



CENTRAL INSTITUTE OF MEDICINAL AND AROMATIC PLANTS

(Council of Scientific and Industrial Research)

Post Office-CIMAP, Lucknow-226015

TENDER DOCUMENT

Name of work: Developing Transgenic Glass House at CSIR-CIMAP, Lucknow.

COVER – I

TECHNICAL BID

Ref No: 68_071/862/2023-MP (Works)



CENTRAL INSTITUTE OF MEDICINAL AND AROMATIC PLANTS
(Council of Scientific and Industrial Research)
Post Office-CIMAP, Lucknow-226015

File No: Ref No: **68_071/862/2023-MP (Works)**

Name of Work: **Developing Transgenic Glass House at CSIR-CIMAP, Lucknow.**

CONTENTS

Sl No.	Description	No. of pages
1.	Cover page	1
2.	Contents	2
3.	Notice inviting E- Tenders with terms and conditions	3-10ss
4.	Appendix	11-12
5.	Article of Agreement	13-14
6.	General conditions of contract	15-49
7.	Performa for Unconditional acceptance of CSIR – CIMAP tender conditions as annexure - VI	50
8.	Abstract of cost Summary sheet and schedule of quantities a) Building work b) Electrical work	51 – 64
9	Drawings	-
10.	General specifications for: A) Building work B) Water supply and sanitary installations C) Electrical work	Latest CPWD Specification will be applicable

Note:

1. Tendered should confirm that they have received/ downloaded all the above papers from S. No. 1 to 8.

Signature of Contractor

**Signature of Officer
Issuing the Tender**



**CENTRAL INSTITUTE OF MEDICINAL AND AROMATIC PLANTS
(Council of Scientific and Industrial Research)**

Post Office-CIMAP, Lucknow-226015

NOTICE INVITING E – TENDER [2 BOT - 2 ENVELOPE OPEN TENDER]

Item rate tenders are hereby invited **through e – tendering portal** for the work of “**Developing Transgenic Glass House at CSIR-CIMAP, Lucknow.**” from contractors of appropriate class, who have working experience **at least five years** in CSIR/Central/State Govt./Autonomous Bodies/Institutions/Hospitals in similar work. Tenderers should have successfully completed at least three works amounting to **40% (Rs. 23.07 lakhs)** or two works of **50% (Rs 28.84 lakhs)** or at least one work amounting to **80% (Rs. 46.14 Lakhs)** value of estimated cost or above in single contract during the last five years ending on **14.09.2023**.

“The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to the last date of submission of bid”.

The tendering process is online at e - portal URL address <http://etenders.gov.in/eprocure/app>.

Sl.no	Tender no.	Estimated cost (Rs)	Duration of contract	Earnest money deposit (Rs)	Publish date	Bid document downloaded / Sale Start date	Bid submission end date	Bid opening date
1.	68_071/862/2023 -MP (Works)	57, 66,558.00 based on CPWD DSR-2021 including G.S.T and all taxes.	150 days	1,15,332.00	14.09.2023	14.09.2023	09.10.2023	10.10.2023

Duration of contract will be for **150 days**.

1. Tenders fee of **Rs1180.00 (including GST @18%)** non-refundable will required to be paid offline in the form of Demand Draft/ Pay order from nationalized bank **drawn in favor of Director, CIMAP, Lucknow**. The scanned copy of tender fee and earnest money must be uploaded and original be dropped in tender box placed in the room of Section **officer (Works) CSIR-CIMAP, Lucknow- 226015** latest by the last date of submission of bid. The details of Demand Draft / any other accepted instruments, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time.

(Junior Engineer)

Chairman (ES&EM)

S.O (Works)/ COA / A.O



Two (2) envelopes shall be submitted through on line at CPP –portal by the bidder as per the following schedule:

CRITICAL DATA SHEET

Publish date	14.09.2023, 16:00 hrs.
Bid document downloaded / Sale Start date	14.09.2023, 16:30 hrs.
Clarification start date	14.09.2023, 16:30 hrs.
Clarification end date	09.10.2023, 10:30 hrs.
Bid submission start date	14.09.2023, 16:30 hrs.
Bid submission end date	09.10.2023 , 11:30 hrs.
Last date and time of submission of original Demand Draft against EMD, tender fee & Unconditional acceptance (as annexure –VII on page no. 52) of CSIR – CIMAP tender Conditions	09.10.2023 , 16:30 hrs.
Bid opening date (Envelope – I)	10.10.2023 , 11:40 hrs.
Bid opening date (Envelope – II)	To be intimated Later on through CPP Portal.
Tender fee	Rs 1180.00 (including GST @18%) drawn in favor of Director, CIMAP, Lucknow.
EMD	Rs.1,15,332.00 in the form of Demand Draft/ Pay order from Nationalized bank drawn in favor of Director, CIMAP, Lucknow.

The Tenderer shall submit their application only at CPP Portal <https://etenders.gov.in/e procure/app>. Tenderer /Contractor are advised to follow the instructions provided in the tender document for on line submission of bids. Tenderer are required to upload the digitally signed file of scanned documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

(Jr. Engineer)

Chairman (ES&EM)

S.O(Works)/ COA / A.O



Uploading of application in location other than specified above shall not be considered. Hard copy of application shall not be entertained.

Envelope - I : Technical bid - Qualification requirements of Contractor/ Firm (Uploaded by the contractors/ firms) and may be submitted in “Tech Bid Folder” in Technical bid / attachments section of e-tendering portal containing scanned copy of the following documents...

- i. Tender fees of Rs **1180.00 (including GST @18%)**
- ii. Earnest money deposit (EMD) of value **Rs.1,15,332.00 (Rs. One Lakhs Fifteen Thousand Three Hundred Thirty Two only)**
- iii. **Unconditional acceptance of CSIR – CIMAP tender conditions (As Performa given on page no. 50, Annexure – VI of tender document).**
- iv. Requisite experience proof along with certificate regarding satisfactory completion of work. Certificate should show the nature of similar work done, value of work, date of start, date of completion as per agreement, actual date of completion and satisfactory completion of work.
- v. Copy of pan card.
- vi. Registration certificate under G.S.T.
- vii. Tender documents except price bid.
- viii. Valid Character certificate from District Magistrate or in the form of an original Latest Affidavit on the stamp paper of Rs.100/- to the effect that the contractor/firm has not been blacklisted by any Govt. deptt /CSIR as also that there is no criminal case pending against the firm/contractor in any court of Law
- ix. A copy of partnership deed, in case of partnership firms.
- x Valid ‘A’ Class Electrical License of the contractor / sub – contractor (issue by Electric Safety Department)
- xi. **Undertakings to be given by the contractors:**
 - That the bidder is registered under GST and compliant of GST provision.
 - In case of non-Compliance of GST provisions and blockage of any input credit, the bidder shall be responsible to indemnify CSIR – CIMAP.
 - That all input credits have been passed on to CSIR – CIMAP by the bidder.

(Jr. Engineer)

Chairman (ES&EM)

S.O (Works)/ COA / A.O



Envelope – II: The Financial e-Bid through CPP portal.

All rates shall be quoted in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should have save it and submit it online, without changing the file name. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

2. Original EMD, Tender fees, hard copy of signed Unconditional acceptance (as annexure –VI on page no. 50) of CSIR – CIMAP tender Conditions to be sent to the Administrative officer, Central Institute of Medicinal and Aromatic Plants, Post Office - CIMAP, Lucknow-226015 and should reach before the date & time mentioned in CRITICAL DATA SHEET. Tender of the Tenderer whose EMD, Tender fees and unconditional acceptance of CSIR – CIMAP Tender conditions are not received by the time of the opening of pre-qualification of tender then their tenders will be summarily rejected. Any postal delay will not be entertained.

3. Bids opening process are as under:

- **Envelope –I** : Technical bid opening date shall be as mentioned in **CRITICAL DATA SHEET** Containing documents of pre-qualification bid (uploaded by the Contractor/ firms) shall be opened as per **CRITICAL DATA SHEET**. The intimation regarding acceptance/ rejection of their bids will be intimated to the contractors / firms through e- tendering portal. **If any clarification is needed from the bidder about the deficiency in his uploaded documents in Envelope–I, he will be asked to provide it through CPP Portal. The bidder shall upload the requisite clarification / documents within time specified by CSIR-CIMAP, failing which tender will be liable for rejection.**



- **Envelope-II:** The financial bids of the Contractor/firms found to be meeting the qualifying requirements and technical criteria shall be as per **CRITICAL DATA SHEET. (Depending upon Technical bid evaluation, the date shall be intimated through CPP Portal).**

4. The Council of Scientific and Industrial Research does not bind itself to accept the lowest tender and reserves to itself the authority to reject any or all of the tenders received without assigning any reasons.
5. Canvassing in connection with the tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection on the same ground.
6. Tenders incorporating additional conditions are liable to be rejected.
7. The tenderer shall not be permitted to tender for works in the concerned unit of CSIR in which a relative is posted in the grade between Controller of Administration and Junior Engineer, (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or subsequently employed by him and who relatives are as mentioned above.
NOTE: A person shall be deemed to be relative or another if, and only if (a) they are members of a Hindu undivided family or (b) they are husband and wife; or the one is related to other in the following manner ;Father, Mother (including step mother), son (including step son), son's wife, Daughter (including step daughter) father's, son's wife, son's daughter, son's daughter's husband, daughter's son's wife, daughter's daughter, daughter's husband, Brother (including step brother), Brother's wife sister (including step sister), sister's husband.
8. Earnest money is liable to be forfeited, if the contractor selected for the work fails to send necessary stamp paper or to sign the formal agreement within seven days from the date of intimation to that effect to him or fails to start the work within seven days from date of commencement given in the work order.
9. Tender which do not fulfill all or any of the above conditions or are incomplete in any respect are liable to rejection.
10. Contractors must quote for all the items of the schedules together otherwise their tenders are likely to be treated as incomplete. The building contractor, if he is himself not a registered Sanitary contractor/electrical contractor will have to get sanitary work/electrical work done through licenced plumber/electrician. The entire work will be given to only one contractor.
11. Except writing rates and amounts contractor(s) should not write any condition or make any changes, additions, alterations, and modification, in the printed form of tenders. Contractors who are desirous to offer rebate the same should be brought out separately in the covering letter and submitted along with the tender. Conditional rebates will not be considered for comparison.



12. Any additions, subtractions, alterations, in tender conditions or rates and amounts, submitted by Tenderers after submission of tender will not be considered, unless the tenderers are called by the departments to make the same.
13. Tenders will be valid for a period of 90 days from the date of opening, which can be extended, if so agreed to by both the parties.
14. Tenderers must brief PERT/BAR CHART along with their tender showing how they would complete the work in the prescribed time. After the award of the work, the successful tenderer will submit a detailed CPM+PERT CHART of the entire work within a period of one month from the date of signing of the agreement. The detailed chart thus prepared and accepted by the Department shall form part of the agreement between the parties.
15. After award of work, the successful tenderer will have to submit names and qualifications with details of experience of the supervisory staff to be deputed for the work. He should also communicate changes if any, in names so communicated. He should also give list of the major tools and plants to be deployed for work.
16. In case of discrepancy in English and Hindi version, English version shall prevail.
17. The Employer does not bind himself to accept the lowest or any tender and reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted.
18. The tenderer shall quote rates both in figures and words. He shall also work out the amount for each item of work and write in both figures and words. On check if there are differences between the rates quoted by the tenderer in words and in figures or in the amount worked out by him, the following procedure shall be followed.
 - (i) When there is difference between the rates in figures and in words, the rates which correspond to the amounts worked out by the tenderer shall be taken as correct.
 - (ii) When the amount of an item is not worked out by the tenderer or it does not correspond with the rate written either in figures or in words, the rate quoted by the tenderer in words shall be taken as correct.
 - (iii) When the rate quoted by the tenderer in figures and in words tallies but the amount is not worked out correctly the rate quoted by the tenderer shall be taken as correct and not the amount.



19. The tenderer should see drawings and in case of doubt, obtain required particulars, which may in any way influence his tender from the Engineer as no claim whatsoever will be entertained for any alleged ignorance thereof.
20. Before tendering, the tenderer shall inspect the site to fully acquaint himself about the condition in regard to accessibility of site, nature and extent of ground, working condition of site and locality including stacking of materials, installations of tools and plants (T & P) etc., conditions affecting accommodations and movement of labour etc. required for the satisfactory execution of the work contract. No claim whatsoever on such account shall be entertained by the Employer in any circumstances.
21. Earnest money will be forfeited if the contractor fails to commence the work as per letter of award.
22. Except writing rates and amount, the tenderer should not write any conditions or make any changes, additions, alterations and modifications in the printed form of tenders. Tenderers who are desirous to offer rebate the same should be brought out separately in the covering letter and submitted along with the tender.
23. Some of the provisions of General Conditions of Contract are given below. Interpretation however shall be as given in the General Conditions of Contract.
 - (a) **Defects Liability Period:** Twelve months from the date of completion as certified by the Employer.
 - (b) **Minimum Value of Work for the Intermediate Certificate: Rs9.50 Lakhs (Rupees Nine Lakh Fifty Thousand only).** Intermediate certificate for a lesser amount can be admitted for payment at the discretion of the Engineer.
 - (c) **Security Deposit:** A sum@10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tenderer value of work. In addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as performance Security within the period prescribed for commencement of work in the letter of award issued to him.
 - (d) **Compensation:** Contractor shall pay as-compensation and amount equal to one percent or



such smaller amount as the Employer (whose decision in writing shall be final) may decide on the cost of whole work as shown in the agreement, for every week that the work remains uncompleted or unfinished or due quantity of work remains incomplete after the proper dates. Compensation to be paid shall not exceed ten percent of the estimated cost of the work as shown in the agreement.

24. Schedule showing approximate quantity of materials to be supplied by the Employer under Clause: 6 of the General Conditions of Contract for works contracted to be executed and to rates at which they are to be charged for.

Particulars of materials	Approx. Qty.	Rates at which the material will be charged to the contractor			Place of Delivery Stores, <u>(NAME OF THE LABORATORY)</u>
		Unit	Rs. (Figures)	Rupees	
1. Cement 2. Steel		CONTRACTOR'S SUPPLY			

NOTE: The Tenderer shall ensure that particulars in the above form are filled in by the engineer before he submits the tender.

25. For all specialist jobs e.g., lights, air conditioning, public address, fire protection, security /surveillance and building management systems, technical (covering also general conditions and commercial terms) and financial offers will be given separately in two sealed covers.
26. This tender document will part of the agreement.
27. Director CSIR – CIMAP reserves the right to reject any or all the bids without assigning any reason thereof.



APPENDIX

Defects liability period	12 months from the date of virtual completion as certified by the Employer.
Time for completion	150 days from the date of start as given in work order
Minimum value of work for Interim payment.	9.50 Lakhs or less as per Discretions of Engineer-In-charge, but not more than one running payment per month.
Earnest money to be deposited with the tender	Rs.1,15,332.00 (Rs. One Lakhs Fifteen Thousand Three Hundred Thirty Two only)

RETENTION MONEY FOR INTERIM PAYMENTS SECURITY DEPOSIT (SEE SPECIAL CONDITIONS)

i)	Earnest Money:	Rs.1,15,332.00 (Rs. One Lakhs Fifteen Thousand Three Hundred Thirty Two only)
ii)	Subsequent retention inclusive of earnest money deposited at the time of submitting the tender	A sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. In addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as Performance Security within the period prescribed for commencement of work in the letter of award issued to him



Modified terms of refund of security deposit are as under: (These supersede the conditions given elsewhere in the tender documents)

The refund of the security deposit shall be made only after the defect liability period is over and the final bill is paid as per provision of contract, no interim refund of any percentage of security deposit is admissible.

Period of submitting of final bill by the contractor : Two months from the date of virtual completion

CEMENT AND STEEL Arranged by Contractor as per contract provision.



ARTICLES OF AGREEMENT

ARTICLES OF AGREEMENT MADE AT _____ this _____ day of _____ BETWEEN the Council of Scientific & Industrial Research, New Delhi, a society registered under the Societies Registrations Act 1860 (Hereinafter referred to as the Employer, which expression shall include its successor and assignees and authorized officers of the Society) of the one part and _____ trading in the name and style of _____ (herein after referred to as the contractor(s) which expression shall include his/ their respective heirs, executors, administrators and permitted assignees) of the other part.

WHEREAS the Employers is desirous of getting the work ofdone and has caused drawings, schedule of Quantities and Specifications describing the work to be prepared.

AND Whereas the said specifications and the schedule of quantities and other documents have been signed by on behalf of the parties.

Now it is hereby agreed and declared by and between the parties hereto as follows:

1. In consideration of the payments to be made to them as hereinafter provided the Contractor shall upon and subject to the conditions hereinafter contained executed and complete, the work at the rates specified in the attached schedule of quantities and with such materials as are provided for and in accordance in all respect with specifications, designs, drawings and instructions in writing. Time for carrying out the work will be **30 days** and the date of commencement be reckoned from the **tenth day** of issue of award letter.
2. The Employer shall pay to the Contractors such sum as shall become payable hereunder at the items and in the manner specified in the said conditions.
3. This agreement contains the following documents in addition to pages of Articles of Agreement.
 - (i) General Conditions of Contract Page No _____ to _____.
 - (ii) Special Conditions Page No _____ to _____.



- (iii) Additional Conditions Page No _____ to _____ .
- (iv) Indenture for Secured Advance Page No _____ to _____ .
- (v) Original tender document along with the covering letter of the firm dated Page No: 1 to _____ .
- (vi) _____ .
- (vii) _____ .
- (viii) _____ .

In witness whereof the parties hereto have set their respective hands the day and year in above written.

Signed by, for and on behalf of Employers _____

In the presence of

(1) _____ (2) _____ .

Signed by the said contractor

In the presence of

(1) _____ (2) _____ .



GENERAL CONDITIONS OF CONTRACT

1. INTERPRETATION

(a) In construing these conditions, the Specifications, the Schedule of Quantities, Tender, Special Conditions and Agreement, the following words shall have the meaning herein assigned to them except where the subject or context otherwise requires.

(b) This contract shall comprise of the Articles of Agreement, General Conditions of Contract, Special Conditions. Additional Special Conditions, the Schedule of Quantities, Specifications, letter of acceptance of tender and other documents mentioned in the contents sheet attached hereto and including these to which only reference is made herein.

WORK OR WORKS: Shall mean all work or works defined in schedule of quantities, specification and such other work or works as the contractor may be entrusted with for carrying out under this contract.

EMPLOYER: Shall mean Director-General, CSIR or any officer authorized by Director-General for the purpose.

Engineer: Shall mean the Engineer designated by the Employer to superintend and perform other duties as indicated in the contract.

CONTRACTOR (S): Shall mean the individual or Firm or Company, whether incorporated or not. Undertaking the work and shall include the legal personal representative or such individual or the persons composing such Firm or Company or the successors of such Firm or Company and the permitted assignees of such individual or Firm or Firms or Company.

SITE: Shall mean the site of the contract works including any buildings and erections thereon and any other land adjoining thereto (inclusive) as aforesaid allotted by the Employer or the Engineer for the contractor's use.

COMPENSATION: Shall mean all sum payable by way of compensation under any of the conditions shall be considered as reasonable compensation without reference to the actual loss or damage sustained and whether or not any damage sustained, and whether or not any damage shall have been sustained. Words imputing persons include firms and corporations; Words imputing the singular only also include the plural and vice versa where the context so required.

The headings are given to the clauses for convenience and they will not limit the meaning or scope of the clauses in any way.



2. DRAWINGS AND SPECIFICATIONS

The Contractor shall execute whole and every part of the work in the most substantial and workmanlike manner both as regards material and otherwise in every respect in accordance with the specifications. The contractor shall also confirm exactly and faithfully to the design, drawings and instructions given in the respect of the work by the Engineer. The contractor shall be furnished free of charge one- copy of such specifications and all such designs, drawings and instructions as are not included in the printed publications.

2 A. EARNEST MONEY DEPOSIT (EMD)

EMD up to the value of **Rs.10,000/-** may be deposited in cash and when value of EMD exceeds **Rs.10,000/-** then EMD should be deposited in the shape of **DD/PO** upto the value of **RS 25 lacs**. If EMD amount is in excess of **Rs 25 lakh** then the excess amount over **RS 25 lacs** can be accepted in the form of Bank Guarantee issued by a scheduled bank.

3. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

(a) The contractor shall provide at his own cost all materials (except such materials, if any as may in accordance with the contract be supplied by the Employer) plants, tools, appliance, implements, ladders, scaffolding, temporary works, etc. requisite or proper for the execution of the work whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or which may be necessary for the purpose of satisfying or complying to the requirements of Engineer, as to any manner as to which under these conditions he is entitled to be satisfied together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer **at the expense of the contractor** and the expenses may be deducted from any money due to the contractor under the contract and *I* or from his Security Deposit.

(b) The contractor shall provide himself with requisite quantity and quality of water for carrying out the works at his own, if, however piped water is supplied by the Employer, the contractor shall pay for the water at **one percent of** the total of the work done except on Electrical Work, Air-conditioning work and Furniture work. The contractor shall make own arrangement for water connection and laying of further pipelines from the source of supply of the Employer. It should be clearly understood that the Employer does not guarantee to maintain uninterrupted supply of water and it will be incumbent on the part of the contractor to make alternative arrangement for water at his own cost in the event of any temporary breakdown in the water mains so that the progress of work is not held up for want of water.



No claim as damages or refund of water charges will be entertained on account of such breakdowns. However, if the contractor is permitted to make his own arrangement to draw water from a well, hand-pump, or natural river or pond of the Employer, no charges will be made for the water drawn from the same, but the contractor will make good any damage done to the installations and ensure that the quality of water used in the work is conforming to BIS codes and provide for any treatment at his own cost.

(c) The contractor shall be allowed to construct temporary wells in Employer's land for taking water for construction purpose only after he has permission of the Employer in writing. No charges shall be recovered from the contractor on this account but the contractor shall be required to provide necessary safety arrangement to avoid any accident or damage to adjacent buildings, roads and service lines. He shall be responsible for any accident or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.

(d) The Employer on no account shall be responsible for the expenses incurred by the contractor for hired ground or water obtained for elsewhere.

(e) Subject to availability the Employer may **supply power** at only one point from where the Contractor shall make his own arrangement for distribution including provision of electric meters, switches, fuses etc. at his own cost. These shall be in the custody of the Employer. If there is any hindrance caused to other works the contractor shall reroute or remove such temporary lines without any extra cost. Such temporary lines shall be removed after the completion of work. The cost of power consumed by the contractor shall be payable to the employer at rates fixed by the Employer, which would be deducted from the running account bills. However the Employer does not guarantee the supply of power and no compensation for any failure or short supply of power shall be entertained.

3 A. SUFFICIENCY OF TENDER

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of the tender the works and the rates and the prices quoted in the schedule of items, which rates and the prices shall, except as otherwise provided, cover all his obligation under the contract and all matters and things necessary for the proper completion and maintenance of the works”.

4. AUTHORITIES, NOTICE & PATENTS

(a) The contractor shall confirm to any regulations and bye-laws of any corporation and of any electricity supply company and authorities with whose systems the structure is proposed to be connected, and shall before making any variations from the drawing and specifications that may be



Necessitated for so conforming by giving written notice to the Engineer specifying the **variations proposed** to be made, the reasons for making it and apply for instructions thereon. If the compliance with this clause involves any extra work not included in this contract, he shall specify these items of work and the allowance of extra payment required on their account.

(b) The contractor shall give all notices required by the said regulations or bye-laws to be given to any Authority and pay to such Authority or to any public office all fees that may be chargeable in respect of the works and lodge the receipts with the bill to the Engineer for reimbursement.

5. RATES TO INCLUDE ALL TAXES

(a) Rates quoted by the contractor shall **include sales tax / VAT, G.S.T , purchase tax, turnover tax, duties, octroi, toll tax, royalties and all other taxes in respect of this contract.** The Employer shall not entertain any claim whatsoever in this respect. Tendered rates are inclusive of all taxes levies payable under the respective statutes. However pursuant to the Constitution (Forty Sixth Amendment) Act; 1982 if any further tax or levy is imposed by Statutes, after the date of receipt of tenders and the contractor there upon necessarily and properly pays such taxes/ levies the contractor shall be reimbursed the amount as per the rules on producing proof of payment so made provided such payments, if any, is not in the opinion of the Employer (whose decision shall be final and binding) attributable to delay in execution of work within the control of the contractor.

(b) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Employer and further shall furnish such other information and documents as the Employer may require.

(c) The contractor shall within a period of thirty days of imposition of any **further tax** or levy pursuant to the Constitution (Forty Sixth Amendment) Act, 1982 give a written notice thereof to the Employer that the same is given pursuant to this condition together with all necessary information relating thereto.

6. MATERIALS

(a) If the specifications of schedule of items provide for the use of any material to be supplied by the Employer's stores or if it is required that the contractor shall use certain stores to be provided by the

Employer as shown in the schedule of materials hereto annexed, the contractor shall be bound to procure and shall be supplied such materials and stores as are from time to time required to be used by him for the purpose of the contract only and value of the materials so supplied at the rates specified in the said schedule of materials and of the quantities incorporated in the work may be set off or deducted



from any sums then due, or thereafter to become due to the contractor under the contract or otherwise or against or from the Security deposit. All materials so supplied to the contractor by the Employer shall remain the absolute property of the Employer and the contractor shall be the trustee of the materials so supplied procured and the said materials shall not be removed/disposed off from the site of the work on any account and shall be at all times open for inspection by the Engineer or Employer. The contractor shall bear all incidental charges for cartage, storage and safe custody of all materials and against damage due to dampness, rain, sun, fires and theft and be fully responsible for their storage and maintenance. Any such material unused and in perfectly good condition in the opinion of the Employer at the time of the completion of work or termination of the contractor or earlier shall be returned to the Employer at a place directed by the Engineer at contractor's cost and at rates stipulated in the said schedule but in case the Employer decides not to take back the materials the contractor shall have no claim for compensation on account of any such materials supplied to him as aforesaid being unused by him or for any wastage or damage to any such materials.

(b) If for any reason there is delay or non-supply of material as shown in the schedule, the contractor shall procure the same and complete the work in time after due intimation and approval of the Employer. The difference in price (between his procurement price and price shown in the schedule) shall be paid to the contractor. However, in case approval of the Employer is not given, only suitable extension of time would be considered and no other claim of compensation/damages shall be payable by the Employer.

(c) After completion of the work or on determination/ termination of the contract, the theoretical quantity of cement to be used in work shall be calculated on the basis of statement showing quantity of cement to be used in different items of work provided in current Schedule for the purpose printed by CPWD. In case any item is executed for which the standard contents for the consumption of cement are not available in the above mentioned statement or cannot be derived from this statement, the same shall be calculated on the basis of standard formula to be laid down by the Engineer. Over this theoretical quantity of cement shall be allowed a variation up to 3% plus/minus for works estimated cost of which as put to tender is not more than Rs.10 lakhs and up to 2% plus/ minus for works estimated cost of which as put to tender is more than Rs. 10 lakhs. The difference in the quantity actually issued to the contractor and the theoretical quantity including authorized variation if not returned by the contractor, shall be recovered at twice the issue rate, without prejudice to the provision of other conditions regarding return of material governing the contract. In the event of its being discovered that the quantity of cement which is less than the quantity ascertained as herein before provided (allowing variation on minus side as stipulated above) the cost of quantity of cement not so

Used, shall be recovered from the contractor on the basis of stipulated issue rates and cartage to site.



(d) The provisions of foregoing sub-clause shall apply Mutatis-Mutandis in the case of steel reinforcement structural steel sections (each diameter/ section or category shall be considered separately) except that the theoretical quantity of the steel be taken as the quantity required as per design or as authorized by the Engineer, including lap pages, plus 3% wastage due to cutting into pieces. Over this theoretical quantity 2% plus/ minus shall be allowed as variation due to wastage.

(e) The provision of foregoing sub-clause shall apply Mutatis-Mutandis in the case of cables; (other than under-ground cables) wires, conduits/ GI pipes, GI/ MS sheets used in various items of work shall be calculated on the basis of measurements recorded in the measurement books for the purpose of payment and for assessing the Consumption of materials used in the works. Over this quantity a variation of 5% plus shall be allowed for wastage of materials during execution in case of cables (other than under-ground cables), wires, conduits GI pipes, and 10% plus in case of GI/ MS Sheets.

(f) The provisions made above are without prejudice to the right of the Employer to take action against the contractor under the conditions of the contract for not doing the work according to the prescribed specifications.

(g) "In case of easy availability of approved quality of cement and steel in the open market it will be Employer's discretion to make these items as contractor's supply".

7. TESTING OF MATERIALS

The contractor shall provide assistance, instruments, materials, labour and any other arrangement normally required for testing, checking of materials and workmanship as stipulated in the specifications and by statutory authority at his own cost. The Employer has the right to appoint the testing authorities. The contractor shall pay for the cost of test samples, its packing, transportation including testing fees. Failing his so doing, the same shall be provided by the Engineer at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract and/ or from the Security Deposit or proceeds thereof or of a sufficient portion thereof.

8. CONTRACTOR'S ENGINEERS/ FOREMAN & WORKMAN

(a) The contractor shall give all necessary personals superintendence during the execution of the (work and as long thereafter as the Engineer may consider necessary until the expiration of the Defects Liability Period. The contractor shall employ competent Site-Engineer/ Foreman as per CPWD norms and as approved by the Engineer whose qualification must conform to the requirement specified by

the Engineer who shall be constantly in attendance of the work while the men are at work. Any directions, explanations, instructions or notices given by the Engineer to such Site-Engineer or



Foreman or any other authorized agent shall be held to be given to the contractor.

Contractor's Site Superintendence Staff to be employed by contractor on works: The contractor shall employ the following technical staff during execution of works

FOR BUILDING AND ROAD WORKS

- (i) One Graduate Engineer, when the tendered cost of work exceeds Rs. 10 lakhs
- (ii) One qualified Diploma holder (overseer) with experience not less than 3 years when the tendered cost of work exceeds Rs. 5 lakhs but is less than RS.10 lakhs.
- (iii) One qualified Diploma holder when the tendered cost of work is more than RS.2lakhs but less than RS.5 Lakhs.

FOR SANITARY AND WATER SUPPLY WORKS

One qualified diploma holder with experience of not less than 5 years, out of which one year should be in sanitary and water supply works when the tendered cost of work is more than Rs.50,000.

FOR ELECTRICAL WORKS

- (i) One qualified Graduate Engineer possessing Degree in Electrical Engineering from recognized university with an experience of not less than 3 years or a Diploma holder in Electrical Engineering with an experience of not less than 7 years when the tendered cost of the work is not less than RS.1.5 lakhs.
- (ii) One Graduate Electrical Engineer with two years' experience or a Diploma holder in Electrical Engineering with experience of not less than 3 years when the tendered cost of the work is more than RS.75,000 but less than Rs. 1.5 lakhs.
- (iii) One Diploma holder in Electrical Engineering with experience of not less than 3 years when tendered cost of work is more than Rs. 37,000, but less than Rs.75,000.
- (iv) One licensed Supervisor with experience of not less than 3 years when the tendered cost of work is more than Rs.7,500 and less than Rs.37,000.

In case the contractor fails to employ the technical staff as aforesaid, he shall be liable to pay reasonable amount not exceeding the amount shown below for each month. of default. These recoveries are subject to modification, from time to time by CSIR based on CPWD.



- (i) In case when a Graduate Engineer is to be employed Rs. 3,000
- (ii) In case when a qualified Diploma holder is required to be employed Rs. 1,500
- (iii) In case when a technical Supervisor is required to be employed Rs. 750

- (b) The contractor shall on the request of the Engineer immediately dismiss from the works any person employed thereon who may in the opinion of the Engineer be unsuitable or incompetent or who may in the opinion of the Employer misconduct himself.

9. ACCESS

- (a) The Engineer, and the Employer or its representatives shall at all reasonable time have free access to the works and/or workshops, factories or other places the materials are being prepared or constructed for the contract and also to any place where the materials are lying or from which they are being obtained and the contractor shall give every facility to them for inspection. Except the representatives of statutory authorities and those mentioned above no other person shall be allowed on the works at any time without the permission of the Engineer.
- (b) If any work is to be done at a place other than the site of works, contractor shall obtain written permission of the Engineer.

10. VARIATION & PRICE FOR VARIATION

- (a) The Engineer with the approval of the Employer shall have powers to make any alterations/ omissions/ additions and/ or substitutions from the originals specifications, drawings, designs and written instructions of such alterations, omissions, additions, substitutions shall not invalidate the contract and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work. The rates for such altered, additional or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order.
- (b) If the rates for the altered, additional, or substituted work are specified in the contract for the work, the contractor is bound to carry out the altered, additional, or substituted work at the same rates as are specified in the contract for the work.
- (c) If the rates for the altered, additional, or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for a similar class of work



as are specified in the contract for the work.

- (d) If the rates for the altered, additional, or substituted work cannot be determined in the manner specified in sub-clause (b) and (c) above, then the contractor shall, with 10 working days from the date of receipt of the order to carry out the work through notice in writing; inform the Engineer of the rate which it is his intention to charge for such class of work, supported by analysis of the rate claimed which shall be based on actual cost of work plus 10% as contractor's profit and overheads except in case of departmental materials for which contractors profit and over-heads shall be 2.5%. When such notice has been given, the Engineer with the consent of the Employer may agree to such a rate but if the Engineer does not agree to the contractor's rate the Engineer may cancel his order to carry out such class of work and arrange to carry out in such a manner as he may consider advisable.
- (e) Under no circumstances, the contractor shall suspend the work on the plea of non-settlement of rates of items falling under the clause.

(f) **“DEVIATION LIMITS”**

Building work	30%
Maintenance/emergency works	50%
Foundation works	100%
Services works	30%

11. **Faulty Materials, Workmanship & Defects after Completion**

- (a) The Engineer shall have powers to require the removal from the site of all materials and work which in his opinion are not in accordance with specifications and in case of default, the Engineers shall be at liberty to employ other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials to be substituted thereof and in case of default the Engineer may cause the same to be supplied and all costs which may attend such removal and/ or substitution are to be borne by the contractor.
- (b) If it shall appear to the Engineer or to the Employer based on audit/ technical examination that any work has been executed with unsound, imperfect, or unskillful workmanship or

with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, any defects, shrinkage or other faults which may appear within the defects liability period of 12 months from the date of completion



arising in the opinion of the Engineer, the contractor shall on demand in writing which shall be made within 12 months of the completion of the work from the Engineer specifying the work, materials, articles defects or other faults complained of notwithstanding that the same may have been passed, certified and paid for, forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may requires or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own cost. In case of any such failures, the Engineers may rectify or remove or re-execute the work or remove and replace with others, the material or articles complained of as the case may be at the risk and cost in all respects of the contractor.

- (c) In lieu of rectifying the work not done in accordance with the contract, the Employer may, allow such work to remain, and in that case make allowance for the difference in value, together with such further reduction as in his opinion may be reasonable.
- (d) Provided always that nothing in this clause shall relieve the contractor from his liability to execute the works in all respects in accordance with the terms and conditions of this contract, or from his liability to make good all defects.

12. WORKS TO BE OPEN FOR INSPECTION

- (a) All work under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer and the contractor shall at all times, during the usual working hours, and at all other times at which reasonable notice of the intentions of the Engineer to visit the works shall have been given to the contractor, either himself be present to receive order and instruction or have a responsible agent duly accredited in writing present for that purpose.
- (b) The contractor shall give not less than seven days notice in writing to the Engineer before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is so covered up or placed beyond the reach of measurement and shall not cover up and place beyond the reach of measurement, any work without the consent in writing of the Engineer and the Engineer shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurement without such

notice having been or the Engineer's consent obtained the same shall be uncovered at the contractors expense or in default thereof. no payment or allowance shall be made for such work or the materials with which the same was executed



13. ASSIGNMENT OR SUB-LETTING

- (a) The contract shall not be assigned or sublet without the written approval of the Employer. And if the contractor shall assign or sub-let his contract or attempt to do so or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so or if any bribe, gratuity or gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor or any of his servants or agents to any person in the employment of the Employer in any way relating to his office or employment, or if any such employee or person shall become in any way directly or indirectly interested in the contract, the Employer shall have the power to adopt any of the courses specified under clause-23 as may be best suited to the interest of the Employer and in the event of any of the courses being adopted the consequences specified in the said clause shall ensure.
- (b) Where the contractor is a partnership firm, the approval in writing of the Employer shall be obtained before any changes in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concern such approval as aforesaid shall likewise be obtained the contractor enters into any partnership agreement hereunder the partnership firm would have the right to carry out the work hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned or sublet in contravention of clause 13 (a) and the same action may be taken and the same consequences shall ensue as provided in the said clause 13 (a).

14. INDEMNIFYING AGAINST DAMAGES TO PERSONS, PROPERTY & STATUTES

The contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of work.

- (a) The contractor shall be responsible for all injury to persons, animals or things, and for all damage, whether such injury or damage arises from carelessness or accident in any way connected therewith. This clause shall be held to include interilic any damage due to causes is aforesaid to work, building (whether immediately adjacent or otherwise) and to roads, streets, foot paths, bridges or ways as well as all damage caused to the buildings and works forming the subject of this contract by inclemency of weather. The contractor indemnifies the Employer and holds him harmless in respect of all expenses arising from such injury or damage as



aforesaid and also in respect of any award of compensation or damage consequent upon such claim including legal costs.

- (b) The contractor shall reinstate all damage of every sort mentioned in this clause, so as to deliver the whole of the contracted works complete and perfect in every respect and so as to make good and otherwise satisfy all claims for damage as aforesaid to the property of third parties.
- (c) The contractor also indemnifies the Employer against all claims which may be made upon the Employer for acts during the currency of this contract by any employee or representative of an employee of the contractor or any sub-contractors, employed by him, for any injury to or loss of life, of such employees, or for compensation payable under any law for the time being in force to any workmen or to the representative of any deceased or incapacitated workmen.
- (d) The contractor also indemnifies the Employer against all claims which may be made upon the Employer for acts during the currency of this contract by the Central/ State Government or local Municipal authorities for the noncompliance of any laws, regulations, rules pertaining to wages act, safety act in force and any amendments thereof in respect of all labour and apprentices directly or indirectly employed in the work under this contract.
- (e) The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensation costs, charges and/ or expenses arising or accruing from or in respect of any such claim and/ or damages as aforesaid from any sum or sums due or to become due to the contractor or security deposit.
- (f) The contractor shall indemnify the employer against any action, claim or proceedings relating to infringement or sue of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against the Employer in respect of any such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise there from. Provided that the contractor shall not be liable to indemnify the Employer if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the said Employer or his authorized representative.

15. LIEN IN RESPECT OF CLAIM IN OTHER CONTRACTS

- (a) Any sum of money due and payable to the contractor including the security deposit under the contract may be withheld or retained by way of lien by the Employer or Government or any



other contracting person or persons against any claim of the Employer or Government or such other persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Employer or Government or with such other persons.

- (b) It is agreed term of the contract that the sum of money so withheld or retained under this clause by the Employer will be kept withheld or retained as such by the Employer or till his claim arising out of in the same contract or any other contract is either mutually settled or determined by the Arbitrator if the contract is governed by arbitration clause or by the competent court as the case may be, and that the contractor shall have no claim for interest or damages whatsoever on this account or any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

16. Withholding & Lien in Respect of Sums Claimed

- (a) Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the contractor, the Employer shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security deposit if any deposited by the contractor and for the purpose aforesaid, the Employer shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security deposit being insufficient to cover the claimed amount or amounts or if no security deposit has been taken from the contractor, the Employer shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which at any time thereafter may become payable to the contract under the same or any other contract, with the, Employer or any contracting person pending finalisation or adjudication of any such claim.

It is an agreed terms of the contract that the sum of money so withheld or retained under the lien referred above, by the Employer will be kept withheld or retained as such by the Employer till the claim arising out of or under the contract is determined by the Arbitrator (if the contract is governed by the arbitration clause) or by the competent court as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company the Employer shall be entitled to withhold and also

have a lien to retain towards such claimed amount or amounts in whole or In part from any sum payable to any Partner/ Limited company as the case may be, whether in his individual capacity or otherwise.



- (b) The Employer shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been over paid in respect of any work done by the contractor under the contract or any work claimed by him to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over payment and it shall be lawful for the Employer to recover the same from him in the manner prescribed in sub-clause (a) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under-payment shall be duly paid by the Employer to the contractor.

Provided that the Employer shall not be entitled to recover any sum over-paid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Employer on the one hand, and the contractor on the other hand under any term of contract permitting payment for work after assessment by the Employer.

17. IN-CASE OF DEATH OF CONTRACTOR

Without prejudice to any of the rights of remedies under this contract, if the contractor dies, the Employer shall have the option of terminating the contract without compensation to the contractor.

18. SUB -CONTRACTORS

The Employer reserves the right to use the premises and any portion of the site for the execution of any work not included in the contract. The contractor is to afford all reasonable facilities to all sub-contractor, specialists, merchants, tradesmen and others who may at any time be appointed by the Employer for executing any work or supplying any goods relating to the construction, servicing, equipping or furnishing of the work under this contract.

19. COMPLIANCE TO LABOUR LAWS & APPRENTICE ACT

The contractor shall comply with an the provisions of the Minimum Wages Act, 1948, Contract Labour (Regulation and Abolition) Act, 1970, and rules and orders framed there under and

Other labour laws affecting contract labour and Apprentice Act, 1961 and the rules and orders framed there under that may be in force or brought into force from time to time.



Contractor shall obtain a valid license under Contract Labour (R&A) Act 1970 and Contract Labour (R&A) Central Rules 1971 before commencing work and which should be valid till the completion.

20. COMPENSATION FOR DELAY

- (a) The time for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be deemed to be essence for the contract on the part of the contractor. The work shall throughout the stipulated period of the contract be proceeded with all due diligence and the contractor shall pay as compensation an amount equal to ONE PER CENT OR such smaller amount as the employer (whose decision in writing shall be final) may decide on the amount of the whole work as shown in the agreement, for every week that the work remains uncompleted or unfinished after the proper dates.
- (b) And further to ensure good progress during the execution of the work, the contractor shall be bound in all cases in which the time allowed for any work exceeds one month (say for special jobs) to complete one-eighth of the whole of the work before one-fourth of the whole time allowed under the contract has elapsed: three-fourths of the work before three-fourths of such time has elapsed. However for special jobs if a time schedule has been submitted by the contractor and the same has been accepted by the Employer, the contractor shall comply with the said time schedule. In the event of the contractor failing to comply with this condition he shall be liable to pay as compensation an amount equal to one per cent or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the said cost of the work for every week that the due quantity of work remains incomplete. Provided that the entire compensation to be paid under the provisions of this clause shall not exceed ten percent on the estimated cost of the work as shown in the agreement.

21. DAMAGE TO WORKS IN CONSEQUENCE OF HOSTILITIES OR WAR-LIKE OPERATION

- (a) The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and others things connected therewith shall be at the risks of the contractor until the work has been delivered to the Employer and a certificate from him to that effect obtained. In the event of the works or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or war-like operations, the contractor shall, when ordered in writing by the

Employer, remove any debris from the site, collect and properly stored or remove from store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing



the site of debris, stacking, removal of serviceable materials and for the reconstruction of all works ordered by the Employer such payment being addition to compensation up to the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for the damage/ destruction suffered and for restoring the material at the rates based on the analysis of rates tendered for in accordance with the provision of this agreement. The certificate of the Employers regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on the contractor.

- (b) Provided always that no compensation shall be payable for any loss in consequence of hostilities or war-like operations (i) unless the contractor had taken all such precautions against Air Raid as are deemed necessary by the A. R. P. Officers or the Employer, (ii) for any materials etc., not on the site of the work or for any tools and plant, machinery, scaffolding, temporary buildings and other things not intended for the work.
- (c) In the event on the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Employer.

22. EXTENSION OF TIME

- (a) If the contractor shall desire an extension of time for the completion of the work on the grounds of his having been unavoidably hindered in its execution or any other ground he shall apply in writing to the Employer within thirty days of the date of hindrance on account of which he desires extension-as aforesaid, and the Employer shall, if in his opinion (which shall be final) reasonable grounds shown therefore, authorize such extension of time if any, which may, in his opinion, be necessary or proper
- (b) In the event, the value of work exceeds the value of the Bill of Quantities owing to variations, the contractor shall be entitled to ask for extension of time in proportion to the increased value of work.

23. SUSPENSION OF WORK BY CONTRACTOR

- (a) The Employer may without prejudice to his right against the contractor in respect of any delay or inferior workmanship or otherwise or to any claims for damages in respect of any breaches of the contract and without prejudice to any rights or remedies under any of the provisions of this contract or otherwise and whether the date for completion has elapsed by



notice absolutely determine the contract in any of the following cases:

- (i) If the contractor having been given by the Engineer to rectify, reconstruct or replace any defective work or that the work is being performed in any inefficient' or otherwise improper or unworkman-like manner shall omit to comply with the requirements of such notice for a period of seven days thereafter or if the contractor shall delay or suspend the execution of the work so that in the judgment of the Employer (which shall be final and bindings) he will be unable to ensure completion of the work by the date for completion or he has already failed to complete the work by that date.
 - (ii) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditors shall be appointed or if circumstances shall arise which entitle the court of creditor to appoint a receiver or a manager or which entitle the court to make a winding up of order.
 - (iii) If the contractor commits breach of any of the terms and conditions of this contract.
 - (iv) If the contractor commits any acts mentioned in clause-13th hereof.
- (b) When the contractor has made himself liable for action under any of the cases aforesaid, the Employer shall have the following powers:
- (i) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of the Employer shall be conclusive evidence). Upon such determination or recession the security deposit of the contractor shall be liable to be forfeited and shall be absolutely at the disposal of the Employer.
 - (ii) The Engineer may employ labour paid by the Employer and to supply materials to carry out the work or any part of the work debiting the contractor with the cost of the labour and the price of the materials (of the amount of which cost and price certified by tile Engineer shall be final and conclusive against the contractor) and crediting him with the value of the work done in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Engineer as to the value of the work done shall be final and conclusive against the contractor, provided always that action under the sub-clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the Employer are less than amount payable to the contractor at his Agreement rates, the difference should not be paid to the contractor.
 - (iii) After giving notice to the contractor to measure up the work of the contractor and to take such



part thereof as shall be unexecuted out of his hands and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor if the whole work had been executed by him (of the amount of which exceed the certificate in writing of the Engineer shall be final and conclusive) shall be borne and paid by the original contractor and may be deducted from any money due to him by the Employer under this contract or any other account whatsoever or from his security deposit.

- (iv) In the event anyone or more of the above courses being adopted by the Employer the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagement or made any advances on account or with view to the execution of the work or the performance of the contract. And in case action is taken under any of the provisions aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer has shall certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

24. SECURED ADVANCE

The contractor on signing an indenture in the form specified by the Employer during the progress of the execution of the work may be paid if agreed by the Employer up to 75 percent of the estimated value which shall take into account the market value and contractor tendered rates for the finished item of any material which in the opinion of the Engineer is likely to be incorporated in the work within next three months, are non-perishable and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and protected against damage by weather or other causes, which have not at the time of advance been incorporated in the works. When materials on account of which an advance has been made under this clause are incorporated in the worth the amount of such advance shall be deducted from the next payment made under any of the clause of clauses of this contract.

25. CERTIFICATES & PAYMENTS

- (a) No payments shall be made for a work estimated to cost Rupees ten thousand or less till the whole of the work shall have been completed and certificate of completion given. But in the case of a work estimated to cost more than Rupees ten thousand, the contractor shall, on submitting the bill entitled to receive a monthly payment proportionate to the part of the work executed and to the satisfaction of the Engineer, whose certificate of the" sum so payable shall



be final and conclusive against the contractor, provided the amount of work done is as per the value of intermediate certificate or for a lesser amount at the discretion of the Engineer as mentioned in the NIT. All such intermediate 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, imperfect or unskilled work to be removed and taken away and reconstructed, or recreated 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 powers of the Employer under these conditions or any of them as to the final settlement and adjustment of the accounts or in any other way affect the contract. The final bill shall be submitted by the contractor within two months of the date fixed for the completion of work or of the date of the certificate of completion furnished by the Employer and payments shall be made within three months if the value of the completed works is up to Rupees Two lakhs and in six months if the same exceeds Rupees Two lakhs of the submission of such bill. If there shall be any dispute about any item or items of the work then the undisputed item or items only shall be paid within the said period of three months or six months as the case may be.

- (b) Whenever there is likely to be delay in recording detailed measurements for making a running payment, advance payment without detailed measurements for work done worked out at 75 percent of the tendered rates for assessed quantities may be made in running account bills by the Employer on the basis of a certificate from the Engineer. The advance payments so allowed shall be adjusted in the subsequent running bills by taking detailed measurements thereof. Final payments shall be made only on the basis of detailed measurements.
- (c) A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer on printed forms obtainable from the Engineer's office. The Engineer shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, as far as admissible, adjusted as far as possible, before the expiry of ten days from the presentation of the bills. If the contractor does not submit the bill within the time fixed as aforesaid the Engineer may take action within seven days of the date fixed as aforesaid, an authorized representative to measure up the said work in the presence of the contractor whose signature to the measurement will be sufficient warrant and the Engineer may prepare the bill from such measurements.
- (d) Before taking any measurement of any work the Engineer or his authorized representative deputed by him shall give reasonable notice to the contractors. If the contractor fails to attend after such notice or fails to sign or to record the difference within a week from the date of measurement in the manner required by the Engineer then in any such event the measurements



taken by the Engineer or by the authorized representative deputed by him as the case may be, shall be final binding on the contractor and the contractor shall have no right to dispute the same.

- (e) The charges in the bills shall always be entered at the rates specified in the agreement or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the agreement at the determined as per-clause-10. However in case of partially executed items of work, the Employer at his discretion allows proportionate rates for such items of work as determined by the Engineer whose certificate of the sum so payable shall be final and conclusive against the contractor.

26. SECURITY DEPOSIT

- (a) A sum @ 10% of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with the sum already deposited as earnest money, will amount to security deposit of the 5% tender value of the work. In addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as Performance Security within the period prescribed for commencement of work in the letter of award issued to him.
- (b) In case a fixed deposit receipt of any scheduled bank is furnished by the contractor to the Employer as part of the Security deposit and the bank goes into liquidation or for any reason is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the Employer to make good the deficit of such sum from the running bill as mentioned above. Such deductions will be held by the Employer by way of security deposit, provided always that the Employer for this purpose shall be entitled to recover the said percentage of the amount from each running bill till the balance of the amount of security deposits is realized. All compensation or the other sums of money payable by the contractor under the terms of this contract may be deducted from the security deposit or from the interest arising there from or from any sums which may be due to or may become due to the contractor by the Employer on any account whatsoever and in the event of his security deposit being reduced reason of any account whatsoever and in the event of his security deposit being reduced reason of any such deductions aforesaid, the contractor shall within ten days make good in cash or further fixed deposit receipt pledged in favor of the Employer. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the earnest money if deposited-at the time of tenders will be treated as part of the security deposit.



- (C) The contractor if he so desires may furnish fixed deposit receipt in advance towards the security deposit. Such fixed deposit receipt shall be of a minimum value of **Rs.25,000/-** each. (The last such fixed deposit receipt could be of a lower value on the basis of the amount) In case any recovery is effected from running account bills, such recovered amount shall not be replaced with fixed deposit receipt. It is in the contractor's interest to keep a ward about the adequacy of the fixed deposit receipt submitted.
- (d) No partial refund of security deposit shall be made during the defect liability period. In case the final bill is not settled within stipulated period for reasons beyond control and the Employer is satisfied that the security deposit is not required for adjustment of Employer dues or whatsoever dues either in this or any other contract then this security deposit either in full or in part could be refunded at the sole discretion of the Employer. However, release of security deposit would be only after written clearance of Labour Officer regarding no dues or claims is received.
- (e) In case of termination of contract, this security deposit shall be forfeited and amount necessary to makeup this amount shall be recovered from money due to the contractor under this contract, or any Contract with the Employer.

27. COMPLETION CERTIFICATE

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Employer and within ten days of the receipt of such notice the-Engineer shall inspect the work. If there is no defect in the work the Employer shall furnish the contractor with certificate of completion otherwise a certificate of completion indicating defects shall be issued but the work shall not, considered to be completed until the contractor shall have removed from the premises on which the work shall be executed an the scaffolding, surplus material, rubbish, and all the huts and sanitary arrangements required for his work, people on the site in connection with execution of the works as shall have been erected or constructed by the contractor and cleaned of the dirt, splashes, droppings of finishing items from all wood work, doors, windows, walls, floors or other parts of any building, in upon or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof. If the contractor shall fail to comply with requirements of this clause on or before the fixed for the completion of the work, the Employer may at the risk and cost of the contractor take action as he may think fit and the contractor shall have no claim except for any sum actually realized by the sale thereof.



28. ESCALATION

- (a) If the prices of materials not being supplied by the Employer and/ or wages of labour required for execution of the works increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contractor shall accordingly be varied, subject to the condition that compensation for escalation in prices shall be available only for the work done during the stipulated period of the contract including such period for which the contract is validly extended under the provisions of Clauses-22 of General Conditions of Contract without levy of compensation under Clause-20 of General Conditions of Contract and also subject to the condition that no such compensation shall be payable for a work and also which the stipulated period of completion is six months or less. Such compensation for escalation in the prices of materials and labour when due shall be worked out based on the following provisions.
- (i) The base date for working out such escalation shall be the last date on which the tenders were stipulated to be received.
- (ii) The cost of work on which escalation will be payable shall be reckoned as 85% of the cost of the work as per the bills, running or final, and from this amount the value or material supplied by the Employer and proposed to be recovered in the particular bill shall be deducted before the amount of compensation for escalation is worked out. In case of materials bought to site for which secured advance is included in the bill full value of such materials as assessed by the Engineer in charge (and not the reduced amount for which secured advance has been paid) shall be included in the cost of work done for operation of this clause. Similarly when such materials are incorporated in the work, the secured advance is deducted from the bill full assessed value of the materials originally considered for operation of this clause shall be deducted from the cost of work shown in the bill running or final. Further the cost of work shall not include any work for which payment is made for any item at prevailing market rates.
- (iii) The compensation for escalation for materials & labour shall be worked out as per the formula given below:

$$VM = W A / 100 \times (MI - MI_0) / MI_0.$$

VM = Variation in material cost Le. increase or decrease in the amount in rupees to be paid or recovered

W = Cost of work done worked out as indicated in sub Para (ii) above.

A = Component of materials expressed as percent of the total value of work and is predetermined as 75

MI = Index numbers of Wholesale Prices in India for all commodities published by



the Reserve Bank of India for the period under reckoning

M_{I0} = Index numbers of Wholesale prices in India for all commodities published by the Reserve Bank of India and valid on the stipulated date of receipt of tenders

$$VL = W \times B/100 \times (LI-LI_0)/LI_0$$

VL = Variation in labour cost, that is, increase or decrease in the amount in rupees to be paid of recovered

W = Value of work done, worked out as indicated in sub Para (ii) above.

B = Component of labour expressed as percent of the total value of work and is predetermined as 25

L₁ = All India consumer price index numbers for workers published by the Reserve Bank of India for the period under reckoning as for the period under consideration

L₁₀ = All India consumer price index numbers for industrial workers published by the Reserve Bank of India and valid on the stipulated date of receipt of tenders.

- (b) The following principle shall be followed while working out indices mentioned in sub Para (iii) above.
- (i) The compensation for escalation shall be worked out at half yearly intervals and shall be with respect to the cost of work done during the six calendar months of the said work. The first such payment shall be made at the end of the six months after the month (excluding) in which the tenders was accepted and thereafter at six monthly intervals. At the time of completion of work, the last period for payment might become less than six months, depending on the actual date of completion.



(ii) The index (MI or LI) relevant to any six months for which such compensation is paid shall be the arithmetical average of the indices relevant to the six calendar months. If the period upto date of completion after the six months covered by the last such installment of payment, is less than six months the index MI or LI shall be the average of indices for the months falling within that period.

(iii) The base index (MI or LI) shall be the relating to the months in which the tender was stipulated to be received.

c) In the event the price of materials and/ or wages of labour required for execution' of the work decreases there shall be downward adjustment of the cost of work so that the price of materials and/or wages of labour shall be deductible from the cost of work under this contract and in this regard formula herein before stated under this clause shall mutatis mutandis apply, provided that no such adjustment for the decrease in the prices of materials and/ or wages of labour aforementioned would be made in case of contracts in which the stipulated period of completion of the work is six months or less.

d) Employer shall have the discretion to permit the IIEEMA (Indian Electrical & Electronics Manufacturers' Association) Clause for escalation in case of specialized works e.g. lifts and electrical and mechanical installations etc. where the price variation is not similar to building works.

29. ARBITRATION

- 1. In the event of any question/dispute/difference arising under the agreement or in connection herewith (except as to matters the decision of which is specially provided under this agreement) the same shall be referred to the Delhi International Arbitration Center for appointment of Arbitration to adjudicate the dispute.**
- 2. The award of the Arbitrator shall be final and binding on the parties. The Arbitrator may give interim award(s) and / or directions, as may be required.**
- 3. subject to the aforesaid provision, the arbitration and conciliation act, 1996 and the rules made hereunder and any modification thereof from time to time being in force shall be deemed to apply to the Arbitration proceeding under this clause.**



30. DISMANTLED MATERIAL:

The contractor shall treat all material obtained during dismantling of a structure, services sub systems/ installations, excavation of the site for a work etc., as employer's property and such material shall be disposed of to the best advantage of the Employer according to the instructions issued in writing by the Engineer.

31. PERFORMANCE GUARANTEE

Performance Guarantee may be taken from the contractor before the award of work, by the officer authorized to award the contract, if and where considered necessary, to ensure that a part or whole of the contract is completed by the contractor. In case of non-performance this guarantee could be encased.



ANNEXURE -I

I SPECIAL CONDITIONS

1. These special conditions are meant to amplify the general specifications and general conditions of contract.
2. Work shall be done as per CPWD specifications.

In case of any discrepancy the order of precedence in interpretation shall be as under.

- (i) Schedule of quantities
- (ii) Drawings
- (iii) Additional conditions
- (iv) General conditions of contract
- (v) Special condition
- (vi) Additional Technical Specifications
- (vii) CPWD latest Civil and Electrical Specification
- (viii) IS Codes
- (ix) International Codes
- (x) Best Engineering Practice.

3. STEEL

Supply of the steel shall be in the scope of Contractor.

4. CEMENT

Supply of the Cement shall be in the scope of Contractor.

5. Unless otherwise provided in the schedule of quantities the rates tendered by the contractor shall apply for all heights, lifts, leads and depths of the work and nothing extra shall be payable on this account.
6. The surplus excavated earth which is beyond the requirement of the Employer's work may be allowed by the Employer to be disposed off by the contractor on his own or sell the surplus excavated earth to private parties at his discretion but nothing extra will be paid for the carriage or disposal of surplus earth if the same is not required for any other work of the Employer.



ANNEXURE -II

II ADDITIONAL CONDITIONS

1. The structural and architectural drawings, shall at all-time be properly correlated before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and drawings relating to the relevant item the former shall prevail unless and otherwise given in writing by the Engineer.
2. No payment shall be made to the contractor for any damage caused by rain snowfall, floods or any other natural cause whatsoever during the execution of work. The damage to work will be made good by the contractor at his own cost and no claim on this account shall be entertained.
3. All materials used shall be as per specifications and ISI marked wherever applicable. ISI marking referred relates to latest BIS code as published by Bureau of Indian Standards up to 30 days before the date of opening the tender.
4. The contractor shall give a performance test of the entire installation(s) as per standard specifications and/ or as directed by the Engineer and will also submit. Test certificates as are required by Municipal. Electrical authority or another authority. Nothing extra shall be payable for the same other than the fees paid to such authorities which shall be reimbursed on production of receipts.



ANNEXURE – III

CONDITIONS FOR CEMENT AND STEEL

1. **The contractor shall procure 33 grade (confirming to IS:269) or 43 grade (confirming to IS: 8112) Ordinary Portland Cement, as required in the work, from reputed manufacturers of cement, having a production – capacity of one million tons per annum or more, such as ACC, L&T, J.P. Rewa, Vikram, shri Cement, Birla and Cement corporation of India etc., as approved by Ministry of Industry, Government of India and holding license to use ISI Certification mark for their product whose name shall be got approved from Engineer – in – charge. Supply of cement shall be taken in 50 kg bags bearing manufacturers name and ISI marking, sample of cement arranged by the contractor shall be taken by the Engineer – in – charge and got tested in accordance with provisions of relevant BIS Code. In case test results indicated that the cement arranged by the contractor does not conform to the relevant BIS Codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer – in – charge to do so.**
2. The cement shall be brought at site in bulk supply of approximately 50 tones or as decided by the Engineer – in – charge.
3. The cement go down of the capacity to store a minimum of 2000 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made. Double lock provisions shall be made to the door of the cement go down. The keys of one lock shall remain with the Engineer – in – charge or his authorized representative and the key of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of cement go down. The contractor shall facilitate the inspection of the cement go down by the Engineer – in – charge at any time.
4. The contractor shall supply free of charge the cement required for testing. The cost of tests shall be born by the contractor.
5. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in Clause 6 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 6 of the contract and shall be governed by conditions laid therein.



6. Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer – in – charge.
7. The contractor shall procure **steel** reinforcement bars confirming to relevant BIS Codes from main producers as approved by the Ministry of steel. The contractor shall have to obtain and furnish test certificates to the Engineer – in – charge in respect of all supplies of steel brought by him to the site of work. Sample shall also be taken and got tested by the Engineer – in – charge as per the provisions in this regard in relevant BIS codes. In case test results indicated that the reinforcement arranged by the contractor does not conform to the relevant BIS Codes, The same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer – in – charge to do so. The steel shall be brought at site in bulk supply of approximately 10 tons or more as decided by the Engineer – in – charge.



(ANNEXURE –IV (PROFORMA))

INDENTURE FOR SECURED ADVANCE

This indenture made the _____ day of _____ 20____ between _____ (hereinafter called the contractor which expression shall where the context so admits or implies be deemed to include his heirs, executors, administrators and permitted assignees) of the one part and Council of Scientific & Industrial Research, New Delhi, a Society registered under the Societies Registration Act 1860 (hereinafter called the Employer which expression shall include its successors and assignees and authorized officer of the Society) of the other part.

WHEREAS by an agreement dated _____ (hereinafter called the said agreement) the contractor has agreed AN D WH EREAS the contractor has applied to the Employer that he may be allowed advances on the security of materials absolutely belonging to him and brought by him to the site of the works the subject of the said agreement for use in the construction of such of the works as he has undertaken to execute at rates fixed for the finished work (inclusive of the cost of materials and labour and other charges) AND WHEREAS the Employer has agreed to advance to the contractor the sum of Rs. _____ (Rupees _____) on the security of materials the quantities and other particulars of which are detailed in accounts of secured advances attached to the running account Bill for the said works signed by the contract on _____ and the Employer has reserved to himself the options of making any further advance or advances on the security of other materials brought by the contractor to the site of the said works. Now THIS INDENTURE Witnesses that in pursuance of the said agreement and in consideration of the sum of Rs. _____ on or before the execution of these presents paid to the contractor by the Employer (the receipt whereof the contractor both hereby acknowledge) and of such further advances (if any) as may be made to him as aforesaid the contractor both hereby convince and agree with the Employer and declare as follows:

1. That the said sum of Rs. _____ advanced by the Employer to the contractor as aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the contractor in or towards expediting the execution of the said works and for no other purpose whatsoever.
2. That the materials detailed in the said account of secured advance which have been offered to and accepted by the Employer as security are absolutely the contractor's own property and free from encumbrance of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from



Encumbrances of any kind and the contractor indemnify the Employer against all claims to any materials in respect of which an advance has been made to him as aforesaid.

3. That the materials detailed in the said account of secured advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the contractor solely in the execution of the said works in accordance with the directions of the Engineer and in the term of the said agreement.
4. That the contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protections against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the contractor's custody and on his own responsibility and shall at all times be open to inspection by the Employer or any officer authorized by him. In the event of the said materials or any part thereof being stolen destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Engineer.
5. That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Employer or any officer authorized by him on that behalf.
6. That the advances shall be repayable in full when or before the contractor receives payments from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. However if any intermediate payments are made to the contractor on account of work done then on the occasion of each such payment the Employer will be at liberty to make a recovery from the contractor's bill for such payment by deducting there from the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously the value for this purpose being determined in respect of each description of materials at the rates at which the amount of the advances made these presents were calculated.
7. That if the contractor shall at any time make any default in the performance or observance in any respect of any of the terms of provisions of the said agreement or of these presents the total amount of the advance or advances that may still owing to the Employer shall immediately on the happening of such default be repayable by the contractor to the Employer together with interest thereon at twelve percent per annum from the date or respective dates or such advance or advances to the date of repayment and with all costs charges, damages and expenses incurred by the Employer in or for the recovery thereof or the enforcement of this security or otherwise by reason



of the default of the contractor and the contractor hereby covenants and agrees with the Employer to repay and pay the same respectively to him accordingly.

8. That the contractor hereby charges all the said materials with the repayment to the Employer of the said sum of Rs. _____ and any further sum or sums advanced as aforesaid and all costs charges, damages and expenses payable under these presents PROVIDED ALWAYS AND it is hereby agreed and declared that notwithstanding anything in, the said agreement and without prejudice to the powers contained therein if and whenever the convenient for payment and repayment herein before contained shall become enforceable and the money owing shall not be paid in accordance therewith the Employer may at any time thereafter adopt all or any of the following courses as he may deem best:-
- (a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provisions in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and amount due in respect of advances under these presents and crediting the contractor with the value of work done as if he had carried out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor he is to pay same to the Employer on demand.
 - (b) Removed and sell by public action the seized material or any part thereof and out of the money arising .from the sale retain all the sums aforesaid repayable or payable to the Employer under these presents and pay over the surplus (if any) to the contractor.
 - (c) Deduct all or any part of the money owing out of the security deposit or any sum due to the contractor under the said agreement.
9. That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.

In witness whereof the said _____ and _____ by the order and under the direction of the Employer have hereunto set their respective hands the day and year first above written.

Signed sealed and delivered By the said contractor: _____



In the presence of

Signature: _____

Name: _____

Address: _____

Signed by _____

By the order and direction of the Employer: _____

In the presence of

Signature: _____

Name: _____

Address: _____



(ANNEXURE –V (PROFORMA))

PERFORMANCE GUARANTEE

To

Council of Scientific and Industrial Research

In consideration of Council of Scientific and Industrial Research (hereinafter) called "The Council" having awarded to MIs _____ a Company registered under the Companies Act 1956 (hereinafter) called the Contractor, a contract for (hereinafter) called the said contract under the terms and conditions of an Agreement dated-made between the Council and the 'Contractor hereinafter called the said agreement and Council agreed to accept the Council and the Contractor as herein provided for Rs.. _____ (Rupees _____ only) from a Scheduled Bank towards due performance of the contract by the Contractor as per the terms and conditions of the contract on the condition that the Bank on demand from the Council and without demur pay to the Council the aforesaid amount.

2. We, _____ Bank Ltd., (hereinafter referred to as the 'bank' do hereby undertake to pay to the Council and amount not exceeding Rs. _____ against any loss or damage caused to or suffered or would be caused to or suffered by the Council by reasons of any breach or breaches of any of the terms. of condition of the said agreement by the said contractor.

3. We, _____ Bank Ltd., do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Council by stating the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Council for reasons of any breach by the said contractor(s) of any of the terms conditions contained in the said Agreement or by reason of the Contractor(s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____

4. This guarantee shall come into force immediately and continue in force and remain valid till six months after the completion of all works under the said contract which according to the terms of the said contract, should be six months from the probable date of completion viz., the _____



_____ day of _____. If, however, the period of the completion of the works under the said contract is for any reason extended and upon such extension if the Contractor fails, before the terms of this guarantee expires, to furnish a fresh or renewed guarantee for the extended period, the Bank shall pay to Council the said sum of Rs. _____ or such lesser sum as Council may demand.

5. This guarantee shall not be affected by any change in the constitution of the Bank or of the Contractor.

6. Notwithstanding anything hereinafter contained, the liability of the Bank under this guarantee is restricted to Rs. _____ (Rupees _____ only) and the guarantee shall remain in force till _____ day of 20____ unless claim or demand under this guarantee is presented to the Bank within six months from that date all the rights of Council u'lder this guarantee shall be forfeited and the Bank shall be released and discharged from all obligations hereunder.



(ANNEXURE –VI (PROFORMA))

ACCEPTANCE OF CSIR –CIMAP TENDER CONDITIONS

Director

Central Institute of Medicinal and Aromatic Plants
(Council of Scientific and Industrial Research)
Post Office-CIMAP, Lucknow-226015

Sir,

1. The tender documents for the work “**Developing Transgenic Glass House at CSIR-CIMAP, Lucknow.**” have been sold to me/us by CSIR - CIMAP and I/We hereby certify that I/We have inspected the site and read the entire terms and conditions of the tender document made available to me/us which shall form part of the contract agreement and I/We shall abide by the conditions/clauses contained therein.
2. I/We hereby unconditionally accept(s) the tender conditions of CSIR - CIMAP tender documents in its entirety for the above work.
3. The contents of Notice Inviting Tender of the Tender documents have been noted wherein it is clarified that after unconditionally accepting the tender conditions in its entirety. It is not permissible to upload any additional file or put any remarks/conditions (except unconditional rebate on quoted rates if any) along with tender document and same has been followed in the present case. In case, this provision of the tender is found violated after opening the tender, I/We agree that the tender shall be rejected by CSIR – CIMAP.
4. The required earnest money as specified in Envelope-I at page No. 5 for this work has already been deposited.

Yours faithfully

(Signature of the Tenderer)
With rubber stamp



CENTRAL INSTITUTE OF MEDICINAL AND AROMATIC PLANTS
(Council of Scientific and Industrial Research)
Post Office-CIMAP, Lucknow-226015

Name of work: **Developing Transgenic Glass House at CSIR-CIMAP, Lucknow.**

COVER – II

FINANCIAL BID

Ref No: 68_071/862/2023-MP (Works)



CENTRAL INSTITUTE OF MEDICINAL AND AROMATIC PLANTS
(Council of Scientific and Industrial Research)
Post Office-CIMAP, Lucknow-226015

ABSTRACT OF COST

Name of work: **Developing Transgenic Glass House at CSIR-CIMAP, Lucknow.**

Schedule of Quantities

a) Building Work:	Rs.
b) Electrical work	Rs.
Total	Rs.

(Rupees only)

ALL MATERIALS SHALL BE OF QUALITY AS SPECIFIED AND APPROVED BY THE ENGINEER/ARCHITECT

1. Coarse sand and fine sand shall be conforming to grading zones III and IV, respectively.
2. Stone aggregate shall be crushed stone grit of specific grade as approved by the Engineer-in-charge.
3. The contractor should inspect site, examine drawings, specifications, schedules of quantities and tender their rates. The rates given in the schedule of quantities will be deemed to include all the necessary materials, T&P, labour required for satisfactory completion of work as shown in the drawings, specifications, schedule of quantities.
4. The additional work in the same campus can be awarded during the currency of contract at the same rates, terms and conditions of the contract.
5. C.P. fittings shall be as specified and approved by the Engineer/Architect even if not specified in the item.
6. All materials, fixture and fittings, required for this work, which are available with ISI certificate mark, will be of that quality, even if not specified in the item.
7. The exterior paint shall be "APEX ULTIMA" of Asian paint / "Sand Tax Matt" of Snowcap India of required shade as approved by the Engineer – in - charge even if not specified in the item.

Scope of work: Renovation /replacement of old and damaged wooden door, windows with Aluminum door, windows and internal painting of Animal house basement at CSIR-CIMAP, Lucknow.

WITNESS

SIGNATURE OF TENDERER



SUMMARY SHEET

**CENTRAL INSTITUTE OF MEDICINAL AND AROMATIC PLANTS
(Council of Scientific and Industrial Research)
Post Office-CIMAP, Lucknow-226015**

Name of Work: **Developing Transgenic Glass House at CSIR-CIMAP, Lucknow.**

Total brought forward from

page no.

54	RS-----
55	RS-----
56	RS-----
57	RS-----
58	RS-----
59	RS-----
60	RS-----
61	RS-----
6 2	RS-----
63	RS-----
64	RS-----
65	RS-----

Total carry over to

Abstract of cost on page no. 52

Rs



SCHEDULE OF WORK

Developing Transgenic Glass House at CSIR-CIMAP, Lucknow						
ITEM No	SUB-HEADS AND ITEM OF WORK	QUANTITY	UNIT	RATE (Rs)	RATE (In Words)	AMOUNT(Rs)
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.					
1.01	All kinds of soil.	63.440	cum			
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	63.440	cum			
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					
3.01	1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources: 10 graded stone aggregate 40 mm nominal size derived from natural sources).	9.800	cum			
4	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1:cement :2 coarse sand derived from natural sources):4 graded stone aggregate 12.5mm nominal size derived from natural sources)	16.540	sqm			
5	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	6.300	per 50kg cement			
6	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement:3 coarse sand derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	83.850	sqm			
7	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, ifnishing and reinforcement- All work up to plinth level :					
7.01	1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) derived from natural sources: 3 graded stone aggregate 20 mm nominal size derived from natural sources).	9.460	cum			



8	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement				
8.01	1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	3.640	cum		
9	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) derived from natural sources: 3 graded stone aggregate 20 mm nominal size derived from natural sources).	11.540	cum		
10	Centering and shuttering including strutting, propping etc. and removal of form for				
10.01	Foundations, footings, bases of columns, etc. for mass concrete	32.100	sqm		
10.02	Suspended floors, roofs, landings, balconies and access platform	39.810	sqm		
10.03	Shelves (Cast in situ)	5.148	sqm		
10.04	Lintels, beams, plinth beams, girders, bressumers and cantilevers	97.570	sqm		
10.05	Columns, Pillars, Piers, Abutments, Posts and Struts	111.340	sqm		
10.06	Edges of slabs and breaks in floors and walls Under 20 cm wide	23.180	metre		
10.07	Weather shade, Chajjas, corbels etc., including edges	5.820	sqm		
11	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto floor five level.				
11.01	Thermo-Mechanically Treated bars of grade Fe-500D or more.	2140.750	kg		
12	Smooth finishing of the exposed surface of R.C.C. work with 6 mm thick cement mortar 1:3 (1 Cement : 3 fine sand).	44.180	sqm		
13	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections.	175.770	metre		
14	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
14.01	Cement mortar 1:6 (1 cement : 6 coarse sand)	22.260	cum		
15	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
15.01	Cement mortar 1:6 (1 cement : 6 coarse sand)	33.360	cum		



16	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
16.01	Cement mortar 1:4 (1 cement :4 coarse sand)	1.848	sqm		
17	Brick edging 7cm wide 11.4 cm deep to plinth protection with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 including grouting with cement mortar 1:4 (1 cement : 4 fine sand).	200.460	metre		
18	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade				
18.01	Area of slab upto 0.50 sqm	17.340	sqm		
18.02	Area of slab over 0.50 sqm	7.970	sqm		
19	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	2.000	each		
20	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	4.000	each		
21	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
21.01	250x10 mm	4.000	each		
22	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.				
22.01	Twin rubber stopper	4.000	each		
23	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.				
23.01	Hot finished welded type tubes	2988.360	kg		



24	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	149.540	kg		
25	Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.				
25.01	Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and 1.4 mm aperture on both sides	9.800	sqm		
26	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily. Glazed vitrified floor tiles polished finish of size				
26.01	Size of Tile 600 x 600 mm	39.810	sqm		
27	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.				
27.01	Size of Tile 600x600 mm	8.270	sqm		
28	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
28.01	75 mm diameter	4.800	metre		
28.02	110 mm diameter	8.000	metre		
29	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion. Single tee with door				
29.01	110x110x110 mm	2.000	each		
29.02	Bend 87.5° 75 mm bend	2.000	each		



29.03	Shoe (Plain) 110 mm Shoe	2.000	each		
30	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
30.01	110 mm	8.000	each		
31	12 mm cement plaster of mix :				
31.01	1:6 (1 cement: 6 coarse sand)	296.710	sqm		
32	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) and a top layer 6 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) finished rough with sponge.	140.560	sqm		
33	6 mm cement plaster 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement and thick coat of Lime wash on top of walls when dry for bearing of R.C.C. slabs and beams.	5.955	sqm		
34	Finishing walls with textured exterior paint of required shade :				
34.01	New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm	310.520	sqm		
35	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :				
35.01	Two or more coats on new work	126.750	sqm		
36	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
36.01	Two or more coats on new work	115.390	sqm		
37	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	296.710	sqm		
38	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				
38.01	With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	296.710	sqm		
39	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS:13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :				
39.01	Kitchen sink without drain board 610x460 mm bowl depth 200 mm	2.000	each		



40	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :				
40.01	100 mm inlet and 75 mm outlet Sand Cast Iron S&S as per IS- 1729	4.000	each		
41	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. Internal work- Exposed on wall / hanged with Truss by mean with MS Clamps and making provision for misting nozzle as required.				
41.01	20mm dia nominal bore	110.240	metre		
41.02	25 mm dia nominal bore	52.000	metre		
42	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall :				
42.01	15 mm dia nominal bore	13.500	metre		
42.02	20 mm dia nominal bore	15.000	metre		
43	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :				
43.01	25 to 40 mm nominal bore	5.000	each		
44	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
44.01	25 mm nominal bore	2.000	each		
44.02	20 mm nominal bore	4.000	each		
45	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
45.01	25 mm nominal bore	2.000	each		
46	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
46.01	For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron)	77.470	kg		



47	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)				
47.01	Powder coated aluminium (minimum thickness of powder coating 50 micron)	89.670	kg		
48	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
48.01	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	71.170	sqm		
49	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.				
49.01	Upto 5mm depth and 5 mm width	129.700	metre		
49.02	Powder coated minimum thickness 50 micron aluminium tubular handle bar	12.000	each		
50	Providing and fixing Brass 100mm mortice latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	3.000	each		
51	Providing and fixing Aluminium American handle 200mm with SS screws etc. complete as per direction of Engineer in charge				
51.01	Powder coated minimum thickness 50 micron aluminium	8.000	each		



52	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. (d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. "All above operations to be done in order and as directed and specified by the Engineer-in-Charge :					
52.01	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	49.100	sqm			
53	Providing and fixing Stainless steel patch fittings OZONE or equivalent make patch fittings to the glass partitions and doors).					
53.01	Patch fittings OPF-3 Bottom patch for Glass door.	2.000	each			
53.02	Patch fittings OPF-2 top patch for Glass door.	2.000	each			
53.03	Patch fittings top pivot OFS-ACC-GDP.	2.000	each			
53.04	Patch fittings OPL-1 corner patch lock for Glass door.	2.000	each			
54	Providing and fixing C.P. brass bib cock with nozzle of approved quality Jaquar FLR-CHR-5047NN or equivalent .					
54.01	15 mm nominal bore	2.000	each			
55	Providing and fixing C.P. brass sink cock Jaquar cat no.FLR - 5347N or equivalent make					
55.01	15 mm nominal bore	2.000	each			



56	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality Jaquar FLR.CHR 5053N or equivalent.				
56.01	15mm nominal bore	2.000	each		
57	Providing and fixing double cylendar floor spring OZONE FS-8400 or equivalent for glass doors as required complete as per the direction of Engineer in charge.				
57.01	Double cylendar floor spring OZONE FS-8400 or equivalent make.	2.000	each		
58	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side, having 12 mm air gap, including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. as per specifications, drawings and direction of Engineer-in-charge complete.	296.490	sqm		
59	Providing and fixing Stainless steel glass door handle SS grade 304, 32mm, SSS finish OZONE OGH-55 or equivalent 32mm X 600 mm or equivalent with S.S screws etc .complete OZONE or equivalent as per direction of Engineer in Charge.				
59.01	OGH 32X600 MM or equivalent	2.000	each		
60	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-charge (Door handle, lock, floor spring, patch fittings and stopper etc.to be paid separately).	3.090	sqm		



SCHEDULE OF WORK

Name of Work: - Electrification work of new Transgenic Glass House at CSIR-CIMAP, LUCKNOW.

61. Electrical Electrification Work:

ITEM No	SUB-HEADS AND ITEM OF WORK	QUANTITY	UNIT	RATE (Rs)	RATE (In Words)	AMOUNT(Rs)
61.01	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required. Group B	40	Point			
62	Wiring for circuit/ sub-main wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required					
62.01	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	50	Meter			
62.02	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	80	Meter			
62.03	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	100	Meter			
63	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.					
63.01	6 pin 15/16 amp socket outlet	20	Each			
64	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required.					
64.01	6 Module (200mmX75mm)	10	Each			
65	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.					
65.01	100 Amp, 16 KA	04	Each			
66	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
66.01	Single pole	20	Each			
67	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal/ coke and salt as required.	06	Set			



68	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	50	Meter			
69	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.					
69.01	Above 185 sq. mm and upto 400 sq. mm	280	Meter			
70	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.					
70.01	3½ X 300 sq. mm (70mm)	02	Each			
71	Supplying of 3.5 core x 300 sq.mm aluminium conductor XLPE insulated armoured PVC jacketed cable conforming to IS:7098 (Part-1) 1988	280	Meter			
72	Supplying and fixing of TP MCCB enclosure on surface or in recess including painting etc. as required.	04	Each			
73	Designing, Fabrication, Supply, Installation, Testing & Commissioning of LT Incomercum-outgoing panel, outdoor type duly powder coated, dust vermin proof, made out of 1.6 mm CRCA sheet complete with all protection/safety devices and comprising major switchgears as follows: A) Incomer a) 400 Amp. 50kA TP MCCB - 01 No., b) Digital Multi Function Meter , c) Indicating Light (RYB), d) Protection MCB, Coil & Relay, e) Aluminium busbar of rating 400A TP+N duly insulated and suitable for termination of 05 Nos. LT cable B) Outgoing 1) 3 pole, TP MCCB 125A, 30kA-05Nos. 2) 6-32A'C'series SP MCB - 20 Nos (Complete Job)	01	Job			
74	Designing, Fabrication, Supply, Installation, Testing & Commissioning of 300A, 415V AC, 3P+N, Automatic Phase Sequence Corrector Panel made out of 1.6 mm thick CRCA sheet with Bus Bar Connecting terminals including 400 amp., 50 kA TP MCCB in mains complete etc. as required	01	Job			
75	Supply, Installation, testing & commissioning of outdoor type feeder pillar made out of 1.6 mm CRCA sheet steel duly powder coated paint and having double bus-bar system of 400A capacity, including pedestal stand complete as required.	01	Job			

Rate not to be filled in Schedule of work