$$V3 = \frac{0.75 \times P_o \times K3 (L2 - L1)}{L1}$$

Where,

Po= the value of the work in Rs. executed during the period under consideration.

V3= the amount of price adjustment in Rs.

K3= a factor representing all lab our cost including benefits, amenities etc. to be incurred by the contractor for their work including all allied/ancillary/temporary works and overhead etc.

L2= consumer price index for Industrial workers during the period under consideration.

L1= consumer price index for industrial workers on the operative date.

In case materials like cement steel and bitumen are required to be arranged by the contractor as per terms of the contract, the variation in the prices of these materials shall be worked out on the basis of the prices prevalent on the operative date and as fixed by the Government of India and the price operative during the period and fixed by Government of India under consideration for work

doing out price adjustment. Price of cement at any time shall be the price payable as per the Rate Contract entered into by the D.G.S. &D. with the cement factories.

Price of Steel (steel) for reinforcement and structural steel) shall be the price at which steel is available, at the nearest stock-yard controlled by the Steel Authority of India.

Price of bitumen shall be the price at which bitumen is available from the nearest refinery.

Note- Value of factors K1 K2 & K3 in clauses mentioned above are specified separately :-

	K1 (Materials)	K2 (P.O.L.)	K3 (Lab our)
Building Works.	0.25	0.075	0.35
Road Works (W.B.M.)	----	0.40	0.60
Bridge Works	0.2	0.05	0.30

Work to be Executed in Accordance with Specification, Drawing, order etc.

Clause 12. – The contractor shall execute the whole and every part of the work in the most substantial and workmen like manner, and both as regards materials and otherwise in every respect in strict accordance with specifications. The contractor 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 at such office or on the site of the work for the purpose of inspection during office hours and the contractor shall, if he so requires, be entitled at his own expense to take or cause to be made copies of the specifications, and of all such designs, drawings and instructions aforesaid.

Maharashtra P.W.D. Specifications shall apply along with the various I.S.I code in the case of any variance the following order of precedence shall prevail:-

- (1) Specifications as per N.I.T.
- (2) Specifications as per C.S.R. of the circle
- (3) I.S.I Code/I.R.C. Specifications
- (4) Maharashtra P.W.D. Specifications
- (5) Mode of measurements for building shall be as provided in the C.S.R. applicable to the contract. Where such mode of measurement is not specified in the C.S.R., It shall be done as per I.S.I. code of building measurement. However, if any mode of measurement is specifically mentioned in the N.I.T. the same will get precedence over all the above.

Clause 12.A – In respect of all bearing, hinges, or similar parts intended for use in the superstructure of any bridge, the contractor shall, whenever required, in the course of manufacture, arrange and afford all facilities for the purpose of inspection and test of all or any of the parts and the material used therein to any officer of the Directorate of Inspection of the Ministry of Works production and supply of the Government of India, and such bearing, hinges or similar parts shall not be used in the superstructure of any bridge except on production of a certificate of acceptance thereof from the Directorate of Inspection. All inspection charges will be payable by the contractors.

(This clause may be struck off if the tender is not for bridge work.)

Additions Alterations in Specifications and Designs

Clause 13.-- *The Engineer-in Charge shall have power to make any alterations in omissions, from additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in*

accordance with any instructions which may be given to him in writing signed by the Engineer-in-Charge and such alterations omissions additions or Substitutions shall not invalidate the contract and any altered, additional or substituted 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 the main work. Provided the total value of such increased or altered or substituted work does not exceed 25% of the amount put to tender, inclusive of contractor's percentage. If such value exceeds 25% it shall be open to the contractor either to determine the contractor apply for extension.

Extension of Time in Consequence of Alterations

Time for the completion of the work shall be extended in the proportion that the altered, additional or substituted work bear to the original contractor's work, and certificate of the Engineer-in-Charge shall be conclusive as to such proportion.

Rates for works Not in Schedule of Rates of the Circle

And if the altered, additional or substituted work includes any class of work, for which no rate is specified in this contract, then such classes of work shall be carried out at the rates entered in the applicable schedule of rates which was in force on the date of tender provided that when the tender for the original work as a percentage below/above the schedule of rate, the altered, additional or substituted work required as aforesaid shall be chargeable at the said schedule of rate minus/plus the same percentage deduction, addition and if such class of work is not entered in and arrange to carry it out in such manner as may be considered advisable provided always and if the contractor shall commence work or incur any expenditure in regard thereto before the rates shall have been determined as lastly herein before mentioned then and in such case he shall only be entitled to be paid in respect of the work carried out on expenditure incurred by him prior to the date of the determination of the rates as aforesaid according to such rate or rates as shall be fixed by the Engineer-in-Charge. In the event of a dispute the decision of the Registrar of the University shall be final.

If during the course of execution where it is found necessary that certain item, items of work not provided for in the C.S.R. of the Circle required to be carried out then the Engineer-in-Charge shall identify such item/ items including approximate quantity of the contract and ask the contractor to submit his rates in writing supported by the requisite data within a period of 7 days. The Engineer-in-Charge shall obtain approval/modification of the proposed rate from the competent authority and communicate the same within a period of 4 weeks to the contractor. In case the contractor agrees to the above rates as fixed by the competent authority then they shall form part of supplementary schedule of the contract agreement. If the contractor does not agree to the rate of the competent authority then it shall be open for the Engineer in -Charge to get the work executed through any

other agency. The contractor will not however be entitled to any compensation due to delay or hindrance or loss of profit accruing on account of this extra work executed by alternative agency.

If the contractor commences non-schedule work or incur expenditure in regard there to before the rates shall have been determined by the competent authority, then he shall be entitled for payment for the work done as may be finally decided by the competent authority. In the event of did pate, the decision of the Registrar shall be final

**No claim to any Payment or compensation for
Alteration in or Restriction of Works**

Clause 14. -- If at any time after the execution of the contract documents, the Engineer-in-Charge shall, for any reason whatsoever require the whole or any part of the work as specified in the tender to be stopped for any period or shall not require the whole of part of the work to be carried out at all or to be carried out by the contractor, he shall give notice in writing of the fact to the contractor who shall there upon suspend or stop the work totally or partially, as the case may be.

In any such case, except as provided hereunder, the contractor shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not so derive in consequence of the full amount of the work not having been carried out, or on account of any loss that he may be put to on account of materials purchased or agreed to be purchased, or for unemployment of lab our recruited by him. He shall not also have any claim for compensation by reason of any alterations having been made in the original specifications, drawings, designs and instructions, which may involve any curtailments of the work as originally contemplated. Where, whoever, materials have already been purchased or agreed to be purchased by the contractor shall be paid for such materials at the rates determined by the Engineer-in-Charge, provided they are not in excess of requirements and are of approved quality and/or shall be compensated for the loss, if any, that he may be put to, in respect of materials agreed to be purchased by him. The amount of such compensations to be determined by the Engineer-in-Charge whose decision shall be final. If the contractor suffers any loss on account of his having to pay lab our charges during the period during which the stoppage any loss on account of his having to pay lab our charges during the period during which the stoppage of work has been ordered under this clause, the contractor shall, on application be entitled to such compensation on account of lab our charges as the Engineer-in-Charge, whose decision shall be final, may consider reasonable. Provided that the contractor shall not be entitled to any compensation on account of lab our charges, if, in the opinion of the Engineer-in-Charge, the lab our could have been employed by the contractor else where for the whole or part of the period, during which the stoppage of the work has been ordered as aforesaid.

If the total duration of suspension of the work is more then six months, then this suspension of the work will be considered as permanent stoppage of the work, and the contractor determine the contract, if he so desire.

Time Limit for Unforeseen Claims

Clause 15.- Under no circumstances whatever shall the contractor be entitled to any compensation from University on any account unless the contractor shall have submitted a claim in writing to the Engineer-in-Charge within one month of the cause of such claim occurring.

Action and Compensation payable in Case of Bad Work

Clause 16.-- If at any time before the security deposit 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 with unsound, imperfect or unskillful workmanship or with materials of interior quality, 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 otherwise not in accordance with the contract, it shall be lawful for the Engineer-in-Charge to intimate this fact in writing to the contractor and then notwithstanding the fact that the work, materials this fact in writing to the contractor and then notwithstanding the fact that the work, materials or articles complained of may 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 or in part as the case may require, or if so required, shall remove the materials or articles so specified and provide other proper and suitable materials or articles at his own proper charge and cost, and in the event of this 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 contract put to tender every day not exceeding ten 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 risk and expense in all respects of the contractor. Should the Engineer-in-Charge consider that any such inferior work or material 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 fix therefore.

Work to be Open for Inspection-contractor or Responsible Agent to be present

Clause 17.—All work under or in course of execution or executed in pursuance of the contract shall at all time 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 of his subordinate to visit the work shall have given to the contractor, either himself be present to receive orders and instruction or have a responsible agent duly accredited in writing present for that purpose. Orders given to the contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

Notice to be given Before Work is Covered up

Clause 18.- 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 and work in order that the same may be measured, and correct dimensions there of be taken before the same is so covered up or placed 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 or consent obtained, the same shall be uncovered at the contractor's expenses or in default there of, no payment or allowance shall be made for such work or the materials with which the same was executed.

Contractor Liable for Done and for Imperfections for Twelve Month After Certificate

Clause 19.- If the contractor or his work people or servants shall break, deface, injure or destroy any part of building in which they may be working or any building, road, road curbs, fences, enclosures water pipes, cables, drainage, electric or telephone posts or wires trees grass or grass

land of cultivated ground continuous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work, while in progress, from any cause whatever, or any imperfections become apparent in it within three months (six months in the case of a road work) after a certificate final or otherwise or its completion shall have been by the Engineer-in-Charge as aforesaid, the contractor shall make good the same at his own expense or in default, the Engineer-in-Charge may cause the same to be made good by other workmen, and deduct the expense (of which certificate of the Engineer-in-Charge shall be final) from any sums the may be then or at any time his security deposits, or the proceeds of sale there of, or of a sufficient there of.

The contractor hereby also covenants that it shall be his responsibility to see that the buildings constructed under this contract do/does not leak during the period of tow consecutive rainy seasons after its (their) completion and if any defects are pointed out to him by the Engineer-in-Charge during the said period, the same shall be removed by him at his own expenses or in default the Engineer-in-charge may get tem remove and deduct the expenses there of from any sum that may be then due to or may become due to the contractor or from the security deposits of the contractor, an amount equal or may become due to the contractor or from the security deposits of the contractor, an amount equal to 20% cost of the roof shall notwithstanding anything contained in this clause be retained, till the roofs are tested during two consecutive rainy seasons as aforesaid and the defects are fully removed and if any amount still remains due to this account after making deductions as aforesaid the same may be recovered from him as an arrears of land revenue / cash security. The security deposit of the contractor to the extent of 50% shall be refunded on his getting the completion certificate, provided that all the recoveries outstanding against him are realized. 25% of the amount shall be refunded on maintenance period being over, even if the final bill is not passed, balance 25% shall be refunded after the final bill is passed.

Contractor to Supply Plant, Ladders Scaffolding etc.

Clause 20.- The contractor shall supply at his own cost materials (except such special materials if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores) plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works, requisite for the proper execution of the work, whether original, altered or substituted, and whether included in the specification or other documents forming part of the contract referred to in these conditions or not or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. The contractor shall also supply without charge requisite number of persons with the means and materials necessary for the purpose of setting out works, and counting, weighing and assisting in the measurements or examination at any time and from time to time of the work, or materials. Failing his so doing the same may be 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, a sufficient portion thereof.

Contractor is liable for damages arising from non-provision of lights fencing etc. The contractor shall also provide at one his own cost except when the contract specifically provides otherwise and except for payments due under clause all necessary fencing and lights required to protect the public from accident and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that sustained owing to neglect of the above precautions and to pay any damage and costs which may be such person or which may with the consent of the contractor be paid to compromise any claim by any such person.

Compensation under Section 12 Sub-section (1) of The Workman's compensation Act, 1923

Clause 21.-- In every case in which by virtue of the provision of section 12, sub-section, (1) of the work man's compensation Act, 1923 University is obliged to pay compensation to a workman employed by the contractor in execution of the works, University will recover from the contractor the amount of compensation so paid and without prejudice to the rights of University under section (1) Subsection (2) of the said Act, University shall be at liberty to recover the amount or any part thereof by deducting it from the security deposit or from any sum due by University to the contractor whether under this contract or otherwise University may not be bound to contest any claim made against them under Section 12, Sub-section(1) of the said Act except on the written request of the contractor and upon his giving to University full security for all cases for which University might become liable in consequence contesting such claim.

Lab our

Clause 22.- The contractor should get himself registered under-contract-layout regulations and abolition Act, 1970 including its amendments after getting a certificate from the principal employer, who will be the Engineer-in-Charge.

Clause 23. – Lab our below the age of 12 years – No lab our below the age of 12 years shall be employed on the work.

Fair Wage

Clause 24-The contractor shall pay not less than fair age to lab ours engaged by him on the work.

Explanation :-

- (a) “Fair wage”, means wage whether for time or piece work notified at the time of inviting tenders for the work and where such wages have not been so notified, the wages prescribed by the Commissioner for the division in which the work is done.
- (b) The contractor shall, notwithstanding the provisions of any contract to the contrary cause to be paid a fair wage to laborers indirectly engaged on the work including any lab our engaged by his subcontractors in connection with the said works, as if the laborers had been immediately employed by him.
- (c) In respect of lab our directly or indirectly employed on the works for the performance of the contractor’s part of this agreement the contractor shall comply with or cause to be complied with the Lab our Act in force.
- (d) The University Engineer shall have the right to deduct, from the moneys due to the contractor, any sum required or estimated to be required for making good the loss
- (e) suffered by a worker or workers by reason of non-fulfillment of the conditions to the contract for the benefit of the workers, non payment of wages or deductions made from his or their wages, which are not justified by the terms of the contract or non observance of the regulations.
- (f) The contractor shall be primarily liable for all payments to be made under and for the observance of the regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractors.
- (g) The regulations aforesaid shall be deemed to be a part of this contract and any branch thereof shall be deemed to be a breach, of this contract.

Work not to be Sublet

Clause 25.- The contract may be rescinded and security deposit for feited, for subletting, bribing or if contractor becomes insolvent –

The contract shall not be assigned or sublet without the written approval of the U.E. and if the contractor shall assign or sublet his contract or a tempt, so to do, or become insolvent

commence any insolvency proceedings or make any composition with his creditors, or attempt so to do or if any bribe, gratuity, gift, loan, perquisite, reward of 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 employ of Government 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 U.E. may there upon by notice in writing rescind the contract, and the S.D. of the contractor shall ensure as if the contract had been rescinded under clause 3 hereof, and in addition the contractor shall not be entitled to recover or be paid for any work thereto for actually performed under the contract.

If the contractor gets item/items of work executed on a task rate basis with or without materials this shall not amount to sub-letting of the contract.

Sum Payable By Way of Compensation to be Considered as Reasonable Compensation Without Reference to Actual Loss.

Clause 26.- all sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of University without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

Changes in the Constitution of Firm

Clause 27.- In the case of a tender by partners any change in the constitution of the firm shall be forthwith notified by the contractor to the Engineer-in-Charge for his information.

Work to be under the Direction of University Engineer/Registrar

Clause 28.- All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the University Engineer or the University Registrar for the time being who shall be entitled to direct at what point or points and in what manner they are to be commenced and from time to time carried on.

Arbitration Clause

Clause 29.- Except as otherwise provided in this contract all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to things whatsoever, in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, concerning the works, or the execution or failure to execute the same, whether arising during the progress of the work or after the completion or abandonment thereof shall

be referred to the Registrar in writing for his decision, within a period of 30 days of such occurrence thereupon the Registrar shall give his written instructions and / or decisions within a period of 60 days of such request. This period can be extended by mutual consent of the parties.

Upon receipt of written instructions of decisions, the parties shall promptly proceed without delay to comply such instructions or decisions. If the Registrar fails to give his instructions or decisions in writing within a period of 60 days or mutually agreed time after being requested if the parties are aggrieved against the decision of the Registrar the parties may within 30 days prefer an appeal to the Vice Chancellor who shall afford an opportunity to the parties of being heard and to offer evidence in support of his appeal. The V/c will give his decision within 90 days. If any party is not satisfied with the decision of the V.C. he can refer such disputes for arbitration by an Arbitration Board to be constituted by the University which shall consist of three members of whom one shall be chosen from among the officers belonging to the University not below the rank of S.E., on Retire Chief Engineer of any Technical Development and one serving officer not below the rank of S.E. belonging to another Technical Department.

The following are also the terms of this contract namely: -

- (a) No person other than the aforesaid Arbitration Board constituted by the University (to handle cases of all Technical Departments) shall act as arbitrator and if for any reason that is out possible, the matter shall not be referred to arbitration at all.
- (b) The University may at any time effect any change in the personnel of the Board, and the new member or members appointed to the Arbitration Board shall be entitled to proceed with the reference from the stage at which it was left by his or their predecessors.
- (c) The party invoking arbitration shall specify the dispute or disputes to be referred to Arbitration under this clause together with the amount or amounts claimed in respect of each such dispute (s).
- (d) Where the party invoking arbitration is the contractor, no reference for arbitration shall be maintainable, unless the contractor furnishes a security deposit of a sum determined according to the table given below, and the sum so deposited shall on the determination of Arbitration proceedings be adjusted against the cost, if any awarded by the Board against the party and the balance remaining after such adjustment or in the absence of the such cost begin awarded, the whole of the sum shall be refunded to him within one month from the date of the award.

Amount of Claim

Rate of Security Deposits

For claims below Rs. 10,000 &

5% of the amount claimed.

Claim for Quantities Entered in the Tender or Estimate

Clause 33 - Quantities shown in the tender are approximate and no claim shall be entertained for quantities of work executed being either more or less than those entered in the tender of estimate.

Claims for Compensation for Delay in Starting the Work

Clause 34- Non 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 according sanction to estimates.

Employment of Scarcity Lab our

Clause 35 – If government declare a state of Scarcity or famine to exist in any village situated within sixteen kilometers of the work, the contractor, shall employ upon such parts of the work, as are suitable for unskilled lab our, any person certified to him by the University Engineer or by any person to whom the University Engineer may have delegated this duty in writing, to be in need of relief and shall be bound to pay to such person wages not below the minimum which Government may have fixed in this behalf. Any dispute which may arise in connection with the implementation of this clause shall be decided by the University Engineer whose decision shall be final and biding on the contractor.

Clause 36 – Deleted as per C.S.R.

Technical examination

Clause 37 – The University shall have the right to cause Audit and Technical Examination of the works and the final bills of the contractor including all supporting vouchers, abstracts etc. to be made as per payments of the final bill and if as a result of such Audit and Technical Examination the sum is found to have been over paid in respect of any work done by the contractor under the contract of any work claimed by him to have been done under contract and found not to have been executed, the contractor shall be liable to refund the amount of over payment and it shall be lawful for the University to recover the same from the security deposit of the contractor or from any dues payable to the contractor from the Government account. If it is found that the contractor was paid lesser than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by the University to the contractor.

In the case of any audit examination and recovery consequent on the same the contractor shall be given an opportunity to explain his case and the decision of the Registrar shall be final .

In the case of Technical Audit, consequent on which there is a recovery from the contractor, no recovery, should be made without orders of the Vice Chancellor, whose decision shall be final. All action under this clause should be initiated and intimated to the contractor within a period of twelve months from the date of completion.

Death of Permanent Invalidity of Contractor

Clause 38 - If the contractor is an individual or a proprietary concern, partnership concern, dies during the currency of the contract or becomes permanently incapacitated, where the surviving partners are only minors, the contract shall be closed without levying any damages / compensation as provided for in clause 3 of the contract agreement.

However if the Registrar is satisfied about the competence of the survivors, then the competent authority shall enter into a fresh agreement for the remaining work strictly on the same terms and conditions, under which the contract was awarded.

Penalty for Breach of Contract

Clause 39- On the breach of any term or condition of this contract by the contractor the said University shall be entitled to forfeit the security deposit or the balance thereof, that may at that time be remaining, and to realize and retain the same as damages and compensation for the said breach but without prejudice to the right of the University to recover further sums as damages from any sums due or which may become due to the contractor by University or otherwise howsoever.

Note- The person or firm submitting the tender should see that the rates in the schedule showing materials to be supplied by the department are filled up by the Engineer-in-charge on the issue of the form prior to the submission of the tender.

Notice to the Contractor to Start Work

Your contract for the _____ has been accepted by the Jiwaji University Gwalior, on the _____ day of _____ 20 ____ and you are hereby ordered to commence the work.

University Engineer

The notice to the Contractor (s) to start work from the _____
day of _____ 20 _____ was issued vide this office memorandum No. _____
dated the _____ 20 _____

Signature of Contractor

University Engineer

Completion Certificate

In pursuance of clause 6 of the agreement in form A, dated the _____
_____ between the contractor Shri _____
and the Jiwaji University Gwalior, it is hereby certified that said contractor has duly completed
the execution of the work undertaken by him there under, on the _____
day of _____ 20 _____.

(Signature of Engineer-in-Charge)

JIWAJI UNIVERSITY, GWALIOR

Schedule of Quantity

Name of Work: Repairing Water Proofing Treatment of different Building of University, Gwalior.

Item No.	Description of time	Unit	Rate (in Rs.)	Quantity	amount Rs.
1.	Demolishing lime concrete manually /by mechanical means and disposal of material within 50 metres lead as per direction of Engineer-in-charge.	Cum.	139.00		
2.	Dismantling of flexible pavement (bituminous courses) by 1129 as per direction of Engineer-in-charge. mechanical means and disposal of dismantled material up to a lead of 1000 metres.	Cum.	90.00		
3.	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, terraces etc consisting of following operations: a Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to Is.2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment. b Laying brick bate with mortar using broken bricks/ brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1cement :5 sand) admixed with water proofing compound conforming to Is :2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining of walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75kg/ sqm of cement admixed with water proofing compound conforming to Is :2645 and approved by Engineer-in-charge. d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4(1 cement :4 sand) admixed with water proofing compound conforming laying glass fiber cloth type grade – I thssue reinforced of approved quality in top layer plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300mm square 3mm deep .e) the whole terrace so finishing of shall be flooded with water for a minimum period to two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer –in-charge:(with five years service gurantee)	sqm	744.00		

	With average thickness of 150mm and minimum thickness at khurra as 75mm.				
4.	<p>Providing and laying APP (Atactic polypropylene Polymer) modified prefabricated five layer. 3mm thick water proofing membrane, black finished reinforced with glass fibre matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sqm. by the same membrane manufactures of density at 25.c, 0.87-0.89 kg/ltr and viscosity 70-160 cps. Over the primer coat the layer of membrane shall be laid using butane torch and sealing . all joints etc. and preparing the surface complete. the vital physical and chemical parameters of the membrane shall be as under: joint strength in longitudinal and transverse direction at 23'c as 650/450 N/5cm. Tear strength in longitudinal and transverse direction as 300/250N. Softening point of membrane not less than 150'c cold flexibility shall be upto- 2'c when tested in accordance with ASTM, D-5147. the laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane:(with 5 yrs. service gurantee) 3mm thick</p>	Sqm	337.00		
5.	<p>Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sq. meters and under including the patch in proper shape. raking out joints and preparing the surface of the walls complete including disposal of rubbish to the dumping within 50 metres lead: With cement mortar 1:4(1 cement :4 coarse sand)</p>	Sqm	140.00		
6	<p>Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.</p>	Sqm	9.00		
7	<p>15 mm cement plaster on rough side of single or half brick wall of mix: 1:4 (1cement: 4 sand)</p>	Sqm	106.00		
8	<p>Providing and fixing on wall face unplasticised Rigid PVC Rain water pipes conforming to IS:13592 Type A including jointing with seal ring conforming to IS:5382 leaving 10 mm gap for thermal expansion. (i) Single socketed pipes. for working pressure of 4kg/cm²</p> <p>110mm diameter</p>	metre	225.00		

