CLIENT : INDIAN ACADEMY OF SCIENCES  
C. V. RAMAN AVENUE,  
SADASHIVNAGAR,  
BENGALURU - 560080

TENDER FOR : CIVIL WORKS -GROUND FLOOR  
FOR INDIAN ACADEMY OF SCIENCES  
BENGALURU - 560080

DOCUMENT : TENDER DOCUMENT No.  
04(A)/PUR/BNN/IASc/2018-19

TENDER ISSUED TO : M/s

ARCHITECTS : N. G. ASSOCIATES,  
No.302, RIVERSTONE CHANCELLOR,  
50 SIVANCHETTI GARDEN ROAD,  
ULSOOR, BENGALURU - 560042

एन. महेशचन्द्र N. MAHESHCHANDRA  
कार्यकारी सचिव Executive Secretary  
भारतीय विज्ञान अकादमी Indian Academy of Sciences  
सदाशिवनगर Sadashivnagar  
बेंगलूरु 560 080 Bangalore 560 080
## TABLE OF CONTENTS

1. NOTICE INVITING TENDER : 03-03
2. ITEM RATE TENDER FORM FOR WORKS : 04-05
3. INSTRUCTION TO TENDERS : 06-07
4. OFFER LETTER FROM TENDERER TO CLIENT : 08-08
5. GENERAL CONDITIONS OF CONTRACT : 09-26
6. SAFETY CODE : 27-30
7. APPENDIX TO GENERAL CONDITIONS OF CONTRACT : 31-31
8. SPECIAL CONDITIONS OF CONTRACT : 32-37
9. NOTES ON SCHEDULE OF QUANTITIES : 37-38
INDIAN ACADEMY OF SCIENCES
BENGALURU – 560080

NOTICE INVITING TENDER

SEALED ITEM RATE TENDERS are invited for the execution of the following work,

1. Ground floor Civil works for Indian Academy of Sciences, Bengaluru – 560080

2. Period of completion of work from date
   Issue of work order. 60 Working days

3. Cost of the project 22 Lakhs

4. Validity of tender 90 days from the date of opening.

5. Period of issue of tender. From 07.01.2019 to 05.02.2019
   at Indian Academy of Sciences,
   C V Raman Avenue,
   Sadashivnagar,
   Bengaluru – 560080

6. Date of receipt of tender 27.02.2019 before 1.00 P. M at
   Indian Academy of Sciences,
   Bengaluru.

7. Date of opening tender. 27.02.2019 at 3.00 P.M at
   Indian Academy of Sciences,
   Bengaluru.

8. Cost of Application (Even if downloaded
   from the website) Rs.1000.00/- (must attach DD in
   favor of “Indian Academy of
   Sciences”, along with the Tender
   Documents)

9. The Executive Secretary, Indian Academy of Sciences, Bengaluru reserves the right to
   accept or reject any tender without assigning any reasons thereof.

10. EMD Rs. 55,000.00/- (Rs. Fifty five
    Thousand Only) in the form of
    bank draft favouring, Indian
    Academy of Sciences

11. This notice shall form part of the contract & Articles of Agreement.
INDIAN ACADEMY OF SCIENCES, BENGALURU
ITEM RATE TENDER FOR THE WORK

I/ We hereby tender for the Indian Academy of Sciences, C. V. Raman Avenue, Sadashivnagar, Bengaluru – 80, of the works specified in the under mentioned Memorandum to undertake and execute the work within the time specified in such Memorandum, at the rates specified therein, and in accordance with the specification in all respects, designs, drawings and written instructions which have been read by me/ us, read and explained to me/ us and with such materials as provided for and in all respects in accordance with conditions as far as possible.

MEMORANDUM

<table>
<thead>
<tr>
<th>General Description</th>
<th>Civil Works –Ground floor for Indian Academy of Sciences, Bengaluru</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security Deposit</td>
<td>5% of the running account bills and the final bill including the Earnest money deposit</td>
</tr>
<tr>
<td>Time allowed for completion of work</td>
<td>60 working days</td>
</tr>
<tr>
<td>In all respects from the date of written Order to commence the work</td>
<td></td>
</tr>
<tr>
<td>Bill of Quantities</td>
<td>Enclosed</td>
</tr>
<tr>
<td>Specifications</td>
<td>The work shall be carried out strictly in Accordance with the enclosed specifications and wherever items are not covered by those specifications in accordance with the Specifications/drawings/requirements/of the Architect / Engineer- in- charge.</td>
</tr>
</tbody>
</table>

If this tender be accepted, I/ We hereby agree to abide by and fulfill the terms and conditions of the Articles of Agreement which have been read by me/us or in default thereof to
forego and play to The Executive Secretary, Indian Academy of Sciences, Bengaluru- 80, or his successors the sum of monies mentioned in the said conditions.

Dated this ------------------- day of -----------------------------------------------2018

Signature of Tenderer

Address:

Witness of tenderer's Signature:

Name:

Address:

Occupation:

The above tender is hereby accepted by me on behalf of Indian Academy of Sciences, Bengaluru.

THE EXECUTIVE SECRETARY,
INDIAN ACADEMY OF SCIENCES,
C. V. RAMAN NAGAR
SADASHIVNAGAR,
BENGALURU – 560080
INSTRUCTIONS TO TENDERERS

1. The completed Tender documents including the ORIGINAL and duplicate copies of BILL/SCHEDULE OF QUANTITIES should be submitted to the Executive Secretary at the address given in the Tender Notice. The tender document should be sealed in an envelope super scribed "Tender for the work of PROPOSED CIVIL WORKS FOR GROUND FLOOR AT INDIAN ACADEMY OF SCIENCES, BENGALURU" and addressed to the Executive Secretary. The tenderer's name and address should also be put on the envelope.

2. Last date for receipt of tenders: As stated in the tender notice.

3. Tenderers should ensure that their tenders are received before the date and time specified above.

4. Contractors are requested to put their firm’s endorsement on each page of the tender documents as a token of acceptance.

5. Contractors should fill in all the relevant blanks and put their signature in the relevant places indicated in the documents.

6. The Schedule of Quantities should be filled as follows:
   a. The “Rate” Column to be legibly filled in ink in both figures and words.
   b. “Amount” column to be filled for each item and the total amount for each trade to be given.
   c. All corrections to be initialed.
   d. Contractor’s signature to be put on each page of the Schedule of quantities and in the “Abstract Sheet”.
   e. The “Amount” column for alternative items for which the quantities are mentioned should be filled up.
   f. The “Rate” column for "Rate only" items should be filled up

7. No alterations or additions are to be made by the Contractors in the tender document. Violation of this instruction will attract rejection of the tender at the discretion of Architect/Consultants/Academy.

8. Earnest money accompanying the tender will be accepted only in the form of Crossed Demand Draft on any of the nationalized Banks in Bengaluru drawn in favour of Indian Academy of Sciences and payable at Bengaluru and not in favour of any other authority. Any tender, which is not accompanied by Earnest Money Deposit in the form of DD, shall be summarily rejected.
9. The Sealed Envelopes shall be opened at the specified time in the presence of the tenderer's or their accredited representatives.

10. The Contractor is required to check the numbers of the pages and should any page be found missing or in duplicate, or the figure or writing indistinct, he must inform the Architect at once and have the same rectified. Should the Contractor be in doubt about the precise meaning of any item or any provision or if he wants any clarification, he must inform the Architect/Academy before the prebid meeting. No claim will be allowed in respect of errors in the Contractors tender due to any mistake in the Schedule of Quantities, which should have been but was not rectified in the manner described above.

11. The articles of Agreement should not be filled. This will be done at the time the contract is awarded, in the case of the successful tenderer only.

12. In the event of arithmetical errors or discrepancies being discovered in the Contractor's tender the rates mentioned in words in the tender copy marked 'Original' will be taken as bonafide. Rate in words will be taken in precedence over rate in figures. If the amount of an item does not tally with the rate quoted in words, the rate shall be taken as correct.

Contractors are forewarned that no errors whatsoever arithmetical or otherwise will be permitted in their tenders. Tenders containing many errors are liable to be considered as Non-bona fide at the discretion of Architects/Consultants/Academy.

13. Tenderers should note that their tenders should remain open for consideration for a minimum period of 90 days from the date of the opening of tenders. EMD of unsuccessful tenderers will be refunded without any interest.

14. The Academy reserves the right to accept any tender or accept tenders in part or to reject any or all tenders without assigning any reasons thereof and will not be liable to offer any explanation whatsoever.

15. Contractors are requested to note that non-compliance of the above instructions is liable to render their Tender non-bona fide.

CONTRACTOR

ARCHITECT/CONSULTANT
OFFER LETTER FROM THE TENDERERS TO THE CLIENT

Name of work: Proposed Civil works for Ground Floor at Indian Academy of Sciences, Bengaluru

Dear Sir,

1. Having examined the drawings, specifications conditions, form of item rate contract, schedule of quantities relating to the above work and having visited and examined the site of the proposed works and having acquired the requisite information relating thereto as affecting the tender invited by you on behalf of the ___________________, Bengaluru.

2. I/We, the undersigned, hereby offer to construct, execute and complete the above work to the satisfaction of the Academy on item rate basis in strict accordance with the contract conditions and specifications.

3. I/We, undertake to complete and deliver the whole of the works within a period as specified in Appendix to the General Conditions of Contracts. I/We shall be under the obligation to pay the sum as stated in the said Appendix for the period that the works shall remain incomplete as compensation subject to the condition of contract relating to an extension of the time.

4. In the event of the tender being accepted

   a. I/we do agree to furnish to Indian Academy of Sciences within fourteen days from the date of acceptance of tender, a bank guarantee for a sum of Rs. 3,00,000.00 (Three lakhs) from a Nationalized bank.

   b. I/We further agree to the deduction of 5% of the value of each interim bill as stated in the said Appendix as Retention Money.

5. We note that earnest money shall be adjusted towards retention money after our tender is accepted and is liable to be forfeited at the discretion of the Academy, in the event of our withdrawing the tender or modifying the tender or in the event of our failure to furnish the initial security deposit in the form of bank guarantee. The maximum amount of retention money shall be 5% of the running bills including the final bill. I/We do agree that EMD may be forfeited if tender is withdrawn/modified by me/us.

Name of the partner of the Firm

OR

Name of the person having Power of Attorney to sign the Contract

(Certified true copy of the Power of Attorney should be attached.)

yours faithfully,

contractor.
GENERAL CONDITIONS OF CONTRACT

1. INTERPRETATION

In construing these conditions, the specifications, the schedule of quantities, tender and Agreement, the following words shall have the meaning herein assigned to them except where the subject or context otherwise requires.

i) **Employer or Academy**: The term "Employer" or "Academy" shall denote Indian Academy of Sciences with their Office at BENGALURU represented by Executive Secretary and any of its employees or representative authorized on their behalf.

ii) **Architects**: The term "Architects" or "Consultants" shall mean N.G.Associates, having their registered office located at 302, Riverstone Chancellor, No.50, Sivanchetti Garden Road, Ulsoor, Bengaluru – 560 042. or in the event of his/their ceasing to be the Architects for the purpose of this contract such other person/s the Employer shall nominate for the purpose.

iii) **Engineer**: The term "Engineer" shall mean authorised Engineer appointed by Architect or Academy for day to day supervision of works at site as per tender terms.

iv) **Contractors**: The term "Contractor", "Bidder" or "Tenderer" shall mean (Name and address of Contractor) and his/their heirs, legal representatives, assigns and successors.

v) **Site**: This shall mean the Council Room, President’s Room and Toilets at Indian Academy of Sciences, Bengaluru.

vi) **Drawings**: "Drawings" means the drawings referred to in the Specification and any modification of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer. The work is to be carried out in accordance with drawings, specifications, the schedule of quantities and any further drawings, which may be given by the Employer/Architects/Consultants during the execution of the work.

All drawings relating to work given to the contractor together with copy of schedule of quantities are to be kept at site and the Employer/Architects/Consultants shall be given access to such drawings or schedule of quantities whenever necessary.

In case any detailed Working/Fabrication/Shop Drawings are necessary, contractor shall prepare such detailed drawings and/or dimensioned sketches thereof and have it confirmed by the Employer/Architects/Consultants prior to taking up such work.

The contractor shall ask in writing for all clarifications on matters occurring anywhere in drawings, specifications and schedule of quantities or to additional instructions at least 2 days ahead from the time when it is required for implementations so that the Employer may be able to give decision thereon.

The "Works" shall mean the work or works to be executed or done under this contract and shall include materials, apparatus, equipment, plant, fittings and other things for incorporation in the
vii) "Contract" means the contract effected by the contractor's Tender and the Employer's acceptance thereof comprising (in addition to the Tender and Acceptance) the priced bill of Quantities and Schedules, Schedules of particulars (if any), Specifications and Drawings, these General Conditions of Contract, Special Conditions contained in or attached to any of the foregoing documents, any alterations agreed in writing between the parties before the formal acceptance of the Tender, all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.

viii) "Specification" means the specification annexed to or issued with these conditions and includes Indian or British or other approved standard specifications where required by the specification and where such a specification is not available, the specification approved by the Architect and the Engineer.

ix) "Approved" means approved in writing including subsequent written confirmation of previous verbal approval and "approval" means approval in writing including as aforesaid.

x) 'Market rate' means the rate as prevailing in the market and recommended by the Engineer and Architect and as approved by the Employer on the basis of cost of materials, labour, plant etc inclusive of any tax, duty, octroi etc. at the time of execution of work.

xi) "The Schedule of Quantities" or "Priced Schedule of Quantities" shall mean the schedule (or bill) of quantities as specified and forming part of this contract.

xii) "Act of Insolvency" shall mean any act such as defined by the Presidency Towns Insolvency Act or in Provincial Insolvency Act or any amending statutes.

2. Eligibility Criteria: The contractor should be a class II/III cpwd / kpwd registered individual /firm /company with a minimum of 5 years’ experience in the field.

3. SCOPE
The work consists of Civil works for Ground floor, Indian Academy of Sciences, Bengaluru in accordance with the "drawings" and "Schedule of Quantities". The civil, electrical, sanitary, plumbing, construction of internal road and pathways etc., are within the scope of this tender. It includes furnishing all materials, labor, tools and equipment and management necessary for and incidental to the construction and completion of the work. All work, during its progress and upon completion, shall confirm to the lines, elevations and grades as shown on the drawings furnished by the Employer/Architects/Consultants. Should any detail essential for efficient completion of the work be omitted from the drawings and specifications, it shall be the responsibility of the contractor to inform the Employer/Architects/Consultants and to furnish and install such detail with the Employer's/Architects/Consultants' concurrence, so that upon completion of the proposed work the same will be acceptable and ready for use.

Employer/Architects/Consultants may in their absolute discretion issue further drawings and/or written instruction, details, directions and explanations, which are, hereafter collectively referred to as "The Employer’s instructions" in regard to:

a) The variation or modification of the design quality or quantity of works or the addition or omission or substitution of any work.

Any discrepancy in the drawings or between the schedule of quantities and/or drawings and/or specification.
c) The removal from the site of any defective material brought thereon by the contractor and the substitution of any other material thereof.

d) The demolition removal and/or re-execution of any work executed by the contractor/s.

e) The dismissal from the work of any persons employed there upon.

f) The opening up for inspection of any work covered up.

g) The rectification and making good of any defects under clauses hereinafter mentioned and those arising during the maintenance period (retention period).

The Contractor shall forswear comply with and duly execute any work comprised in such Employer's/Architects' Consultants' instructions, provided always that verbal instructions, directions and explanations given to the contractors or his representative upon the works by the Employer/Architects/Consultants shall if involves a variation, be confirmed in writing to the contract/s within a day. No works, for which rates are not specifically mentioned in the priced schedule of quantities, shall be taken up without written permission of the Employer/Architects. Rates of items not mentioned in the priced schedule of quantities shall be fixed by the Employer in consultation with the Architects as provided in Clause "variation".

Regarding all factory made products for which ISI marked products are available, only products bearing ISI marking shall be used in the work.

4. TENDERER SHALL VISIT THE SITE

Intending tenderer shall visit the site and make himself thoroughly acquainted with the local site condition, nature and requirements of the works, facilities of transport condition, effective labour and materials, access and storage for materials and removal of rubbish. The tenderer shall provide in their tender for cost of carriage, freight and other charges as also for any special difficulties, including police restriction for transport etc., for proper execution of work as indicated in the drawings. The successful tenderer will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site condition which existed before the commencement of the work or which in the opinion of the Employer/Architects might be deemed to have reasonably been inferred to be so existing before commencement of work.

5. TENDERS

The entire set of tender papers issued to the tenderer should be submitted fully priced and also signed at appropriate places as detailed in the Instructions to Tenderers.

No modifications, writings or corrections can be made in the tender papers by the tenderer, but may at his option offer his comments or modifications in a separate sheet of paper attached to the original tender papers.

The Employer reserves the right to reject the lowest or any tender and also to discharge any or all of the tenders for each section or to split up and distribute any item of work to any specialist firm or firms, without assigning any reason.

The tenderers should note that the tender is strictly on the item rate basis and their attention is drawn to ensure that the rates for each and every item should be correct, workable and self-supporting. If called
upon by the Employer/Architects/Consultants detailed analysis of any or all the rates shall be submitted. The Employer/Architects shall not be bound to recognize the contractor’s analysis.

The works will be paid for as “measured work” on the basis of actual work done on item rate basis and not as “lump sum” contract.

All items of work described in the schedule of quantities are to be deemed and paid as complete works in all respects and details including preparatory and finishing works involved, directly, related to and reasonably detectable from the drawings, specifications and schedule of quantities and no further extra charges will be allowed in this connection. In the case of lump-sum charges in the tender in respect of any item of works, the payment of such items of work will be made for the actual work done on the basis of lump-sum rates as will be assessed to be payable by the Employer/Architects.

The Employer has power to add/to omit any work as shown in drawings or described in specifications or included in schedule of quantities and intimate the same in writing but no addition, omission or variation shall be made by the contractor without authorization from the Employer. No variation shall vitiate the contract.

6. AGREEMENT

The successful contractor may be required to sign an agreement as may be drawn up to suit local conditions and shall pay for all stamps and legal expenses, incidental thereto.

7. PERMITS AND LICENCES

Permits and Licenses for release of materials, which are under Government control, shall be arranged by the contractor. The Employer may render necessary assistance, sign any forms or applications that may be necessary but shall not be responsible for actual procurement or for any delay in procurement.

It may be clearly understood that no compensation or additional charges can be claimed by the contractor for non receipt of any controlled materials in due time on this account or according to his own requirements.

The contractor shall at his own cost arrange for storage shed adequate for taking delivery and storing of the quantity of controlled materials released by the authorities or supplied by the Employer. The costs of storing, transporting, etc., of all materials including those under Government control are to be included by the tenderer in his quoted rates.

The Employer/Architects/Consultants shall be indemnified against all Government or legal actions for theft or misuse of controlled materials in the custody of the contractor.

8. GOVERNMENT AND LOCAL RULES

The contractor shall confirm to the provisions of all local Bye-laws and Acts relating to the work and to the Regulations etc., of the Government and Local Authorities and of any company with whose system the structure is proposed to be connected. The contractor shall give all notices required by said Act, Rules, Regulations and Bye-laws etc., and pay all fees payable to such authority/authorities for execution of the work involved. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities for licenses, fees for footpath encroachment and restorations etc., and shall indemnify the Employer against such liabilities and shall defend all actions arising from such claims or liabilities.
9. TAXES AND DUTIES
The tenderers must include in their tender prices quoted for all duties royalties, cess and GST or any other taxes or local charges if applicable. No extra claim on this account will in any case be entertained.

10. PROVISIONAL SUMS (P S)
All provisional sums described in the schedule of quantities as P S shall be exclusively allotted to the purchase of materials and not for any handling and fixing to be done by the contractor. Such costs of handling and fixing with profit (including transport charges if required) shall be separately included in the contract price as described in the schedule of quantities. The disposal of the amounts covered under this head will be absolutely at the discretion of the Employer. Contractor is to make payment for these materials to the suppliers on certificate or order issued by the Employer/ Architects/Consultants and realize them through his bills from the Employer.

11. QUANTITY OF WORK TO BE EXECUTED
The quantities shown in the schedule of quantities are only approximate and are intended to cover the works indicated in the drawings but the Employer reserves the right to execute only a part or the whole or any excess thereof without assigning any reason therefore.

12. OTHER PERSONS ENGAGED BY THE EMPLOYER
The Employer reserves the right to execute any part of the work included in this contract or any work, which is not included in this contract by other Agency or persons, and contractor shall allow all reasonable facilities and use of his scaffolding for the execution of such work. The main contractor shall extend all cooperation in this regard.

13. EARNEST MONEY, RETENTION MONEY & SECURITY DEPOSIT
The tenderer will have to deposit the amount specified in the Tender Notice in the form of Bank Draft drawn in favour of Indian Academy of Sciences Bengaluru at the time of submission of tender as Earnest Money. The Employer is not liable to pay any interest on the Earnest Money. The Earnest money of the unsuccessful tenderers will be refunded without any interest soon after the decision to award the work is taken or after the expiry of the validity period of the tender.

Apart from the initial Earnest money deposit (EMD) made as above, retention money shall be deducted from progressive running bills @ 5% of the gross value of each running bill.

The retention amount will be refunded to the contractor, after deducting any sum due from the contractor on any account under this contract, 14 (fourteen) days after the end of defects liability period provided he has satisfactorily carried out all the work and attended to all defects in accordance with the conditions of the contract. No interest is allowed on retention money.

The contractor should furnish the security deposit in the form of a bank guarantee for a sum of Rs. 3, 00,000.00 (Three lakhs) from a nationalized bank. The bank guarantee thus provided to the Employer shall be released by the Employer after satisfactory completion of the work by the contractor.

14. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY
The contractor shall provide everything necessary for the proper execution of the work according to the intent and meaning of the drawings, schedule of quantities and specifications taken together whether the same are or may not be particularly shown or described therein provided that the same can reasonably
be inferred therefrom and if the contractor finds any discrepancies therein he shall immediately and in writing, refer the same to the Employer/Architects whose decision shall be final and binding. The contractor shall provide himself for ground and fresh water for carrying out of the works at his own cost. The Employer shall on no account be responsible for the expenses incurred by the contractor for hired ground or fresh water obtained from elsewhere.

The rates quoted against individual items will be inclusive of everything necessary to complete the said items of work within the contemplation of the contract, and beyond the unit price no extra payment will be allowed for incidental or contingent work, labour and/or materials inclusive of all taxes and duties whatsoever except for specific items, if any, stipulated in the tender documents.

The contractor shall supply, fix and maintain at his own cost, for the execution of any work, all tools, tackle, machineries and equipments and all the necessary centering, scaffolding, staging, planking, timbering, strutting, shoring, pumping, fencing, boarding, watching and lighting by night as well as by day required not only for the proper execution and protection of the said work but also for the protection of the public and safety of any adjacent roads, streets, walls, houses, building, all other erections, matters and things and the contractor shall take down and remove any or all such centering, scaffolding, planking, timbering, strutting, shorting etc., as occasion shall be required or when ordered so to do, and shall fully reinstate and make good all matters and things disturbed during the execution of works to the satisfaction of the Employer/Architects/consultants.

The contractor shall at all times give access to workers employed by the Employer or any men employed on the buildings and to provide such parties with proper sufficient and if required, special scaffolding, hoists and ladders and provide them with water and lighting and leave or make any holes, grooves etc., in any work, where directed by the Employer as may be required to enable such workmen to lay or fix pipes, electrical wiring, special fittings etc. The quoted rates of the tenderers shall accordingly include all these above mentioned contingent works.

15. TIME OF COMPLETION, EXTENSION OF TIME & PROGRESS CHART

15.1 Time of completion: The entire work is to be completed in all respects within the stipulated period stated in the Appendix. The work shall deemed to be commenced on the fourteenth day from the date of acceptance letter of date of handing over of site, whichever is later. Time is the essence of the contract and shall be strictly observed by the contractor.

15.2 Extension of Time: If in the opinion of the Architect/Engineer the works were delayed for reasons beyond control of the contractor, the Architect/Engineer may grant a fair and reasonable extension of time with the Employer's prior approval for completion of the contract works. Request for extension of time, to be eligible for consideration, shall be made by the Contractor in writing within three days of the happening of the event causing delay to the Engineer/Employer. The Contractor shall also, if practicable, indicate in such a request the total period for which extension is desired, overlapping period, if any, with earlier events causing delays, net extension required.

In such case, the Employer may give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the contractor by the Employer in writing, within 2 days of the date of such request. Non-application by the contractor for extension of time within time schedule or happening of an event which will require extension of time will render the contractor non eligible for seeking extension of time at later date & this shall be binding to the contractor. While granting extension, the Architect/Engineer with the approval of the Employer shall notify the contractor the period of time which will not qualify for levy of liquidated damages.
For the period in excess of original stipulated period and authorized extension of time (i.e. period not qualifying for levy of liquidated damages), granted by the Employer, the provision of liquidated damages as stated under Clause 15 hereof will become applicable. However, the contract shall remain in force even for the period beyond the due date of completion irrespective whether the extension is granted or not.

15.3 Progress of work: During the period of construction the contractor shall maintain proportionate progress on the basis of a Programme Chart submitted by the contractor immediately before commencement of work and agreed to by the Employer/ Architects/Consultants. Contractor should also include planning for procurement of scarce material well in advance and reflect the same in the programme chart so that there is no delay in completion of the project.

16. LIQUIDATED DAMAGES

If the Contractor fails to complete the works within the time for completion stated in the Appendix/elsewhere or within any extended time under Clause 14 hereof, the Contractor shall pay the Employer the sum at the rate of 1%(one per cent) of the Contract Value per week subject to a limit of 10%(ten percent) of the Contract Value as "Liquidated damages" for the period during which the said works shall so remain incomplete or the Employer may deduct aforesaid sum towards such damages from any monies due to the Contractor.

17. TOOLS, STORAGE OF MATERIALS, PROTECTIVE WORKS AND SITE OFFICE REQUIREMENTS

The contractor may provide, fix up and maintain in an approved position, proper office accommodation for the contractor's representative and staff at his own cost. Such offices shall be open at reasonable hours to receive instruction notices or communications and clear away on completion of the works and make good all work disturbed.

All drawings maintained on the site are to be carefully mounted on boards of appropriate size and covered with a coat of approved varnish. They are to be protected from ravages of termites, ants, and other insects.

The contractor shall provide at his own cost all artificial light required for the work and to enable other contractors and sub-contractors to complete the work within the specified time.

Every precaution shall be taken by the contractor to prevent the breeding of mosquitoes on the works during the construction, and all receptacles, cisterns, water tanks etc., used for the storage of water, must be suitably protected against breeding of mosquitoes. The contractor shall indemnify the Employer against any breach of rules in respect of anti-material measures.

The contractor shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed in or upon any boarding, gantry, building structure other than those approved by the Employer.

Protective Measures: The contractor from the time of being placed in possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays, on round the clock basis and no extra will be paid by the Employer for such services.

The contractor shall indemnify the Employer against any possible damage to the building, roads or members of the public in course of execution of the work.
The contractor shall provide necessary temporary enclosures, gates, entrances, etc., for the protection of the work and materials and for altering and adopting the same as may be required and removing on completion of the works and making good all works disturbed.

**Storage of materials:** Store all the materials in the basement of council complex which will be made available by the Employer.

**Tools:** Theodolite levels, prismatic compass, chain, steel and metallic tapes and all other surveying instruments found necessary for the works shall be provided by the contractor for the due performance of this contract as instructed by the Site Engineer.

All measuring tapes shall be of steel and suitable scaffolding and ladders that may be required for safely taking measurement and shall be supplied by the contractor.

The mistries and the supervisor on the works shall carry with them necessary instruments like a steel tape, a measuring tape of 30 meters, a spirit level, a plumb bob and a square and shall check the work to ensure that the work is being done according to the drawing and specifications. The Site Engineer will use any or all measuring instruments or tools belonging to the contractors as he chooses for checking the works executed or being executed on the contract.

The contractor should cover in his rates for making provisions for all reasonable facilities for the use of his scaffolding, tools and plant etc., by subcontractors for their work.

**18. NOTICE AND PATENTS OF APPROPRIATE AUTHORITY AND OWNERS**

The contractor shall conform to the provisions of any Acts of the Legislature relating to the work, and to the Regulations and Bye-laws of any authorities, and/or any water, lighting and other companies, and/or authorities with whose systems the structures were proposed to have connection and shall before making any variations from the drawings or specification that may be associated to so conform, give the Employer/Architects/Consultants written notices specifying the variations proposed to be made and the reasons for making them and apply for instruction thereon. The Employer/Architects/Consultants on receipt of such intimation shall give a decision within a reasonable time.

The contractor/s shall arrange to give all notices required for by the said Acts, Regulations or Bye-laws to be given to any authority, and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the work and lodge the receipts with the Employer.

The contractor shall indemnify the Employer against all claims in respect of patent rights, royalties, and damages to buildings, roads or members of public in course of execution of work and shall defend all actions arising from such claims and shall keep the Employer saved harmless and indemnified in all respects from such actions, costs and expenses.

**19. CLEARING SITE AND SETTING OUT WORKS**

The site shown on the plan shall be cleared of all obstructions, loose stone, and materials rubbish of all kinds. All holes or hollows whether originally existing or produced by removal of loose stone or materials shall be carefully filled up with earth well rammed and leveled off as directed at his own cost.

The contractor shall set out the works and shall be responsible for the true and perfect setting out of the work and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time, any error shall appear during the progress of any part of the work, the contractor shall at his own expenses rectify such error, if called upon to the satisfaction of the Employer. The contractor shall
further set out the works to the alternative positions at the site until one is finally approved and the rates quoted in his tender should include for this and no extra on this account will be entertained.

20. BENCHES

The contractor is to construct and maintain proper benches of all the main walls, in order that the lines and levels may be accurately checked at all times.

21. CONTRACTOR IMMEDIATELY TO REMOVE ALL OFFENSIVE MATTERS

All soil, filth or other matters of any offensive nature taken out of any trench, sewer, drain, cesspool or other place shall not be deposited on the surface but shall be at once carted away by the contractor to the place provided by him.

22. ACCESS

Any authorized representative of the Employer shall at all reasonable times have free access to the works and/or to the workshop, factories or other places where materials are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained, and the contractor shall give every facility to the Employer or their representatives necessary for inspection and examination and test of the materials and workmanship. Except the representatives of the Employer no person shall be allowed at any time without the written permission of the Employer.

23. MATERIALS, WORKMANSHIP, SAMPLES, TESTING OF MATERIALS

All the works specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and approved quality of the respective kinds in accordance with the particulars contained in and implied by the specifications and as represented by the drawings or according to such other additional particulars, and instructions as may from time to time be given by the Employer/Architects/Consultants during the execution of the work, and to his entire satisfaction.

Whenever required by the Employer /Architects/ Consultants the contractor shall have to carry out tests on materials and workmanship in approved materials testing laboratories or as prescribed by the Employer/Architects/ Consultants at his own cost to prove that the materials etc., under test conform to the relevant I.S. Standards or as specified in the specifications. The necessary charges for preparation of mould (in case of concrete cube) and test samples transporting, testing etc., shall have to be borne by the contractor. No extra payment on this account would in any case be entertained.

All the materials (except where otherwise described) stores and equipment required for the full performance of the work under the contract must be provided through normal channels and must include charge for import duties, sales tax, octroi and other charges and must be the best of their kind available and the contractor/s must be entirely responsible for the proper and efficient carrying out of the work. The work must be done in the best workman like manner. Samples of all materials to be used must be submitted to the Employer/Architects/Consultants when so directed by the Engineer/ Architects/Consultants and written approval from Employer/Architects/Consultants must be obtained prior to placement of order.

During the inclement weather the contractor shall suspend concreting and plastering for such time as the Employer/Architects/Consultants may direct and shall protect from injury all work when in course
of execution. Any damage (during constructions) to any part of the work for any reasons due to rain, storm, or neglect of contractor shall be rectified by the contractor in an approved manner at no extra cost.

Should the work be suspended by reason of rain, strike, lockouts or any other cause, the contractor shall take all precautions necessary for the protection of work and at his own expenses shall make good any damage arising from any of these causes.

The contractor shall cover up and protect from damage, from any cause, all end work and supply all temporary doors, protection to windows, and any other requisite protection for the execution of the work whether by himself or special tradesmen or subcontractor and any damage caused must be made good by the contractor at his own expenses.

24. REMOVAL OF IMPROPER WORK

The Employer shall during the progress of the work have power to order in writing from time the removal from the work within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Employer/Architects/Consultants are not in accordance with specifications of instruction, the substitution or proper re-execution of any work executed with materials or workmanship not in accordance with the drawings and specifications or instructions. In case the contractor refuses to comply with the order the Employer shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental thereto as certified by the Employer/Architects/Consultants shall be borne by the contractor or may be deducted from any money due to or that may become due to the contractor. No certificate, which may be given by the Architects, shall relieve the contractor from his liability in respect of unsound work or bad materials.

25. SITE ENGINEER

The term ‘Site Engineer’ shall mean the person appointed and paid by the Employer/Architect to superintend the work. The contractor shall afford the Site Engineer every facility and assistance for examining the works and materials and for checking and measuring work and materials. The Site Engineer shall have no power to revoke, alter, enlarge or relax any requirements of the contract or to sanction any day work, additions, alterations, deviations or omissions or any extra work whatever, except in so far as such authority may be specially conferred by a written order of the Employer.

The Site Engineer shall have power to give notice to the contractor or to his foreman, of non-approval of any work or materials and such work shall be suspended or the use of such materials shall be discontinued until the decision of the Employer is obtained. The work will from time to time be examined by the Architects, Engineer from the Premises Department of the Employer and the Site Engineer. But such examination shall not in any way exonerate the contractor from the obligation to remedy any defects, which may be found to exist at any stage of the work or after the same is complete. Subject to the limitations of this clause the contractor shall take instructions only from the Architects/Employer/Consultants.

26. OFFICE ACCOMMODATION FOR THE SITE ENGINEER

The Employer will provide office space of the site engineer.
The contractor shall employ technically qualified and competent supervisors for the work who shall be available (by turn) throughout the working hours to receive and comply with instructions of the Employer/Architects/Consultants. The contractor shall engage at least one experienced Engineer as site-in-charge for execution of the work. The contractor shall employ in connection with the work, persons having the appropriate skill or ability to perform their job efficiently.

No labourer below the age of Eighteen years and who is not an Indian National shall be employed on the work.

Any labourer supplied by the contractor to be engaged on the work on day-work basis either wholly or partly under the direct order or control of the Employer or his representative shall be deemed to be a person employed by the contractor.

The contractor shall comply with the provisions of all labour legislation including the requirements of
a) The Payment of Wages Act
b) Employer’s Liability Act
c) Workmen’s Compensation Act
e) Apprentices Act 1981
f) Any other Act or enactment relating thereto and rules framed there under from time to time.
g) Indian Electricity Act (IE Act) and follow the rules.

The contractor shall keep the Employer saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the Employer in connection with any claim that may be made by any workmen.

The contractor shall comply at his own cost with the order of requirement of any Health Officer of the State or any local authority or of the Employer regarding the maintenance of proper environmental sanitation of the area where the contractor’s labourers are housed or accommodated, for the prevention of small pox, cholera, plague, typhoid, malaria and other contagious diseases. The contractor shall provide, maintain and keep in good sanitary accommodation and provide facilities for pure drinking water at all times of the use of men engaged on the works and shall remove and clear away the same on completion of the works. Adequate precautions shall be taken by the contractor to prevent nuisance of any kind on the works or the lands adjoining the same.

The contractor shall arrange to provide first aid treatment to the labourers engaged on the works. He shall within 24 hours of the occurrence of any accident at or about the site or in connection with execution of the works, report such accident to the Employer and also to the competent authority where such report is required by law.

28. DISMISSAL OF WORKMAN

The contractor shall on the request of the Employer immediately dismiss from works any person employed thereon by him, who may in the opinion of the Employer be unsuitable or incompetent or who may misconduct himself. Such discharges shall not be the basis of any claim for compensation or damages against the employer or any of their officer or employee.

29. ASSIGNMENT

The whole of the works included in the contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign or sublet the contract or any a part, share or interest thereof, shall take a new partner, without written consent of the Employer and no subletting shall
relieve the contractor from the full and entire responsibility of the contract or from active superintendence of the work during their progress.

30. DAMAGE TO PERSONS AND PROPERTY INSURANCE ETC.

The contractor shall be responsible for all injury to the work or workmen, persons, animals or things and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of himself or of any sub-contractor or of any of his or a sub-contractor's employees, whether such injury or damage arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of this contract. The clause shall be held to include inter-alia, any damage to buildings whether immediately adjacent or otherwise, and any damage to roads, streets, footpaths or ways as well as damages caused to the buildings and the works forming the subject of this contract by rain, wind or other inclemency of the weather. The contractor shall indemnify the Employer and hold harmless in respect of all and any expenses arising from any such injury or damages to persons or property as aforesaid and also in respect of any claim made in respect of injury or damages under any acts of compensation or damage consequent upon such claim.

The contractor shall reinstate all damage of every sort mentioned in this clause, so as to deliver the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damages to the property or third parties.

The contractor shall effect the insurance necessary and indemnify the Employer entirely from all responsibility in this respect. The insurance must be placed with a company approved by the Employer and must be effected jointly in the name of the contractor and the Employer and the policy lodged with the latter. The scope of insurance is to include damage or loss to the works itself till this is made over in a complete state. Insurance is compulsory and must be effected from the very initial stage. The contractor shall also be responsible for anything, which may be excluded from damage to any property arising out of incidents, negligence or defective carrying out of this contract.

The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensations, costs, charges and expenses arising or accruing from or in respect of any such claim or damages from any sums due or to become due to the contractor.

31. INSURANCE

The Contractor shall be responsible for all injury or damage to persons, employees, labourers, animals or things, and for all damage to property, which may arise from any factor/omission on the part of the Contractor or any Sub-Contractor or any of their employees. The liabilities under this Clause shall cover also, inter-alia any damage to roads, streets, footpaths, and bridges as well as damage caused to the building and other structures and works forming the subject matter of this contract. The Contractor shall also be responsible for any damage caused to the Buildings and other structures and works forming the subject matter of this contract due to rain, wind, fire, flood or high tide or other inclemency of weather.

The Contractor shall indemnify and keep indemnified the Employer and hold him harmless in respect of all and any loss and expenses arising from any such injury or damage to persons or property as aforesaid and also against any claim made in respect of injury or damage, whether under any statute or otherwise and also in respect of any award or compensation or damage consequent upon such claims. The Contractor shall, at his own expense, effect and maintain till the Defects Liability Period is over, with an insurance company approved by the Employer, Contractors All Risks Policy for Insurance for the full amount of the contract including earthquake risk in the joint names of the Employer and the Contractor (the name of the former being placed first in the policy.) with Employer as beneficiary.
against all risk as per the standard all risk policy for Contractors and deposit such policy or policies with the Employer before commencing the works.

The Contractor shall reinstate all damage of every sort mentioned in this clause so as to do delivery of the whole of the works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to property or third parties.

The Contractor shall also indemnify and keep indemnified the Employer against all claims which may be made against the Employer by any persons in respect of the works or in consequence thereof and shall at his own expense, effect and maintain until the virtual completion of the Contract, with an Insurance Company approved by the Employer a third party insurance policy in the joint names of the Employer and the Contractor (name of the former being placed first in the policy) against such risks and deposit such policy or policies before commencement of the works. The minimum limit of the coverage under the policy shall be Rs.5.0 lakhs per person for any one accident or occurrence and Rs.20.0 lakhs in respect of damage to property for any one accident or occurrence. The Contractor shall also indemnify the Employer against all claims which may be made upon the Employer, whether under the Workmen's Compensation Act or any other statute in force, during the currency of this contract or at Common Law in respect of any employee of the Contractor or of sub-Contractor and shall be at his own expense effect and maintain until the virtual completion of the Contract, with an Insurance Company, approved by the

Employer, a policy of Insurance against such risks and deposit such policy or policies with the Employer from time to time during the currency of this contract.

In default of the Contractor insuring as provided above, the Employer may also insure and may deduct the premiums paid plus the administrative fees of 15% of the sum payable to insuring agency as departmental charges from any money due or which may become due to the contractor.

The Contractor shall be responsible for any liability which may not be covered by the Insurance Policies referred to above and also for all other damages to any person, animal or defective carrying out of this contract, whatever, maybe the reasons due to which the damage shall have been caused.

The Contractor shall also indemnify and keep indemnified the Employer against all and any costs, charges expenses arising out of any claim or proceedings relating to the works and also in respect of any award of damage or compensation arising there from.

Without prejudice to the other rights of the Employer against Contractors in respect of such default, the Employer shall be entitled to deduct the sum paid to the Insurance Company with 15% extra as departmental charges from any sums payable to the Contractor the amount of any damages, compensation costs, charges and other expenses paid by the Employer and which are payable by the Contractor under this clause.

The Contractor shall upon settlement by the Insurer of any claim made against the insurer pursuant to a policy taken under this clause, proceed with due diligence to rebuild or repair the works destroyed or damaged. In this event all the monies received from the Insurer in respect of such damage shall be paid to the Contractor and the Contractor shall not be entitled to any further payment in respect of the expenditure incurred for rebuilding or repairing the materials or goods destroyed or damaged.

The Contractor, in case of re-building or reinstatement after damage shall be entitled to such extension of time for completion as the ENGINEER may deem fit, but shall, however, not be entitled to reimbursement by the Employer of any shortfall or deficiency in the amount paid by the insurer in settlement of any claim arising as set out herein.

Without prejudice to his liability under this clause, the Contractor shall also cause all sub-Contractors to effect for their respective portions of the works, similar policies of insurance in accordance with the provisions of this clause and shall produce or cause to produce to the Employer such policies. The Contractor shall not permit a sub-Contractor to commence work at the site unless the said insurance policies are submitted. In the event of failure of the sub-contractor to commence work at the site, the contractor shall be responsible for any claim or damage attributable to the said sub-Contractor.
32. ACCOUNTS RECEIPTS & VOUCHERS

The contractor shall, upon the request of the Employer furnish them with all the invoices, accounts, receipts and other vouchers that they may require in connection with the works under this contract, if the contractor shall use materials less than what he is required under the contract, the value of the difference in the quantity of the materials he was required to use and that he actually used shall be deducted from his dues. The decision of the Employer shall be final and binding on the contractor as to the amount of materials the contractor is required to use for any work under this contract.

33. MEASUREMENTS

Before taking any measurement of any work the Site Engineer or a subordinate deputed by him shall give reasonable notice to the contractor. If the contractor fails to attend at the measurements after such notice or fails to counter sign or to record the difference within a week from the date of measurement in the manner required by the Site Engineer then in any such event the measurements taken by the Site Engineer or by the subordinate deputed by him as the case may be is final and binding on the contractor and the contractor shall have no right to dispute the same.

34. PAYMENTS

All bills shall be prepared by the contractor in the form prescribed by the Employer/Architects. One interim bill shall be prepared after 10 days subject to minimum value for interim certificate as stated in the Appendix. The bill in proper forms must be duly accompanied by detailed measurements in support of the quantities of work done and must show deductions for all previous payments, retention money, etc.

The Employer/Architects shall issue a certificate after due scrutiny of the contractor’s bill stating the amount due to the contractor from the Employer and the contractor shall be entitled to payment thereof, within the period of honouring certificate stated in the Appendix.

The amount stated in an interim certificate shall be the value of work properly executed and material advance up to 75% of invoiced value of materials brought to site for permanent incorporation into the work after preparation of the previous bill less the amount to be retained by the Employer as retention money vide clause 12 of these conditions. Advance paid for materials already incorporated in the work shall be recovered.

The material advance shall be admissible only on materials, which in the opinion of the Architect, are imperishable in nature, are genuinely required for use in the work in the near future, are of the required quality and are adequately protected against damage, theft, loss etc.

If the Employer has supplied any materials or goods to the contractor, the cost of any such materials or goods will be progressively deducted from the amount due to contractor in accordance with the quantities consumed in the work.

All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed, and shall not preclude the requiring of bad, unsound, and imperfect or unskilled 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 part thereof in any respect or the accruing of any claim, nor shall it conclude, determine or affect in any way the power of the Employer 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.
34.1 FINAL PAYMENT

The final bill shall be submitted by the contractor within a week of the date fixed for completion of the work or of the date of certificate of completion furnished by the Site Engineer and payment shall be made within a week for such of those items and quantities that in the opinion of the Employer, are undisputed.

The final bill shall be accompanied by a certificate of completion from the Employer/Architects. Payments of final bill shall be made after deduction of Retention Money as specified in clause 12 of these conditions, which sum shall be refunded as stipulated in Clause 12. The acceptance of payment of the final bill by the contractor would indicate that he will have no further claim in respect of the work executed.

35. VARIATION / DEVIATION

The Employer shall have powers to order additional /nontendered items to modify the tendered items, to vary the quantities of tendered items and not to execute certain items. All such orders shall be in writing.

The rate or price of all such additional items/non-tendered/modified items will be worked out on the basis of rates quoted for similar items in the contract wherever existing or on engineering rate analysis based on prevalent fair price of labour, material and other components as required. The tender rates shall hold good for any increase or decrease in the tendered quantities upto an excess of 25%. For quantities beyond 25% excess, the rate may be reviewed based on prevalent fair price of labour, materials and other components. The contractor shall submit detailed analysis of rates and supporting documents to the Employer/Architect within 14 days of being directed to execute such items/quantities and the Employer/Architect shall assess the analysis and approve reasonable and justified rate. No such additional or modified items or variation in quantities (except variation in quantities as per approved drawings) shall be executed by the Contractor without prior written approval of the Employer/Architect.

36. SUBSTITUTION

Should the contractor desire to substitute any materials and workmanship, he/they must obtain the approval of the Employer/Architects in writing for any such substitution well in advance. For materials designated in the Schedule of Quantities and specification indefinitely by such term as “Equal”, “Equivalent” or “Other approved” etc. specific approval of the Employer/Architects shall be obtained in writing. All such substitution may be subject to suitable price adjustment if considered necessary by the Architect/ Employer.

37. COMPLETION OF WORK

On completion of the work the contractor shall clean all windows, doors, fittings, fixtures etc of all paint/polish/distemper splashes/dirt/dust etc, if necessary all hardware, clean inside and outside, all floor, stair-cases, and every part of the building and the surroundings. The whole of the work will be thoroughly inspected by the contractor and deficiencies and defects set right. On completion of such inspection the contractor shall inform the Employer in writing that he has completed the work and it is ready for inspection.

On receipt of such written intimation from the contractor, the Employer/Architect shall arrange to inspect the work and certify completion if the work has been completed satisfactorily. If not, the Employer/Architect shall inform the Contractor the deficiencies/defects in the work and the contractor shall attend to them properly and again intimate the Employer/Architect for further inspection.
The work shall not be considered as complete until the Employer/Architects/Consultants have certified in writing that it has been completed satisfactorily without any apparent defects and the Defects Liability Period shall commence from the date of such certificate. No such certificates shall be issued until the contractor clears away and removes from the site all constructional plant, surplus materials, rubbish temporary works of every kind and leaves the whole of the site and the works clean and in a workman like condition to the satisfaction of the Employer/Architects.

38. DEFECTS AFTER COMPLETION

The contractor shall make good at his own cost and to the satisfaction of the Employer all defects, shrinkage, settlements or other faults, which may appear within 12 months after completion of the work. In default the Employer may employ and pay other persons to amend and make good such damages, losses and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor and such damages, loss and expenses shall be recoverable from him by the Employer or may be deducted by the employer, in lieu of such amending and making good by the contractor a sum equivalent to the cost of amending such work and in the event of the amount retained being insufficient, recover that balance from the contractor form the amount retained under clause No. 12 together with any expenses the Employer may have incurred in connection therewith.

39. CONCEALED WORK

The contractor shall give due notice to the Employer/Architects whenever any work is to be buried in the earth, concrete or in the bodies of walls or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such burial, in default whereof the same shall, at the opinion of the Employer/Architect be either opened up for measurement at the contractor's expense or no payment may be made for such materials. Should any dispute or differences arise after the execution of any work as to measurements etc., or other matters which cannot be conveniently tested or checked, the notes of the Employer/Architects shall be accepted as correct and binding on the contractor.

40. ESCALATION

The rate quoted shall be firm throughout the tenure of the contract (including extension of time, if any, granted) and will not be subject to any fluctuation due to increase in cost of materials, labour, sales tax, octroi, etc.

PRICE VARIATION ADJUSTMENT (PVA): The contract price shall be adjusted for the increase or decrease in cost of cement, steel and POL in accordance with the following principles:

1. The price adjustment shall apply for the work done up to the stipulated date of completion, including authorized extension of time granted to the contractor without levy of compensation, and shall not apply to the work carried out beyond such period for reasons attributable to the contractor.

2. The price adjustment shall be applicable only for the civil works and shall not be applicable for the electrical works.

A price adjustment shall be made during each quarter based on the following formulae.
41. IDLE LABOUR

Whatever the reasons may be, no claim for idle labour, additional establishment cost of hire and labour charges of tools and plants would be entertained under any circumstances.

42. SUSPENSION

If the contractor except on account of any legal restraint upon the Employer preventing the continuance of the work or in the opinion of the Employer shall neglect or fail to proceed with due diligence in the performance of his part of the contract or if he shall more than once make default, the Employer shall have the power to give notice in writing to the contractor requiring the work be proceeded within a reasonable manner and with reasonable dispatch, such notice purport to be a notice under this clause.

After such notice shall have been given the contractor shall not be at liberty to remove from the site of the works or from any ground contiguous thereto any plant or materials to subsist from the date of such notice being given until the notice shall have been compiled with. If the contractor shall fall for 7 (seven) days after such notice has been given to proceed with the works as therein prescribe, the Employer may proceed as provided in clause 43 (Termination of Contract by Employer).

43. TERMINATION OF CONTRACT BY EMPLOYER

If the contractor being a company go into liquidation whether voluntary or compulsory or being a firm shall be dissolved or being an individual shall be adjudicated insolvent or shall make an assignment or a composition for the benefit of the greater part, in number of amount of his creditors or shall enter into a Deed or arrangement with his creditors, or if the Official Assignee in insolvency, or the Receiver of the contractor in insolvent, shall repudiate the contract, or if a Receiver of the contractor's firm appointed by the court shall be unable, within fourteen days after notice to him requiring him to do so, to show to the reasonable satisfaction of the employer that he is able to carry out and fulfill the contract, and if so required by the employer to give reasonable security therefore, or if the contractor shall suffer execution to be issued, or shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the contractor, or shall assign, charge or encumber this contract or any payments due or which may become due to the contractor there under, or shall neglect or fail to observe and perform all or any of the acts, matters or things by this contract to be observed and performed by the contractor within three clear days after the notice shall have been given to the contractor in manner hereinafter mentioned requiring the contractor to observe or perform the same or shall use improper materials or workmanship in carrying on the works, or shall in the opinion of the employer not exercise such due diligence and make such due progress as would enable the work to be completed within due time agreed upon, and shall fail to proceed to the satisfaction of the employer after three clear days notice requiring the contractor so to do shall have been given to the contractor as hereinafter mentioned, or shall abandon the contract, then and in any of the said cases, the Academy may not withstanding previous waiver, determine the contract by a notice in writing to the effect as hereinafter mentioned, but without thereby effecting the powers of the contract the whole of which shall continue in force as fully as if the contract had not been so determined and as if the works subsequently executed had been executed by or on behalf of the contractor (without thereby creating any trust in favor of the contractor). Further the employer or his agent, or servants, may enter upon and take possession of the work and all plants, tools, scaffolding, sheds, machinery, steam and other power, utensils and materials lying upon premises or the adjoining lands or roads and sell the same as his own property or, may employ the same by means of his own servants and workmen in carrying on and completing the works or by employing any other contractors or other persons or person to complete the works, and the contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other contractor or other persons or person employed from completing and finishing the work. When the works shall be completed, or as soon thereafter as conveniently may be, the employer
shall give notice in writing to the contractor to remove his surplus materials and plants and, should the contractor fail to do so within a period of 14 days after receipt by him, the employer may sell the same by Public Auction and shall give credit to the contractor for the amount so realized. Any expenses or losses incurred by the employer in getting the works carried out by other persons or contractors shall be adjusted against the amount payable to the contractor by way of selling his tools and plants or due on account of work carried out by the contractor prior to engaging other persons or contractors or by revoking the Bank guarantee. (security deposit).

44. ARBITRATION

All disputes or differences of any kind whatsoever which shall at any time arise between the parties hereto touching or concerning the works or the execution or maintenance thereof of this contract or the rights touching or concerning the works or the execution of maintenance thereof of this contract or the construction remaining operation or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after determination foreclosure or breach of the contract (other than those in respect of which the decision of any person is by the contract expressed to be final and binding) shall after written notice by either party to the contract to the other of them and to the Employer hereinafter mentioned be referred for adjudication to a sole Arbitrator to be appointed as hereinafter provided.

For the purpose of appointing the sole Arbitrator referred to above, the Employer/Architect will send within ten days of receipt of the notice, to the contractor a panel of three names of persons who shall be presently unconnected with the organization for which the work is executed.

The contractor shall on receipt of the names of aforesaid, select any one of the persons named to be appointed as a sole Arbitrator and communicate his name to the Employer within ten days of receipt of the names. The Employer shall thereupon without any delay appoint the said person as the Sole Arbitrator. If the contractor fails to communicate such selection as provided above within the period specified, the competent authority shall make the selection and appoint the selected person as the Sole Arbitrator.

If the Employer/Architect fails to send to the contractor the panel of three names as aforesaid within the period specified, the contractor shall send to the Employer a panel of three names of persons who shall all be unconnected with either party. The Employer shall on receipt of the named as aforesaid select anyone of the persons name and appoint him as the Sole Arbitrator. If the Employer fails to select the person and appoint him as the Sole Arbitrator within 5 days of receipt of the panel and inform the contractor accordingly, the contractor shall be entitled to appoint one of the persons from the panel as the Sole Arbitrator and communicate his name to the Employer.

If the Arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another Sole Arbitrator shall be appointed as aforesaid.

The work under the Contract shall, however, continue during the arbitration proceedings and no payment due or payable to the contractor shall be withheld on account of such proceedings.

The Arbitrator shall give a separate reasoned award in respect of each dispute or difference referred to him. The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion at Bengaluru only.

The fees and expenses, if any, of the Arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The Arbitrator may direct to and by whom and in what manner the cost of the reference and of the award including the fees and expenses or any thereof shall be paid and may fix or settle the amount of costs to be so paid.
The award of the Arbitrator shall be final and binding on both the parties. Subject to the aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof and the rules made hereunder, and for the time being in force, shall apply to the arbitration proceeding under this clause.

Signature of the Contractor

SAFETY CODE

Scaffolds
i) Suitable scaffolds shall be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except in the case of short duration work, which can be done safely from ladders. When a ladder is used, it shall be of rigid construction made either of good quality wood or steel. The steps shall have a minimum width of 450 mm and a maximum rise of 300 mm. Suitable hand holds of good quality wood or steel shall be provided and the ladder shall be given an inclination not steeper than ¼ to 1 (¼ horizontal and 1 vertical).

ii) Scaffolding or staging more than 4 m. above the ground floor, swung or suspended from an overhead support or erected with sanitary support shall have a guard rail properly bolted, braced or otherwise secured, at least 1 m. above the floor or platform of such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

iii) Working platforms, gangways and stairways shall be so constructed that they do not sag unduly or unequally and if the height of the platform, gangway or stairway is more than 4 m. above ground level or floor level, they shall be closely boarded and shall have adequate width and be suitably fenced as described in (ii) above.

iv) Every opening in the floor of a building or in a working platform with suitable means to prevent the fall of persons or materials or railing whose minimum height shall be 1.00m. Whenever there are open excavations in ground, they shall be fenced off by suitable railing and danger signals installed at night so as to prevent persons slipping into the excavations.

v) Safe means of access shall be provided to all working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 m. in length while the width between side rails in rung ladder shall in no case, be less than 290 mm, for ladder up to and including 3 m. in length. For longer ladders this width shall be increased at least 20 mm for each additional metre of length.

vi) A sketch of the ladders and scaffolds proposed to be used shall be prepared and approval of the Engineer obtained prior to construction.

Other Safety Measures

All personnel of the contractor working within the plant site shall be provided with safety helmets. All welders shall wear welding goggles while doing welding work and all metal
workers shall be provided with safety gloves. Persons employed on metal cutting and grinding shall wear safety glasses.

viii) Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public.

Demolition

ix) Before any demolition work is commenced and also during the process of the work.
   a) All roads open areas adjacent to the work site shall either be closed or protected.
   b) No electric cable or apparatus, which is liable to be a source of danger over a cable or apparatus used by the operator, shall remain electrically charged.
   c) All practical steps shall be taken to prevent danger to persons employed from the risk so over loaded with debris or materials as to render it unsafe.

Personal Safety Equipments

xii) All necessary personal safety equipment as considered adequate by the Engineer should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned.

   a) Workers employed on mixing cement and lime mortars shall be provided with protective footwear and protective goggles.

   b) Those engaged in white washing and mixing or stacking of cement bags or any materials, which are injurious to the eyes, shall be provided with protective goggles.

   c) Those engaged in welding works shall be provided with welder's protective eyesight lids.

   d) Stonebreakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.

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

   f) The contractor shall not employ men below the age of 18 years. Women of any age shall not be engaged for the work of painting with products containing lead in any form. Whenever men above the age of 18 years are employed on the work of lead painting the following precautions should be taken.

   i) No paint containing lead or lead products shall be used except in the form of paste or ready-made paint.

   ii) Suitable facemasks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scraped.

   iii) Overalls shall be supplied by the contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
iv) When the work is done near any public place where there is risk of accidents all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

**Hoisting Machines**

xiii) Use of hoisting machines and tackle including their attachments anchorage and supports shall conform to the following standards or conditions.

1. (a) These shall be of good mechanical constructions, sound materials and adequate strength and free from patent defect and shall be kept in good working condition with necessary preventive maintenance

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

2. In case of department machines, the safe working load shall be notified by the Engineer. As regards contractor's machines, the contractor shall notify the safe working load of the machine to the Engineer whenever he brings any machinery to site of work and get it verified by the Engineer concerned.

a) Motors, gearing transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards, hoisting appliances should be provided with such means as will reduced to minimum of risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energised, insulating mats, wearing apparel such as gloves, sleeves and boots as may be necessary, should be provided. The workers should not wear any rings, watches and carry keys or other materials, which are good conductors of electricity.

b) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided near the place of work.

xiv) These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.

xv) To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer, Engineers of the Department or their representatives.

xvi) Notwithstanding the above clauses, there is nothing in these to attempt the contractor from the operation of any other Act or Rule in force in the Republic of India.

Witness

Signature of Contractor

Address:
**APPENDIX TO GENERAL CONDITIONS OF CONTRACT**

<table>
<thead>
<tr>
<th></th>
<th><strong>Description</strong></th>
<th><strong>Details</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Period of Completion</td>
<td>60 working days</td>
</tr>
<tr>
<td>2</td>
<td>Defects liability Period (D.L.P)</td>
<td>12 (Twelve) months from the date of Completion of work</td>
</tr>
<tr>
<td>3</td>
<td>Date of Commencement</td>
<td>As per Clause 14</td>
</tr>
<tr>
<td>4</td>
<td>Liquidated Damages for Delay</td>
<td>As mentioned in the Clause no.15</td>
</tr>
<tr>
<td>5</td>
<td>Period of final measurement</td>
<td>15 (Fifteen) days</td>
</tr>
<tr>
<td>6</td>
<td>Value of work for Interim Certificate</td>
<td>Minimum of Rs.5 (Five) lakhs</td>
</tr>
<tr>
<td>7</td>
<td>Period of honouring interim Certificate</td>
<td>7 (Seven) days</td>
</tr>
<tr>
<td>8</td>
<td>Period of honouring Final Certificate</td>
<td>15 Days</td>
</tr>
<tr>
<td>9</td>
<td>Retention Money</td>
<td>5% of Interim Bill including the final bill</td>
</tr>
<tr>
<td>11</td>
<td>Initial Security Deposit</td>
<td>Rs. 3,00,000.00 (Three lakhs only) in the form of Bank guarantee from a nationalized Bank.</td>
</tr>
<tr>
<td>12</td>
<td>Earnest Money</td>
<td>See Tender Notice</td>
</tr>
</tbody>
</table>

**SIGNATURE OF CONTRACTOR.**
SPECIAL CONDITIONS OF CONTRACT

1. GENERAL:

These Special conditions of Contract shall be read in conjunction with the General Conditions of contract, Specifications of work, Drawings and any other documents forming part of this contract wherever the context so requires.

Notwithstanding, the sub-division of the documents into these separate sections and volumes every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the contract so far as it may be practicable to do so.

Where any portion of the General Conditions of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract, then unless a different intention appears, the provisions of the Special Conditions of Contract, shall be deemed to over-ride the provisions of the General Conditions of Contract and shall to the extent of such repugnance, or variance, prevail.

2. WHOLE WORK TO BE COMPLETED IN THE SPECIFIED COMPLETION PERIOD:

The whole work including all extra and additional items is to be completed in the completion period stated in Appendix to conditions of contract and the Contractor will be required, if necessary to work overtime to fulfill the Architect’s instruction to complete the work by the Contract date. No extra will be allowed on the Contract Sum for such overtime work.

3. INTERPRETATION OF TERMS:

(a) Whenever the words “directed”, “as required”, “selected”, or words like effect are used, it is to be understood that the selection, direction or requirement of the Architect are intended.

(b) The words “approved”, “satisfactory” or words of like import shall mean “approved by” or “satisfactory to” the Architect, whose approval must first be obtained before the materials ordered or the works to which the words refer to are put in hand.

(c) The word “allow” shall mean that the contractor shall include in his rates for the particular matter referred to.

(d) The words “as described” shall mean the description in the trade preambles, general preambles, specifications, general instructions etc.

4. ORDER OF WORK:

The Architect reserves the right to fix the order in which the various items of work involved in this contract are to be executed and contractor shall comply with the same. There shall be no extra claims on account of this.

5. TESTS FOR QUALITY OF MATERIALS AND WORKS:

The quality of all materials proposed to be used in the works will be as per the relevant Indian Standard Specifications and will be generally in accordance with the provisions of the Technical Specifications.
The Contractor will carry out routine tests on all building materials for ascertaining the various qualities of the same as per the relevant tests procedure on samples collected at regular intervals and submit the reports in triplicate to the Architects.

A general guidelines showing the tests required to be carried out on materials and the frequencies of such tests is indicated in annexure – The Architect may at his discretion direct the Contractor to carry out any or all such tests and at intervals shorter or longer than those specified in Annexure – The lists of materials indicated in Annexure - is not exhaustive and the Architect may direct the contractor to carry out tests on other materials not specified in the list. The contractor in all cases will carry out the tests required to be done by him and costs of conducting such tests and furnishing the results will be borne entirely by the contractor. No claim towards reimbursement of such costs or part thereof will be entertained at any time and the rates quoted by the contractor for various items of works will be deemed to be inclusive of such cost.

6. SAMPLES:

(a) Before ordering such materials, the Contractor shall get samples of the materials approved from the Architect well in time. If ordered by the Architect, the samples of materials shall be got tested from approved laboratories at the contractor’s cost before approval. No claim will be allowed for delay to the progress of work caused by tests. If called upon by the Architect, the contractor shall produce proof for having arranged for the supply of materials well in time.

(b) The contractor shall furnish well in time before work commences, at his own cost, any samples of materials or workmanship that may be called for by the Architect for his approval or rejection and any further samples in case of rejection until such samples approved. Such samples when approved shall be the minimum standard for the work to which they apply. In case of items like suspended ceiling, timber partitions, etc., typical sample panels or prototypes shall be erected in position for approval before undertaking work. Rates quoted shall cover for such preliminary work.

9. WORKMANSHIP:

The work involved calls for a high standard for workmanship combined with speed.

10. REJECTED WORKMANSHIP OR MATERIALS:

Any workmanship or materials not complying with the specific requirements or approved samples or which have been damaged, contaminated or deteriorated, must be removed immediately from the site and replaced at the contractor's expense, as directed.

11. DISCREPANCIES:

The several documents forming the contract are to be taken mutually explanatory of one another. In the event of any Errors, Omissions and Discrepancies, the same shall be dealt as under:

a) In case of errors, omissions and/or disagreement between written and scaled dimensions on the drawings and specifications etc., the following order of precedence shall apply.
   i) Between scaled and written dimension (or description) on a drawing, the latter shall be adopted.
   ii) Between the written or shown dimensions in the drawings and the corresponding one in the specification, the former shall be taken as authenticated.

b) In case of discrepancy between the schedule of quantities, the specifications and/or the drawings, the following order of preference be observed.
   i) Description in Schedule of Quantities.
ii) Particular Specifications and special condition, if any
iii) Drawings
iv) Indian Standard Specifications of B.I.S.

c) In case of difference between the rates written in figures and the rate in words shall prevail

d) Between the duplicate/subsequent copies of the tender and original tender, the original tenders shall be taken as authenticated.

e) In case of omissions and/or doubts or discrepancies in any of the items or specifications, a reference shall be made to the Engineer who’s Elucidation, elaboration or decisions approved by the architect shall be considered as authentic. The contractor shall be held responsible for any error that may occur in the work through lack of such reference and precaution.

12. QUOTED RATES:

(i) The rates quoted by the contractor shall be held to include for providing and fixing all scaffolding, conveyance and delivery, unloading, carrying in storing, hoisting, all labour, setting, fitting and fixing in position making, setting, cutting, waste, return of packing and all materials and labour and everything else necessary for the proper completion of each item of work to the approval of Architect and for Establishment Charges, overheads and profits. The Contractor shall provide at his expense all labour, materials and things required by the Architect or his representative for testing and measuring the work, for weighing, testing the efficiency of any portion of the work, all planning gangways etc., necessary for affording access to every part of the work. (However in regard to cube tests of concrete provisions made regarding the same under the trade ‘Concrete’ shall be applicable).

(ii) Contractor should note that unless otherwise stated the tender is strictly on item rate basis and his attention is drawn to the fact that rates for each and every item should be correct, workable and self supporting. The quantities in the Schedule of Quantities approximately indicate the total extent of work but may vary to any extent and may even be omitted. No claim shall be entertained on this account except as provided in clause 35 of the General Conditions.

(iii) If called upon by the Architect, detailed analysis of any or of all the rates shall be submitted by the Contractor. The Architect is not bound to recognize Contractor’s analysis and reserves the right to reject abnormal high rates quoted by the contractor. In case there are in consistencies in the rates for items of same such rates shall be considered as the rate for all such items unless Architect finds that there is justification for such inconsistent rates.

(iv) The rates of items of works shall include liasoning charges, supervision charges in applying & securing service connections. The Academy shall make direct payment to the concerned authorities in getting such permits, if any licenses, service connections on demand & against bills, notices. All other incidental charges, liasoning & supervision charges shall be loaded in the item rates of the tender.

13. WATER:

The Employer will provide water for execution of the work

14. ELECTRICITY:

The Employer will provide electricity for execution of the work. However 1% of the total value of contract will be levied as water and electricity charges by the Employer.
15. SECURITY AND PROTECTION:

(i) All fences, trees, shrubs, grass, lawns and other surfaces about the buildings or approaches thereto, which are required to be maintained are to be kept free from damage due to operations in connection with the work, at contractor’s expense.

(ii) The Contractor shall, at his expense, protect all projecting sills, jambs, copings, stone or concrete treads and mouldings and all concrete steps, woodwork and joinery and the like from injury during the progress of the work by rough timber casings securely fixed. The contractor shall at his cost protect joinery and make good all damage to same from any cause whatsoever during the performance of the contract and leave perfect to the satisfaction of the Architect at completion. Before giving up possession, the Contractor must see that all doors, windows, and ventilators, etc., work easily and shall make all necessary adjustments.

16. INDEMNITY BOND:

Contractor shall sign an Indemnity Bond in an approved format before starting the work, indemnifying the owner and the architect from any damages, prosecution, other legal suits and claims arising out of any mishaps occurring at the site due to faulty from work, faulty construction and for violating rules and regulations for which the contractor shall be solely responsible.

17. MINIMUM WAGES ACT:

The contractor shall pay rates of Wages and observe hours of work and conditions of employment according to existing rules under Minimum Wages Act. Further, it shall be contractor’s responsibility to ensure that he pays his workmen wages which are not lower than the minimum prescribed by the Union Government and State Government in which area this contract is being operated.

18. INCOME TAX DEDUCTIONS/ WORK CONTRACTS TAX:

Appropriate deduction as per relevant Income Tax Rules applicable at the time shall be made on the bills submitted by the contractor and such deducted amounts shall be remitted by the owner with the Reserve Bank of India on behalf of the Contractor as per Rules.

19. WORKS AND SITE TO BE KEPT AND DELIVERED UP CLEAN:

All shavings, cuttings and other rubbish as it accumulates from time to time during the progress of the work and at completion, including that of sub-contractors and special Tradesmen to be cleared and carted away and all materials rejected by the Architect’s representative to be removed. Contractor’s quoted rates shall allow for these factors.

20. USEFUL EXCAVATED MATERIALS:

All useful dismantle materials remain the property of the Employer.

TOOLS FOR MASONs:
Every bricklayer or plasterer on the work shall be provided with suitable level battens, trowels, wooden floats and breaking hammers for cutting brick and templates, to enable him to carry out the work in a neat and workmanlike manner, and each gang of brick layers or plasterer not exceeding six in numbers shall be provided with a suitable measuring rule, a plumb bob, a spirit level and a square in addition to the above mentioned, all to be to the approval of the Architect.

22. CONTRACTOR TO ASSIST SITE ENGINEER FOR TAKING MEASUREMENTS:

(i) The contractor or his representative shall accompany the Site Engineer when required to do so and assist in taking the measurements and shall agree to the measurements recorded on the spot.

(ii) If the Contractor fails to accompany the Site Engineer or any other person that has been duly authorized by the Architect to take measurements then in such a case the measurements recorded by the Site Engineer or Architect’s representative shall be binding on the Contractor.

(iii) All measuring tapes shall be steel and scaffolding and ladders that may be required for taking measurements shall be supplied by the Contractor, at his expense.

23. THEORETICAL CHECK:

After the completion of the work the theoretical quantity of cement to be used on the work shall be calculated on the basis of standard coefficients. Over the theoretical quantity so calculated shall be allowed a variation upto 5% minus.

In the event of it being discovered that the quantity of cement used is less than the quantity ascertained as herein before provided (allowing variations on the minus side as stipulated above), the cost of the quantity of cement not so used shall be recovered from the contractor on the basis of the prevailing market rate.

24. SERVICE AND ADVICE BY CONTRACTOR TO EMPLOYER:

The contractor shall place at the disposal of the Employer the services and the advice of himself and his staff of Engineers, Managers, suppliers/buyers of materials, foreman of trades or to other skilled persons employed by him for conducting the comprised in this contract.

25. NO OVER LOADING OF SLABS:

Floors of buildings under construction shall not be loaded by stacks or materials during construction without the prior approval of the Architect. It is important that no load comes on the reinforced concrete floors.

26. RATES TO COVER FOR WORK AT ALL HEIGHTS AND LEVELS:

The rates quoted by the contractor should cover for work at all heights and levels for all items or work under this contract. Lift of materials will not form any criterion for claiming extra payment.
27. ALTERNATIVE ITEMS:

In regard to alternative and 'rate only' items if any specified in the Schedule of Quantities, Contractor should note that the Architect reserves the right to order the principal item or its alternatives to any extent entirely at the Architect’s discretion.

28. PROVISIONAL ITEMS:

If ordered by the Architect, Contractor shall be required to carry out provisional sum items at the same conditions and rates as applicable for this contract.

29. ATTENDANCE OF SUB – CONTRACTORS:

(i) CO – ORDINATION:
The contractor shall be responsible for the Co-ordination of all the work including that of sub-contractors and nominated sub-contractors, for arranging runs of all services and working to the requirements and layouts of the specialist trades, in all matters necessary for the complete execution of the work.

(ii) Rates quoted by the contractor shall be inclusive of all at-enhance on sub-contractors or other contractors nominated by the Architect. Contractor must allow for provision of the use of his scaffolding to sub-contractors and for its retention until such time all relevant sub-contract works are completed.

(iii) The contractor shall accept liability for and bear the cost of the supply of all necessary water electricity, lighting, watching, etc., for the sub-contractors work.

(iv) The contractor must allow in his rates for making good any holes and chases left by the sub-contractor or other contractor nominated by the Architect before the builder’s work is completed and handed over.

30. MEASUREMENTS OF ALL CONCEALED ITEMS TO BE RECORDED PRIOR TO COVERING UP:

Measurements of all items of work including extra items, if any, such as, work in foundations, including excavations, plinth filling, masonry concrete etc., steel in all R.C.C. WORKS, pipes to be encased etc., shall be got recorded from the authorized Site Engineer by the contractor before they are covered up. Immediately the work is ready for measurements, contractors will give specific notice to Architect and Site Engineer for recording the measurements, the Contractor will refer the matter to the Architect for instructions, but in no case shall cover up the work without his permission.

31. OCCUPATION BY EMPLOYER:

The Employer reserves the right to occupy the works by section as completed, as may be considered by the Architect both practicable and reasonable and without hindrance to the contractor’s progress.

MINIMUM REQUIREMENTS OF THE TECHNICAL STAFF:
Unless otherwise stated, contractor should note that irrespective of the fact whether the proprietor himself is a qualified Engineer or not he shall appoint a qualified resident Engineer having a recognized Degree in Civil Engineering and a minimum of 5 years' experience on such major construction site/s or a Diploma holder with 10 years experience on similar works.

33. GURANTEE FOR SPECIAL WORKS:

For special works like Anti-termite treatment and water proofing works, guarantee issued by the special agencies who are engaged for such works by the contractor, shall be submitted to the Academy. For Termite treatment minimum 10 years guarantee and for water proofing of terrace, sump tank, toilets sunken portion, basement floor & wall areas minimum 10 years is insisted. Such guarantees shall be submitted in the approved format of Academy and the main contractor shall be responsible for any breach in such guarantee terms.

NOTES TO SCHEDULE OF QUANTITIES

1. MASONRY WORKS:

Note: Unless otherwise specified, the rates quoted for all items shall include the following:

a) All scaffolding, ladders, platforms, staging and plant required in the execution of work to any height and depth.

b) Hacking and roughening of concrete or other surface in contact with masonry for bonding.

c) Racking joints to specified depth either for plastering or painting.

d) Leveling up and preparing top of masonry for Damp Proof Coarse (DPC)

e) Building in hold fasts and such other inserts.

f) Keeping the work well wetted for two weeks.

g) Work at all heights and depths unless otherwise specified.

h) Providing through bond stones at every 2 mtrs., apart in each course in stone masonry.

2. FLOORING and CLADDING

Note: Unless otherwise specified, rates quoted shall include the following:

a) Final preparing of base sub-grade or sub-floor including minor trimming of the base to remove slight undulations.

b) Cleaning and watering immediately before laying the floor as directed.

c) Providing bedding layer of mortar as specified in the case of slabs, tiles, etc., to correct levels or steps as called for.

d) Cutting, rubbing, polishing where applicable.

e) Working at all heights unless otherwise specified.

f) Keeping the surface wet for a minimum period of one week.

g) Protecting finished flooring to prevent any damage till handing over.
3. **DOOR AND WINDOWS**

Note: Unless otherwise specified, the rates quoted for all items shall include the following:

a) Hold fasts of flat iron 40x5 mm site welded or screwed to the frame and embedded in concrete 1:3:6 15m x 15m in the support walls.
b) Work at all heights
c) Seasoned HUNASUR/ Burma teak wood first quality shall only be used on all works where teakwood is specified.
d) Shall include cost of the following fittings for teak wood door
   i) 3 Nos. of brass butt hinges 150mm size for each door shutters.
   ii) 3 Nos. of brass butt hinges 75mm size for each window shutters.
e) Shall include the cost of fixing any other fitting/s supplied by the owner like tower bolts, aldrops, hasps, staples, handles, door stoppers, bathroom latches, mortise lock and night latches etc.,
f) Sample of flush shutters shall be got approved by the Architects before fixing.
g) Where the frames are to be fixed to RCC works rawl plugs/rawl bolts/expansion bolts are to be provided.
h) Where aluminum comes in contact with masonry brick cement plaster or dis-similar metals, it shall be coated with an approved insulation lacquer paint or plastic tape to ensure that electrochemical erosion is avoided.
i) After the doors or windows have been fixed, the open hollow sections abutting masonry/concrete shall be filled with cement grout 1:3
j) The gaps between frames and support and also any gaps in the door and window sections shall be raked out and filled with mastic cement.

4. **FINISHES:**

Note: Unless otherwise specified rate quoted for all items shall include the following:

a) Hacking or scarifying concrete surface to be plastered or rendered.
b) Preparations of surfaces by raking out joints, wetting the surfaces etc.,
c) Providing grooves at the junction of masonry and concrete members wherever different materials are connected and also wherever necessary.
d) Work at all heights and depths.
e) Providing drip moulds wherever necessary.
f) Washing floors, cleaning glass, and leaving premises clean and tidy.
g) Curing.
h) Necessary scaffolding, ladder platform for any height and depth.
i) Galvanized chicken mesh (2guage,12mmsize) shall be provided at junction of brick masonry and concrete members to be plastered properly stretched and nailed ensuring equal thickness of plaster.

5. **No wastage shall be measured and paid. All the wastages to be considered in quoted rates.**

6. Basic rate mentioned in bill of quantities excludes tax, transport, labour, material for laying.

Quoted rates shall include all applicable taxes, VAT, Service tax, Octroi.
8. All Quoted rates shall include necessary scaffolding providing and removing and curing etc.,

**LIST OF PREFERED MAKE FOR CIVIL, PLUMBING & SANITARY WORKS**

1. Cement : ACC / Ultra Tech / Birla Super (OPC 43 grade and 53 grades)
2. Reinforcement Steel : As per IS 1786 Fe 415 grade and Fe 500 grade steel (like Tata steel or Equivalent approved by Architect / CLIENT)
3. Structural Steel : As per IS 226-1975 (like Tata steel or Equivalent approved by Architect/CLIENT)
4. Ready Mix concrete : ACC / Ready mix (India) Pvt Ltd / L&T
5. Teakwood : Burma Teak
6. Paints : Asian paints / RERGER
7. Glass : Modifloat / Saint gobain / Asahi India glassworks Ltd.
8. UPVC Pipes and fittings: - 
9. Bricks : Table moulded bricks of crushing strength not less than 30 Kg/Sq cm to be approved by the Architect / CLIENT
10. Solid concrete Blocks : APCO or Equivalent approved by Architect / CLIENT
11. Granite slabs : 19mm thick as per Basic rates
12. Vitrified tiles : Naveen diamontile / Johnson / NITCO/ BELL GRANITO
13. Ceramic tiles : Naveen / Bell / Spartek
14. Tandoor blue/green flooring tiles/slabs : 19mm to 35mm thick as per basic rates
15. Laminate : GREENLAM / SUNDEK / Formica (Laminate basic rate Rs.20/Sft)
16. Plywood : CENTURY / UNIPLY or Equivalent approved by Architect / CLIENT
17. Integral Waterproofing : Karnataka water proofing company or equivalent approved by Architect / CLIENT
18. Waterproofing compound : Fosroc chemicals / Roffeconstrution chemicals
19. Door : Jackson / Kutty flush doors
20. Synko Flex : Ace Technologies or Equivalent

21. Galvalium sheets : Gangaroof / Japan metal or Equivalent approved by Architect / CLIENT

22. Hardware :
(a) Door Handles - Neki
(b) Ball Catch (M) - Eagle
(c) Ball Catch (P/T) - Venus
(d) Door Closer - DORMA
(e) Multipurpose - Ebo, E.G
(f) Door Locks - DOORSET
(g) Door Hinges - HAFFELL

NOTE: ARCHITECT / CLIENT RESERVES THE RIGHT TO CHOOSE FROM ANY OF THE BRAND MENTIONED ABOVE OR EQUIVALENT TO IT.
List of accepted make of materials for Electrical Works

<table>
<thead>
<tr>
<th></th>
<th>Items</th>
<th>Brands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LT Cables</td>
<td>Ravicab / Polycab / CCI</td>
</tr>
<tr>
<td>2</td>
<td>DG Set</td>
<td>KOEL / Cummins / Caterpillar</td>
</tr>
<tr>
<td>3</td>
<td>MCB/MCB Distributor Board</td>
<td>ABB / Legrand</td>
</tr>
<tr>
<td>4</td>
<td>ELCB/EL-MCB</td>
<td>Legrand</td>
</tr>
<tr>
<td>5</td>
<td>Power Capacitor</td>
<td>Mehar/Ducati</td>
</tr>
<tr>
<td>6</td>
<td>Panel Fabrication</td>
<td>Load Control / Star Switchgear</td>
</tr>
<tr>
<td>7</td>
<td>PVC insulated copper wire</td>
<td>Finolex / (FRLS)</td>
</tr>
<tr>
<td>8</td>
<td>Power factor relays</td>
<td>Epcos</td>
</tr>
<tr>
<td>9</td>
<td>Indicating lamps</td>
<td>L&amp;T / Vaishno</td>
</tr>
<tr>
<td>10</td>
<td>Power Contractor</td>
<td>L&amp;T / Siemens</td>
</tr>
<tr>
<td>11</td>
<td>Change Over Switches</td>
<td>HPL / ABB</td>
</tr>
<tr>
<td>12</td>
<td>Current Transformer &amp; VT</td>
<td>Kalpa</td>
</tr>
<tr>
<td>13</td>
<td>UPS</td>
<td>Tata Liebert / Unilever</td>
</tr>
<tr>
<td>14</td>
<td>Starters for Borewell</td>
<td>L&amp;T / Siemens</td>
</tr>
<tr>
<td>15</td>
<td>PVC Conduits</td>
<td>Universal / VIP</td>
</tr>
<tr>
<td>16</td>
<td>Indicating meters</td>
<td>RISHAB</td>
</tr>
<tr>
<td>17</td>
<td>MCCB</td>
<td>ABB / L&amp;T</td>
</tr>
<tr>
<td>18</td>
<td>5A / 15A Switches / Sockets</td>
<td>Anchor Roma / MK</td>
</tr>
<tr>
<td>19</td>
<td>Ceiling fans</td>
<td>Usha / C&amp;G</td>
</tr>
<tr>
<td>20</td>
<td>Exhaust fans</td>
<td>Almonard / Usha</td>
</tr>
<tr>
<td>21</td>
<td>Light fittings</td>
<td>Phillips / Wipro / Art Light only for spots</td>
</tr>
<tr>
<td>22</td>
<td>Room A/c. – Normal / Split</td>
<td>Voltas / Carrier</td>
</tr>
<tr>
<td>23</td>
<td>Calling bells</td>
<td>Anchor / Roma</td>
</tr>
<tr>
<td>24</td>
<td>Residual circuit breaker</td>
<td>Legrand / L&amp;T</td>
</tr>
<tr>
<td>25</td>
<td>KWH Meter</td>
<td>L&amp;T</td>
</tr>
<tr>
<td>26</td>
<td>Switches</td>
<td>Kaycee / L&amp;T</td>
</tr>
<tr>
<td>27</td>
<td>Cable Glands</td>
<td>Dowell / Crompton</td>
</tr>
<tr>
<td>28</td>
<td>Crimping type Lugs</td>
<td>Dowell / Usha</td>
</tr>
<tr>
<td>29</td>
<td>Ceiling roses</td>
<td>Anchor</td>
</tr>
<tr>
<td>30</td>
<td>Earthing stations</td>
<td>Globe Marketing / EQ</td>
</tr>
<tr>
<td>31</td>
<td>Lighting conductor for building &amp; surge protection</td>
<td>OBO Bettermann / EQ</td>
</tr>
<tr>
<td>32</td>
<td>Geyser</td>
<td>Recold / Johnson</td>
</tr>
<tr>
<td>33</td>
<td>Cable trays</td>
<td>PaiFabs / Pan</td>
</tr>
</tbody>
</table>