



ACADEMY OF SCIENTIFIC AND INNOVATIVE RESEARCH
AcSIR Headquarters, CSIR-HRDC Campus, Sector 19,
Kamla Nehru Nagar, Ghaziabad-201002

Name of work: - Renovation of existing office of AcSIR HQ, CSIR-HRDC Campus, Ghaziabad.

Important instructions to the tenderers

The complete document in the folders to be downloaded and printed on one side of paper on good quality printer. The folders contain the following documents.

1. Notice Inviting Tender.
 2. Contract Document, Volume-1, Page 1- 33 & Volume-2, Page 1-25
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1. The tenderers are advised to visit the site before submitting the tender.
 2. The work is to be executed as per CPWD specifications. The contractors are expected to execute good quality work in terms of material and workmanship both.
 3. Before procurement of the materials, to be used at site, the contractor is to seek prior approval. On bringing materials at site, it should be got inspected from Engineer in charge. Purchase bills of all major items should be submitted time to time. The contractor's engineer will maintain consumption statement of various materials.
 4. The contractor is to submit the bills including measurements of work done, in hard and soft copy, on monthly basis, based on joint measurements, subject is to minimum value of work for intermediate certificate as per NIT. All hidden measurements should be done well in time.
 5. Statuary deductions like Income Tax, Labour cess etc., at the prevailing rate, shall be made from the bills.
 6. AcSIR working is five days a week. However, the site will remain open for work, on Saturday. Normally the work at site will remain closed on Sunday & Gazetted holidays.
 7. All the pages must be signed by the tenderers. The tenderer should give **email id & WhatsApp No.**

CONTRACT DOCUMENT

VOLUME -1

CONDITIONS OF THE CONTRACT FOR WORKS

Name of work:

Renovation of existing office of AcSIR HQ, CSIR-HRDC Campus, Ghaziabad



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Details of tender fee & earnest money. (to be filled by the agency)

TENDER FEE DEPOSIT INFORMATION

Tender fee amount-----

Demand draft no.----- Dated ----- Bank-----

EARNEST MONEY DEPOSIT INFORMATION

Earnest money amount -----

Demand draft no.----- Dated ----- Bank-----

Signature & Name/ Seal of agency

Phone

E-Mail

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Detailed Notice Inviting Tender (AcSIR/WS/3/2025)

Item rate sealed tenders are hereby invited in two envelopes system, for the below mentioned work from the contractors, working with CPWD /PWD/Railways /MES/P&T/ other govt. departments, in appropriate class. & has carried out (started & completed satisfactorily) the minimum one/two/ three similar works (construction /additions / alterations/ renovations / upgradation of building. Maintenance/ repair works, are not considerable.), each costing not less than Rs. 41.00 lacs/ Rs. 30.80 lacs/ Rs. 20.50 lacs, respectively, within last seven years, ending on last date of previous month.

Name of Work	Estimated cost (based on latest CPWD SOR & MR), in lacs	EMD/Tender Free (DD from scheduled bank, in favour of Director AcSIR, Ghaziabad)	Time of completion
Renovation of existing office of AcSIR HQ, CSIR-HRDC campus, Ghaziabad.	Civil - Rs. 38.391 Elect. - Rs. 12.941 Total - Rs. 51.332	Rs. 1,03,000 / Rs. 1000	3.5 Months

The tenders shall not be issued physically. The interested and eligible parties are to download the complete tender document from website <https://acsir.res.in>

The tenders shall be required to submit the bids in two envelopes (envelopes should superscribed with envelope no. & documents in envelope).

Envelope -1: - Will contain self-attested copies of documents, related to eligibility criteria, including the following: -

- (a) Valid enlistment order of the contractor.
- (b) GST registration and PAN Card.
- (c) Satisfactory completion certificates for similar works & minimum values, as mentioned above, along with Award letter/Work order.
- (d) EMD and Tender fees in original.

The completion certificate should contain all necessary Informations, including date of start & completion, completion amount & scope of work etc.

In case any of the above documents is found missing or non-satisfactory, the tender shall be rejected. No further clarification shall be sought from the tenderer.

The tenderers are advised to enclose experience certificates more than minimum required as per NIT

Envelope-1 will be superscribed with - envelope 1, containing, tender fee, EMD, Enlistment order, GST Registration, Completion Certificates, etc.

Envelope-2: - Will contain Financial Bid including complete tender document downloaded from website (i.e. NIT, Corrigendum/Addendum if any, Conditions of Contract for work, Schedule of quantities with rates)

Envelope-2 will be superscribed with - Envelope-2 containing complete tender documents downloaded from the website after quoting rates.

The agencies are to follow two envelope system strictly, as described above.

1. Tenderers must ensure that complete tender document is downloaded from website. All the prints (on one side of paper) of downloaded documents should be of good quality. Vogue /poor quality of printed documents and incomplete documents will not be accepted and may cause rejection of tender. The decision of AcSIR in the matter will be final.
2. The rate should be filled neatly by the tenderer both in figures and words, without any cutting/overwriting. In case of Cutting/Overwriting, the tenderer may re-write the rates and make initials. The amount should be calculated in amount column.
3. Envelope -1&2 are to be lakh sealed separately. Both the envelope is to be sealed in bigger size envelope. The tenders are to be dropped in the box kept in the AcSIR office, latest by **2.00 PM on 21th April,2025.**
4. The tender will be opened on 21th April,2025 at 2.30 PM, in the presence of tenderers or their representatives if any. Only Envelope-1 shall be opened on this date & time.
5. The bidders shall be qualified after scrutiny of documents, submitted by bidders in Envelop-1. The decision of AcSIR shall be final.
6. The list of qualified bidders & notice for date & time of opening of Envelop -2, will be displayed on website of AcSIR. The bidders are requested to remain in touch with website.
7. When no rate has been quoted for any item, leaving space both in figures, words and amount blank, it will be considered that the tenderer has included cost of this item in other items and rate for such item will be considered as zero and work will be required to be executed accordingly.
8. If any tenderer withdraws the tender before award of work or makes any modification in terms and conditions of the tender which are not acceptable to the department, then AcSIR shall without prejudice to any right to remedy, be at liberty to forfeit 50% of earnest money.
9. Conditional tenders & tender with use of fluid shall be rejected.
10. The electrical work is required to be executed by Licensed electrical contractor only. On award of work and before start of work, the contractor will submit the name of agency along with credentials, who will execute the electrical work.
11. On award of work, the contractor will bring the original documents (the documents, copy of which has been submitted by the tenderer in support of eligibility), for verification.
12. The date of commencement shall be reckoned from the tenth day of issue of award letter.
13. 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.
14. The tenderer shall not be permitted to tender for works in the AcSIR if a relative is posted in the grade between Senior Manager and Executive Assistant (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 are relatives as mentioned above.

A person shall be deemed to be a relative of another if and only if, (a) they are members of a Hindu undivided family; or (b) they are husband and wife; or (c) the one is related to the other in the following manner: Father, Mother (including step mother), Son (including step son), Son's wife, Daughter (including stepdaughters), Father's father, Son's son, Son's son's wife, Son's daughter, Son's daughter's husband, Daughter's husband, Daughter's son. Daughter's son's wife, Daughter's daughter, Daughter's daughter's husband, Brother (including step brother), Brother's wife, Sister (including stepsister), Sister's husband.

15. Tender submitted shall remain valid for 90 days from the date of opening for the purpose of acceptance and award of work, validity beyond 90 days from the date of opening shall be by mutual consent.
16. The tenderer shall quote rates both in figures and words He shall also work-out the amount for each item of work. 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 a 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.
17. The tenderer should read tender document and in case of doubt obtain required clarification, which may in any way influence his tender, from the Engineer, as no claim whatsoever will be entertained for any alleged ignorance thereof.
18. 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.
19. Earnest money will be forfeited, if the contractor fails to commence the work as per letter of award.
20. 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.
21. Some of the provisions of General Conditions of Contract are given below. Interpretation however shall be as given in the General Conditions of Contract.
22.
 - 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:**
Rs. 10 lacs (Rupees Ten lacs only.)
Intermediate certificate for a lesser amount can be admitted for payment at the discretion of the Engineer.
 - c) 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.
 - d) **COMPENSATION:** Contractor shall pay as compensation an 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 the whole work as shown in the agreement, for every week that the work remains uncommenced or unfinished or due quantity of work remains incomplete after

the proper dates. Compensation to be paid shall not exceed 10% of the estimated cost of the work as shown in the agreement.

23. Corrigendum/Addendum, if any, will be on <https://acsir.res.in>.

ARTICLES OF AGREEMENT

ARTICLES OF AGREEMENT MADE AT _____ this _____ day of _____
BETWEEN the Academy of Scientific and Innovative Research (Hereinafter referred to as the Employer, which expression shall include its successors and assignees and authorized officers of AcSIR) 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 Employer is desirous of getting the work of _____ done 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 HERE TO AS FOLLOWS;

In consideration of the payments to be made to them as hereinafter provided the Contractor shall upon and subject to the conditions hereinafter contained execute 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 _____ and the date of commencement shall be reckoned from the tenth day of issue of award letter

The Employer shall pay to the Contractors such sums as shall become payable here under at the times and in the manner specified in the said conditions.

This agreement contains the following documents in addition to pages of Articles of Agreement.

- IV. General Conditions of Contract Page No _____ to _____ '
- V. Special Conditions Page No. _____
- VI. Additional Conditions Page No. _____
- VII. Indenture for Secured Advance Page No _____ to _____
- VIII. Original tender document along with the covering letter of the firm dated
Page No. 1 to _
- IX. _____
- X. _____
- XI. _____

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

SIGNED BY, FOR AND ON BEHALF OF EMPLOYER _____

In the presence of

(1) _____ (2) _____

SIGNED BY THE SAID CONTRACTOR.

In the presence of

(1) _____ (2) _____

GENERAL CONDITIONS OF CONTRACT

1. INTERPRETATION

- (i) In construing these conditions, the Specifications, the Schedule of Quantities; Tender, Special Conditions and Agreement, the following words shall have the meanings herein assigned to them except where the subject or context otherwise requires.
- (ii) 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 those to which only reference is made herein.

WORK OR WORKS:

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

"EMPLOYER":

Shall mean Director, Academy of Scientific and Innovative Research, Ghaziabad or any officer authorized by him for the purpose.

ENGINEER:

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

CONTRACTOR:

Shall mean the individual or firm or firms 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 there on and any ether land adjoining thereto (inclusive) as aforesaid allotted by the Employer or the Engineer for the contractor's use.

COMPENSATION:

Shall mean all sums 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 anyway.

2. DRAWINGS AND SPECIFICATIONS

The contractor shall execute whole and every part of the work in the most substantial and work-manlike manner both as regards material and otherwise in every respect in accordance with the specifications. The contractor shall also conform 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.

3. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

- (i) 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, appliances, 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/or from his Security Deposit.
- (ii) The contractor shall provide himself with requisite quantity and quality of water for carrying out the works at his own cost. If, However, piped water is supplied by the Employer, the contractor shall pay for the water at one percent of the total cost of the work done except on Electrical work, Air-conditioning work and Furniture work. The contractor shall make his 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 event of any temporary break-down 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 break-downs. 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.
- (iii) The contractor shall be allowed to construct temporary wells in Employers' 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.
- (iv) The Employer on no account shall be responsible for the expenses incurred by the contractor for hired ground of water obtained from elsewhere.
- (v) Subject 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.

3A. SUFFICIENCY OF TENDER

The contractor shall be deemed to have satisfied himself before tendering as to correctness and sufficiency of the tender for 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 obligations under the contract and all matter and things necessary for the proper completion and maintenance of the works.

4. AUTHORITIES, NOTICES & PAYMENTS

The contractor shall conform 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 there on. 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.

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

Rates quoted by the contractor shall include sales tax, duties, octroi, toll tax, royalties and all other taxes in respect of this contract and the Employer shall not entertain any claim whatsoever in this respect. Tendered rates are inclusive of all taxes and 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 thereupon 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 executing of work within the control of the contractor.

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.

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

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 of 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, fire 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 contract, 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.

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.

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 constants 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 the other conditions regarding return of materials 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.

The provision of foregoing sub-clause shall apply Mutatis - Mutandis in the case of steel reinforcement or structural steel sections (each diameter/section or category shall be considered separately) except that the theoretical quantity of the steel shall be taken as the quantity required as

per design or as authorized by the Engineer, including lippage, plus 3% wastage due to cutting into pieces. Over this theoretical quantity 2% plus/ minus shall be allowed as variation due to wastage.

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 cables (other than underground cables), wires, conduits/GI pipes, and 10% plus in case of GI/MS sheets.

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.

"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, labor 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 ENGINEER/FOREMAN & WORKMEN

- (a) The contractor shall give all necessary personal superintendence during the execution of the work and as long thereafter as the Engineer may consider necessary until the expiration of Defect 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.' "Annexure (i) refers,"
- (b) The contractor shall on the direction of the Engineer immediately dismiss from the works any person employed there on 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 representative 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 power to make any alterations / omissions / additions and / or substitutions from the original specifications, drawings, designs, and written instructions and 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, 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, within 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 overheads 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 contractors 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 work	50%
Foundation works	100%
Services work	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 Engineer 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 twelve 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 twelve 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 require 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 failure, the Engineer 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 intention 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 a credited 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 given 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 before 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 & STATUS

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 hinderance 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 inter alia any damage due to causes as 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 damages 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 claim 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 in capacitated 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 non-Compliance of any laws, regulations, rules pertaining to wages act, safety act in force and any amendments thereof in respect of all labor 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 cost, 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 use 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 therefrom. 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 persons 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 contractor under the same or any other contract, with the Employer or and contracting person pending finalization or adjudication of any such claim.

It is an agreed term 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 that 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 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 overpayment 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 or 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 subcontractors, 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 constructions, servicing, equipping or furnishing of the work under this contract.

19. COMPLIANCE TO LABOUR LAWS & APPRENTICE ACT

The contractor shall comply with all 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 Rule 1971 before commencing work and which should be valid till the completion."

20. COMPENSATIONS 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 the essence of 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 uncommenced 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 (save 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 eighths of the work before one-half of such time has elapsed, and 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 cost of the work as shown in the agreement.

21. DAMAGES TO WORKS IN CONSEQUENCE OF HOSTILITIES OR WAR-LIKE OPERATIONS

- (a) The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk 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 work 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 stack or remove in 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 in 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 compensation shall be assessed by the Employer. The contractor shall be 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 Employer 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 of 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 therefor, 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 or has not elapsed by notice absolutely determine the contract in any of the following cases:

- i) if the contractor having been given by the Engineer a notice to rectify, reconstruct or replace any defective work or that the work is being performed in any inefficient or otherwise improper or unwoman-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 binding) 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 bound up or if a receiver or a manager on behalf of a creditor 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 binding up 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 -13 thereof.

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 rescission, 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 labor 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 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 the 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 any one 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 engagements or made any advances on account or with a 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 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 per cent of the estimated value which shall take into account the market value and contractors 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 nonperishable 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 but 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 work the amount of such advance shall be deducted from the next payment made under any of the clause or 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 be 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 re-erected or be considered as an admission of the due performance of the contract, of 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 vary or affect the contract. The final bill shall be submitted by the contractor within two months of the date fixed for the completion of the work or of the date of the certificate of completion furnished by the Employer and payment shall be made within three months if the value of the completed works is Up to Rs. 2 lakhs and in six months if the same exceeds Rs. 2 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 per cent 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 often days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid the Engineer may cause 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 contractor. 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 and 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 rate 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 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.

- (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 deposit is released. 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 therefrom 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 by 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 25000/-each (The last such fixed deposit receipt could be of a lower value on the basis of the amount). In case any recovery is affected 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 watch 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 Employers 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 make up this amount shall be recovered from money due to the contractor under this contract, or any other 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 a certificate of completion otherwise a certificate of completion indicating defects shall be issued but the work shall not be considered to be completed until the contractor shall have removed from the premises on which the work shall be executed all the scaffolding, surplus material, rubbish, and all huts and sanitary arrangements required for his work, people on site in connection with the 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 date 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 released by the sale thereof.

28. ESCALATION

(a) Escalation If the prices of materials not being supplied by the Employer and/or wages of labour required for execution of the work increase, the contractor shall be compensated for such increase as per provision 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 provision of clause 22 of General Conditions of Contract without levy of compensation under Clause 20 of General Condition of Contract and also subject to the condition that no such compensation shall be payable for a work for which the stipulated period of completion is eighteen months or less. Such compensation for escalation in the prices of materials and labour when due, shall be worked out based on the provision.

- 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 of 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 brought 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 the 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:

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

VM - Variation in material cost i.e. 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 per cent of the total value of work and is predetermined as 75.

MI - Index numbers of wholesale prices in India for all commodities published by Reserve Bank of India for the period under reckoning.

MIO - Index numbers of Wholesale prices in India for all commodities published by the Reserve Bank of India on the date of receipt of tenders.

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

VL- Variation in labour cost i.e. increase or decrease in the amount in rupees to be paid or recovered,

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

B- Component of labour expressed as per cent of the total value of work and is

predetermined as 25.

LI- All India consumer price index numbers for industrial workers published by the Reserve Bank of India for the period under reckoning as for the period under consideration.

LIO-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.

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 tender 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 the indices for the months falling within that period.
- iii) The base index (MIO or LIO) shall be the one relating to the month 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 eighteen months or less.
- (d) Employer shall have the discretion to permit the IEEMA (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

- (a) Except where otherwise provided in the contract, all questions and disputes relating to the interpretation of the specifications, designs, drawings and instructions herein before mentioned, and as to the quality or workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, specifications, estimates, instructions, orders-on these conditions or otherwise concerning the works, or the execution or failure to execute the same, whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the person appointed by the Director, Academy of Scientific and Innovative Research. The arbitrator shall be appointed within 30 days from the receipt of a request by any party. The arbitrator to whom the matter is originally referred, being unwilling or unable to act for any reason, the Director shall appoint another person to act as of Arbitrator in

accordance with the terms of the contract, such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. The arbitrator shall give a speaking award. The award of the Arbitrator shall be final and binding on the parties. The cost of the Arbitrator shall be borne equally by both the parties.

- (b) It is also a term of the contract that the party invoking arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute.
- (c) It is also a term of the contract that if the contractor does not make any demand for arbitration in respect of any claim in writing within 90 days of receiving the intimation from the Employer that the final bill is ready for payment, the claim of the contractor will be deemed to have been waived and absolutely barred and the Employer shall be discharged and released of all liabilities under the contract in respect of these claims.
- (d) Subject as aforesaid the provisions of the Arbitration and conciliation Act, 1996, or any statutory modification or re-enactment thereof and the rules made there under and the time being in force shall apply to the arbitration reference under this clause. -

30. DISMANTLED MATERIAL

The contractor shall treat all material obtained during dismantling of a structure, services sub system/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 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 uncashed.

***** SPECIAL CONDITIONS *****

- 1. These special conditions are meant to amplify the general specifications and general conditions of contract.
- 2. 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 Conditions,
 - vi) Additional Technical Specifications
 - vii) CPWD latest civil and Electrical specifications,
 - viii) I.S. codes,
 - ix) International codes.
 - x) Best Engineering practice.

STEEL

- 1. The Contractor shall procure steel reinforcement bars conforming to relevant BIS codes from reputed manufacturers (or their authorized dealers) as approved by Engineer-in-Charge. The contractor shall have to obtain and furnish test certificates to the Engineer-in-Charge in respect of

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

2. The steel reinforcement shall be brought to the site in bulk supply of 10 tons or more as decided by the Engineer-in-Charge.
3. The steel reinforcement shall be stored by the contractor at the site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
4. For checking nominal mass, tensile strength, bend test, rebend test etc., specimen of sufficient length shall be cut from each size of the bar at random at frequency not less than that specified below:

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

5. The contractor shall supply free of charge the steel required for testing. The cost of tests shall be borne by the contractor.
6. The actual issue and consumption of steel of work shall be regulated and proper accounts maintained as provided in Clause 6 of the contract. The theoretical consumption of steel shall be worked out as per procedure in Clause 6 of the contract and shall be governed by conditions laid therein.
7. Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer-in-charge.

CONDITIONS FOR CEMENT

1. The Contractor shall procure 33 grade (confirming to IS:269) or 43 grade (conforming to IS: 8112) ordinary Portland cement or Portland Pozzolana Cement, as required in the work, from reputed manufacturers of cement (or their authorized dealers) having a production capacity of one million tones per annum or more, such as ACC, L&T, J.P. Rewa, Vikram, Shri Cement, Biria Jute, Abuja and Cement Corporation of India, etc. as approved by Ministry of Industry, Government of India, and holding license to uses 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 manufacturer's name and ISI marking, samples of cement arranged by the contractor shall be taken by the Engineer-in -Charge and got tested in accordance with provisions of relevant BIS codes, In case the test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at own cost within a week's time of written orders from the Engineer-in-Charge to do so.
2. The cement shall be brought at site in bulk supply of approximately 20 tons or as decided by the Engineer-in-charge.
3. The cement godown of the capacity to store a minimum of 800 bags of cement or as decided by Engineer-in-charge, shall be constructed by the contractor at site of work for which no extra pay-

ment 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 the safety of the cement go down. The contractor shall facilitate the inspection of the the cement go down by the Engineer-in-charge at anytime.

4. The contractor shall supply free of charge the cement required for testing. The cost of the tests shall be borne 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 condition laid therein.
6. Cement brought to site and cement remaining unused after completion of work shall not be removed from site without permission of the Engineer-in-charge.

ADDITIONAL CONDITIONS

1. The structural and architectural drawings, shall at all times 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 relate to latest BIS code as published by Bureau of Indian Standards upto 30 days before the date 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 any other 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.

INDENTURE FOR SECURED ADVANCE

This indenture made the _____ day of 202 _____ 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 Academy of Scientific and Innovative Research, Ghaziabad (hereinafter _____ called _____ Employer _____ which expression shall include its successors and assignees and authorized officers of the Society) of the other part.

WHEREAS by an agreement dated _____ (hereinafter called the said agreement) the contractor has agreed AND WHEREAS the contractor has applied to the Employer that he may be allowed advances on the security of material 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 material and labor and other charges) AND WHEREAS the Employer has agreed to advance to the contractor the sum of Rs. _____ (Rupees _____) on 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 contractor on _____ and the Employer has reserved to himself the option 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 WITNESSETH 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 do hereby acknowledge) and of such further advances (if any) as may be made to him as aforesaid the contractor do hereby covenant 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 encumbrances 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 indemnifies 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 (herein after 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 amounts of the advances made under 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 of the advance or advances that may still be owing to the Employer shall immediately on the happening of such default be repayable by the contractor to the Employer together with interest there on at twelve per cent per annum from the date or respective dates of 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 covenant 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 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 it 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 auction the seized materials 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.

Deduct all or any part of the moneys owing out of the security deposit or any sum due to the contractor under the said agreement.

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 where of the said_____ and _____by the order the under the direction of the Employer have here into 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: _____

ACADEMY OF SCIENTIFIC AND INNOVATIVE RESEARCH
AcSIR Headquarters, CSIR-HRDC Campus, Sector 19,
Kamla Nehru Nagar, Ghaziabad-201002

PERFORMANCE GUARANTEE

1. In consideration of Academy of Scientific and Innovative Research (hereinafter) called AcSIR having awarded to M/s _____ 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 date _____ made between the AcSIR and the Contractor hereinafter called the said agreement and AcSIR agreed to accept a Deed of Guarantee 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 AcSIR and without demur pay to the AcSIR the aforesaid amount.
2. We, _____ Bank Ltd., (hereinafter) referred to as bank do hereby undertake to pay to AcSIR and amount not exceeding Rs. _____ against any loss or damage caused to or suffered or would be caused to or suffered by the AcSIR by reasons of any breach or breaches of any of the terms of conditions 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 AcSIR by stating the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the AcSIR 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 expire, to furnish a fresh or renewed guarantee for the extended period, the Bank shall pay to AcSIR and said sum of Rs. _____ or such lesser sum as AcSIR may demand.
5. This guarantee shall not be affected by any change in the constitution of the Bank or of the Contractor.
6. Not with standing anything here in before 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 AcSIR under this guarantee shall be forfeited and the Bank shall be released and discharge from all obligations hereunder.

CONTRACTOR'S SITE SUPERINTENDENCE

Staff to be Employed by contractor on works:

The contractor shall employ the minimum, following technical staff during execution of work: -

1. **For CIVIL WORK** - One diploma engineer with minimum one year exp.
2. **FOR ELECTRICAL WORK** - One diploma engineer, on part time basis as per requirement of the work.

In case the contractor fails to employ the above said technical staff, he shall be liable to pay the amount shown below for each month of default.

1. For diploma engineer Civil.....Rs. 10,000/ Per month
2. For part time Diploma Engineer Electrical.....Rs. 5,000/ per month

The contractor is to engage sufficient staff for site superintendence, as required about. Failing to which the contractor may not be allowed to proceed with the work. Contractor will be fully responsible for that.

CONTRACT DOCUMENT

VOLUME - 2

SCHEDULE OF QUANTITIES

Name of work: -

Renovation of existing office of AcSIR HQ, CSIR-HRDC Campus, Ghaziabad



**ACADEMY OF SCIENTIFIC AND INNOVATIVE RESEARCH
AcSIR Headquarters, CSIR-HRDC Campus, Sector 19,
Kamla Nehru Nagar, Ghaziabad-201002**

Renovation of existing office of AcSIR HQ, CSIR-HRDC campus, Ghaziabad					
Schedule of Quantities (Civil work)					
S.No	Description	Qty	Unit	Rate in Fig & words	Amount
1	Providing and laying Vitrified tiles in floor in diferent 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. Double charge vitrified tile polished finish, size of Tile 800 x 1600 mm. Make - Kajaria, Somany, orientell, AGL, CERA, Johnson, Simpolo.	201	sqm		
2	Deduct for not using 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) bedding in laying of floor tiles and jointing with grey cement slurry @ 3.3 kg/ sqm.	201	sqm		
3	Deduct for not grouting the joints with white cement and matching pigment in the items of fixing or vitrified tiles.	201	sqm		
4	Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3 mm thickness.	201	sqm		
5	Providing and laying Vitrified tiles in diferent 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, 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 joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only . Double charge vitrified tile polished finish, size of Tile 800 x 1600 mm. Make - Kajaria, Somany, orientell, AGL, CERA, Johnson, Simpolo	21	sqm		

6	Extra for fixing of vitrified tiles in skirting over wood/gypsum board with Jeevanjor alrounder / equilavent reputed make adhesive in place of 12mm thick cement mortar 1:3 (1 cement : 3 coarse sand).	2	sqm		
7	Grouting the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge. Size of Tile 800x1600 mm.Grouting should be flush with the surface. Make Roff/Myk laticrete/Sika.	201	sqm		
8	Providing and fixing 16-18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills/skirting, 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, etc. complete at all levels. Granite stone slab of colour black, Lakha red/other similar quality as approved. Area of slab over 0.50 sqm	6	sqm		
9	Providing edge moulding to 16-18 mm thick granite, including machine polishing to edge to give high gloss finish etc. Edge polishing should be of matching with original granite surface. Complete as per design approved by Engineer-in-Charge.	15	metre		
10	Extra for fixing marble / granite stone, over and above corresponding basic item, in facia and drops of width upto 150mm with epoxy resin based adhessive , including cleaning etc. complete.	6	metre		
11	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3(1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.(Make Kajaria,Somany,Orient Bell,AGL,NITCO,CERA, Johnson, Simpolo)	31	sqm		

12	Extra for ceramic glazed tile of size 600 x1200 mm in place of ceramic glazed tiles considered in above item including grouting of horizontal joints of size approx. 3mm with epoxy grout.	31	sqm		
13	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to from grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required.	206	sqm		

	<p>Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T'. Bottom exposed with 24 mm of all T-sections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawings and as directed by Engineer-in-Charge.</p> <p>Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/opening (cut outs) having area less than 0.30 sqm. The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection >85%, non- combustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity <0.043 w/mK.</p>				
14	Dismantling aluminium/ Gypsum/wooden partitions with one side or both side ply, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material within 50 meters lead approx, down stairs as directed by Engineer- in-charge.	99	sqm		
15	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, flush door, architrave, holdfasts etc. complete and stacking within 50 metres lead approx. down stairs : Of area 3 sq. metres and below (chowkhats and shutters are to be separated)	15	each		
16	Dismantling tile in floors/ walls laid in cement mortar including mortar and disposal of rubbish to dumping ground. For thickness of tiles 10 mm to 25 mm.	9	sqm		
17	Dismantling stone slab flooring/skirting laid in cement mortar including mortar & stacking of serviceable material and disposal of rubbish to dumping ground.	12	sqm		
18	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of rubbish to dumping ground as per direction of Engineer - in- charge.	1	cum		
19	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of rubbish to dumping ground as per direction of Engineer-in-charge. In cement mortar.	2	cum		

20	Cutting holes of required size 300mm x 300mm to 400mm x 400mm in brick masonry wall (thick cavity wall) for fixing of exhaust fan including and making good the same etc.complete as per direction of Engineer-incharge. And disposal of rubbish to dumping ground.	2	each		
21	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 coarse sand: 6 graded stone aggregate 20 mm nominal size),including making good both side surfaces, including disposal of malba.Excluding cost of pipe. Length of hole will be measured.	5	metre		
22	Hacking of CC flooring/roughing of kota stone flooring with grinder before fixing of tiles, including cleaning for surface etc. complete as per direction of the Engineer-in-Charge.	201	sqm		
23	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. Cement mortar 1:3(1 cement :3 coarse sand).	13	sqm		
24	Extra for providing and placing in position 2 Nos 6 mm dia. M.S. bars at every third course of half brick masonry.	13	sqm		
25	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 : Cement mortar 1:4(1 cement :4 coarse sand)	0.5	cum		
26	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing: 1:2:4 (1 Cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	0.5	cum		

27	Repairs to plaster of thickness 12mm to 20mm in patches of area 2.5 sqm and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of walls complete, including disposal of rubbish to dumping ground, all complete as per direction of engineer-in-charge with cement mortar 1:4 (1 cement : 4 fine sand).	34	sqm		
28	15 mm cement plaster on the rough side of single or half brick wall of mix: 1:4(1 cement: 4 fine sand)	13	sqm		
29	Providing and applying white cement based putty of average thickness 1 mm, in two layers, of approved brand and manufacturer, over the plastered wall/ceiling surface and sand papering to prepare the surface even and smooth complete.	751	sqm		
30	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content. With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre. Cement Primer of same make as of acrylic emulsion should be used.	751	sqm		
31	Wall painting with premium acrylic emulsion paint, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour, Two or more coats.Paint to be applied with roller. Asian Apcolite or equivalent of reputed brands.	751	sqm		
32	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete. Removing should be done by wetting the surface/with machine to minimize dust.	646	sqm		

33	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer 3 mm thick water proofing membrane, black finished reinforced with non-woven polyester matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 litre/sqm by the same membrane manufacture of density at 25°C, 0.87-0.89 kg/ litre and viscosity 70-160 cps. Over the primer coat the layer of membrane shall be laid using Butane Torch and sealing all joints etc, and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under : Joint strength in longitudinal and transverse direction at 23°C as 650/ 400N/ 5cm. Tear strength in longitudinal and transverse direction as 300/250N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane. The contractor will submit the certificate from applicator. : 3 mm thick. STP Super thermolay AR or equivalent of reputed make, as approved by Engineer-in-charge.	406	sqm		
34	Providing and applying bituminous aluminum Paint, suitable for applications on APP membrane to reflect sun / UV rays, in one coat as per manufacturer's recommendations. Super Silver Shield of STP or equivalent as approved.	406	sqm		
35	Making chases up to 7.5cm X 7.5cm in walls including making good with cement concrete/ mortar and finishing with matching surface after housing pipe/APP membrane.	96	metre		
36	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	25	cum		
37	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete, Flexible pipe, 32 mm dia/40m.	2	each		

38	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x 300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 100x100 mm size P type, With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	1	each		
39	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, and all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Internal work- Exposed on wall - 20mm nominal dia pipe.	15	metre		
40	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings and fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Concealed work, including cutting chases and making good the walls etc. 20 mm nominal dia Pipes	10	metre		
41	Providing and fixing uPVC SWR pipe (single socketed pipe for solvent jointing), ISI marked, confirming to IS 13592, Type B under ground (trenching & refilling be paid extra) or above ground level, including jointing with seal ring & adhesive solvent for jointing, excluding cost of clamps if required.- 90mm dia.	8	metre		
42	Providing and fixing unplasticied - PVC pipe clips of approved design to unplasticied - PVC 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. - 75/90 mm.	2	each		
43	Providing and fixing uPVC SWR pipe fittings confirming to IS 14735, including jointing with seal ring & adhesive solvent for jointing.- plain bands 87.5°-90mm	2	each		

44	Providing and fixing uPVC SWR pipe fittings confirming to IS 14735, including jointing with seal ring & adhesive solvent for jointing. Door bands 87.5°-90mm	1	each		
45	Providing and fixing uPVC SWR pipe fittings confirming to IS 14735, including jointing with seal ring & adhesive solvent for jointing. Plain tee - 90mm	1	each		
46	Providing and fixing uPVC SWR pipe fittings confirming to IS 14735, including jointing with seal ring & adhesive solvent for jointing. Door tee - 90mm	1	each		
47	Providing and fixing uPVC SWR pipe fittings confirming to IS 14735, including jointing with seal ring & adhesive solvent for jointing. Nahani trap - 110 x 90mm	2	each		
48	Providing & Fixing Single lever sink mixer with swinging, spout, wall mounted with connected legs and wall flanges, Jaquar make cat no. LYR-38165. Equivalent product of other reputed makes HINDWARE/PARRYWARE/ROCA/KOHLER may also be allowed.	2	each		
49	Providing & Fixing CP brass angle valve of approved quality and make, confirming to IS 8931 of make as approved by Engineer-in-charge.	4	each		
50	Providing and fixing frame work for partitions/ wall lining etc. made of 50x50x1.6 mm/other required sizes, hollow MS tube, placed along the walls, ceiling and floor in a grid pattern at required spacing, with necessary welding at junctions and fixing the frame to wall/ ceiling/ floors with steel dash fasteners of 8 mm dia, 75 mm long bolt by making holes in the M.S. section, including making provision for opening for doors, windows, electrical conduits, switch boards etc., including providing with two coats of approved steel primer etc. complete, all as per direction of Engineer-in-charge.	839	kg		
51	Providing and fixing thermal insulation with Resin bonded rock wool conforming to IS: 8183, density 48 kg/m ³ , 50 mm thick, wrapped in 200 G virgin Polythene bags placed over existing false ceiling and held in position by criss-crossing GI wire.	18	sqm		

52	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 / panelling, 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) : For fixed portion Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	328	kg		
53	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 / panelling, 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) : 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) Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	10	kg		

54	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: 35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws. Make DURO, Century, Green Ply, Marino.	30	sqm		
55	Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality, 1.0 mm thick. Make Century/Royal touch/Virgo/Green Ply	118	sqm		
56	Providing Vision Panel of size 15cm X 15cm (approx) in flush door shutters including cost of 4mm glass and Teak wood moulding(of approved design) for fixing of glass including polishing of moulding complete in all respect as per direction of Engineer-in-charge.	10	each		
57	Providing and fixing godrej make 240mm door handle set with loack body (GLORIA Range) complete in all respects.	14	each		
58	Providing and fixing door closer-Godrej T 72V (C Certified) for door weight 40 Kg- 80 kg, complete with necessary accessories and screws etc. complete	14	each		
59	Providing and fixing stainless steel 100mm L shape towel bolt of approved make.	16	each		
60	Providing and fixing stainless steel 200mm towel bolt of approved make.	6	each		
61	Dismantling of complete FCU(fan coil unit) 1.5 T/2 T of AC plant with inlet & outlet pipe,MS frame,Grill,associated minor ducting, electrical cable & wires, wall acoustic. Complete in all respect including stacking of all material, in store (Or other suitable location) on ground floor, within a lead of 100m, as directed by Engineer-in-charge.	12	job		

62	P/F 12.5mm thick tapered edge gypsum plain board on M.S frame work (To be paid separately) with necessary screws, including joining and finishing to a flush finish with recommended jointing compund , tap & finishing with jointing compound complte in all respect as per manufacture's recommendations.	85	sqm		
63	Providing and fixing internal wall panels on steel frame work with 12.5mm thick gypsum plaster board conforming IS 2095:2011 fixed on cement board as per standard sizes fixed with self-drilling/taping screws/fasteners @ 60cm c/c of approved make , Screws shall be of counter sunk rib head of 1.60mm to 4mm thick or 8 to 10 gauge of length varying from 25 to 45mm. Proper taping and jointing to be done using fiber mesh tape and epoxy and acrylic based jointing compound for seamless finish. (cost of frame work to be paid for separately - Cement Fiber Board 8mm thick of Type B, Category III as per IS 14862:2000 (High pressure Steam Cured), as under layer. Cement Board or Gypsm Board is to be fixed on both sides of frame work (i.e. Partition). It will be measured on one side.	24	sqm		
64	P/F double roller blinds, Zebrano Blinds (MAC), Shade : Stanford, in premio model, Fabric Cassette with metal chain. Equivalent item in Vista or equivalent make may be considered.	34	sqm		
65	Grading of floor with cement mortar 1:3 (1 cement :3 coarse sand),for levelling of floor,where ever required.	0.5	cum		
66	P/F 18mm thick exterior grade HDHMR Board, plain with necessary screws etc. Of approved brand In open shelves , racks, almirah, cupboards, boxes etc. with necessary screws excluding cost of fittings likes hinges , drawer channels etc. complete . Make - Action Tesa or equivalent as approved.	140	sqm		
66A	Extra for 25mm plain HDHMR board in place of 18mm plain HDHMR board.	12	sqm		
67	P/F 12mm thick exterior grade HDHMR Board, plain with necessary screws etc. Of approved brand with necessary screws on backing of racks, drawer, cupboard etc. complete . Make - Action Tesa or equivalent as approved.	38	sqm		

68	Extra for using 18/12mm ORD (One side plain and other side choice laminated) HDHMR Board in place of 18/12mm board thick plain board.	59	sqm		
69	Extra for using 18/12 mm OSL (One side choice laminated and other side balancing laminated) HDHMR Board in place of 18/12mm board thick plain board.	119	sqm		
70	Extra for using BSL (Both side choice laminated) HDHMR Board in place of 18/12mm board thick plain board.	35	sqm		
71	Providing and fixing bright/matt finished stainless steel handles of approved quality and make with necessary screws etc, all complete - 125mm	76	each		
72	Providing and fixing stainless steel fancy handles of approved quality and make with necessary screws etc, all complete - 200mm	21	each		
73	Providing and fixing stainless steel soft closing spring hinges at 0 degree hinges (hydraulic type) of approved make/brand to cupboard shutters with full threaded steel screws inclinding making necessary recess in board and finished etc., as per approved make.complete as per direction of Engineer-in-charge.	215	each		
74	Providing and fixing stainless steel soft closing heavy type telescopic drawer channels of approved make 500mm long with screws etc. complete as per direction of Engineer-in-charge.	4	set		
75	Providing and fixing 2mm thick 16 to 19mm wide PVC edge binding tape of approved make and quality to cupboard/wardrobe including necessary synthetic resin hot pressed to edges - etc complete as per direction of Engineer-in-charge. Make - E3 or equivalent as approved.	479	metre		
76	Providing and fixing 2mm thick 25 to 30mm wide PVC edge binding tape of approved make and quality to cupboard/wardrobe including necessary synthetic resin hot pressed to edges - etc complete as per direction of Engineer-in-charge. Make - E3 or equivalent as approved.	60	metre		
77	Supply of labour for shifting of material/ furniture etc, not dismentled by the contractor.	20	each		

78	Providing & Fixing Stainless steel sink, double bowl with drain board, with overall size 1372 X 457mm (approx.), bowl size 432 X 381 X 230 mm including CP waste. Neelkanth or equivalent make, with minimum 5yr warranty.	1	each		
79	Extra for providing opening of required size & shape for wash basin/kitchen sink in marble/ granite including necessary holes for pillar tapes including polishings & rounding of cut edges etc as required. complete.	1	each		
80	P/F SS 304 grade square grating with frame size approx. 127mm x 127mm & drain pipe size 100mm with or without waste hole including cutting in tile / stone flooring & grouting of floor trap. Make chilly/ Sanjay chilly or equivalent as approved.	2	each		
81	Making groove of size approx. 3mm x 3mm in flush door shutter. Including application of French spirit polishing in groove (after pasting of laminate). Masking tape should be applied before polishing to protect the laminate.	85	metre		
82	Providing and fixing stainless 2nd class teakwood lipping/moulded beading of size- 35/6 mm Fixed with woden adhesive of Approved quality and screw/nails on the edges of the wooden doors including of exposed surface,smooth, as per direction of Engineer-in-charge.	112	metre		
83	Providing and fixing bright finish brass/ SS 304 grade door stopper with necessary screws etc. complete	14	each		
84	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)- With float glass panes of 5mm thickness (weight not less than 12.5kg/sqm)	14	sqm		

85	Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminium doors, windows shutters and partition frames with C.P. brass/ stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge. - Pre-laminated particle board with decorative lamination on both sides.	5	sqm		
86	Providing & installation of linear workstations in the cluster of six back to back. The table top will be 25mm thick pre- laminated MDF Board with clear table size of 1500 x 700mm for each sitting, with standard height, supported on 18mm thick pre-laminated board Gable ends. Edges of the board to be covered with 2mm thick edge binding tape. Partitions of 1.2m height to be provided in center & on ends & to separate each sitting. The partitions will be 45mm thick, with powder coated aluminium frame. The end and intermediate partitions will be fixed with glass in about 30cm height, in upper portions. The centre partitions b/w back to back workstation, will be fixed with combination of fabric pin up board & laminated writing board in upper part. Rest of the area of the partitions will be covered with laminated board. The partitions will be provided with in built, two wire raceways. Complete in all respect as per drawing & design approved finally. The contractor is to submit details drawing design for the approval. Make- CPM systems/ Methodex systems or equivalent manufactures, as per satisfaction of Engineer-in-charge. Rate to be quoted per sitting.	12	each		

87	Providing & installation of curvilinear workstations in the cluster of four in + shape (i.e with diagonal sitting. The table top will be 25mm thick pre-laminated MDF Board with clear table size of 1500 x 1500 x 600mm for each sitting, with standard height, supported on 18mm thick pre- laminated board Gable ends.Edges of the board to be covered with 2mm thick edge binding tape.Partitions of 1.2m height to be provided in center, to seperate each sitting. The partitions will be 45mm thick, with powder coated alluminium frame. The partitions b/w workstations, will be fixed with combination of fabric pin up board & laminated writing board in upper part. Rest of the area of the partitions will be covered with laminated board. The partitions will be provied with in built, two wire raceways. Complete in all respect as per drawing & design approved finally. The contractor is to submit details drawing design for the approval. Make- CPM systems/ Methodex systems or equilent manufacturer, as per satisfaction of Engineer-incharge. Rate to be quoted per sitting.	8	each		
88	Providing & installation of Mobile Drawer unit of size 400 (W) x 650(H) x 450 (D) mm, with three drawers, made in 18mm Th. Pre-laminated MDF Board with 2mmm thick PVC edge binding tape. Complete with accessories like sliding channels handles, lock will be of approved make. Rate to be quoted per unit.	20	each		
89	Providing and fixing special quality bright finished brass cupboard or ward robe locks with four levers of approved quality including necessary screws etc.complete. - 65mm	54	each		
Total for Civil work (X)					
Total for Electrical work (Y)					
Grand Total (X+Y)					
Grand Total in words					

Schedule of Quantities (Electrical)					
S.No	Description	Qty	Unit	Rate in Fig & words	Amount
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. Group C, make of switches should be Norisys, Square Series or equivalent model of havells, North West in white colour and wire,cables will be of make Havells/Polycab/Finolex/KEI.	55.00	each		
2	Supply, Installation, testing and commissioning of recessed/surface mounting LED flat panel 2`X2`, 42 watt with high efficient LEDs and glare free opal diffuser equivalent to cat no.VENUSNEOTW2X2PLR42WLEDTWMOD of Havells make including hanging/fixing arrangement complete with all respect as directed by engineer incharge. Make should be Phillips/Crompton greaves/Wipro /Havells.	30.00	each		
3	Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CM/M/W) minimum 6.00, Air delivery minimum 210 Cum/Min , 350 RPM (tolerance as per IS : 374-2019), THD less than 10% including, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required. Make havells, Usha, Crompton etc.	15.00	each		

4	Supply, Installation, testing and commissioning of recessed/surface mounting round LED panel of 12 watt, LED series of Slim Panel lights has excellent lumen efficiency and most affordable high quality bulb with Aluminium body, Panel size : 6.5 Inches cut out size : 6 Inches Approx, including fixing arrangement complete with all respect as directed by engineer incharge. Make should be Phillips/Crompton greaves/Wipro /Havells.	77.00	each		
5	Installation, testing and commissioning of ceiling fan including wiring the down rods of standard length (up to 30 cm) with 1.5sq.mm. FRLS PVC insulated, copper conductor, single core cable as required.	15.00	each		
6	Supply and fixing of MS plate 4 mm thick, 100x100 mm with fixing on roof by 4 nos fastners including providing and welding ceiling fan hook on MS plate as required as per site condition.	15.00	each		
7	Supplying and fixing extra down rod of 10 cm length G.I. pipe, 15 mm dia, heavy gauge including painting etc. as required. (Note : More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored)	75.00	each		
8	Supply 300 mm sweep, single phase, 230 V 50 Hz, exhaust fan including all accessories such as frame, wings, capacitor, louvers/shutters etc complete in all respect as required. Exhaust fan should be USHA / Khaitan / Bajaj / Crompton Greaves or equivalent.	1.00	each		
9	Installation of exhaust fan in the existing opening/making the suitable hole, including making good the damage, connection, testing, commissioning etc as required. Upto 450 mm sweep	1.00	each		
10	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.				
a	1 or 2 Module (75mmX75mm)	44.00	each		

b	3 Module (75mmX75mm)	31.00	each		
c	6 Module (200mmX75mm)	31.00	each		
d	8 Module (125mmX125mm)	4.00	each		
e	12 Module (200mmX150mm)	10.00	each		
11	Supplying and fixing metal box of 150 mm X 75 mm X 60 mm deep sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc. as required.	10.00	each		
12	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. All the switches, socket etc. make should be Norisys square Series or equivalent model of havells, North West.				
a	15/16 amp switch	97.00	each		
b	6 pin 15/16 amp socket outlet	97.00	each		
c	Telephone socket outlet	21.00	each		
13	Supply and fixing modular blanking plate on the existing modular plate & switch box, and of make of switches fixed, excluding modular plate as required.	52.00	each		
14	Supplying and drawing 2 pair 0.5 sq mm FR PVC insulated copper conductor, unarmoured telephone cable in the existing surface/ recessed steel/ PVC conduit as required.	525.00	metre		

15	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. (All the wires/cables should be multistrand, ISI marked, finolex/ KEI/Polycab/ Havells make)				
a	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	160.00	metre		
b	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	130.00	metre		
c	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	485.00	metre		
d	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	20.00	metre		
e	4 X 2.5 sq. mm + 2 X 2.5 sq. mm earth wire	65.00	metre		
f	4 X 4 sq. mm + 2 X 4 sq. mm earth wire	133.00	metre		
g	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	10.00	metre		
16	Supplying and fixing single phase Motor Starter 7.00A to 11.5A, Screws mounting type for 1.5t AC, norisys make cat-no. S725G.01 or of equilent make , complete with all respect, connections, testing and commissioning etc. as required. Equilent make may be consider	11.00	each		
17	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) (All the MCB's MCCB, MCB DB, should be Legrand/ L&T/ schneider make or equivalent.)				
a	12 way, Double door SPN DB	2.00	each		

18	Supplying and fixing of following ways surface/recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A, tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.) (All the MCB's MCCB, MCB DB, should be Legrand/ L&T/ schneider make or equivalent.)				
a	8 way (4 + 24), Double door	1.00	each		
19	Providing and fixing 125 A , 36 kA, FPMCCB rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required. (All the MCB's MCCB, MCB DB, should be Legrand/ L&T/ schneider make only.)	1.00	each		
20	Supplying and fixing of following rating, 240 /415 volts, C series, miniature circuit breaker of following poles in the existing MCB DB/ MCCB in existing cubical panel board including drilling holes in cubical panel making complete with connections, testing and commissioning as required. (All the MCB's MCCB, MCB DB, should be Legrand/ L&T/ schneider make only.)				
a	5 to 32 amp. SP MCB	50.00	each		
b	5 to 32 amp. SPN MCB	5.00	each		
21	Supplying and fixing of 25 mm steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.	10.00	metre		
22	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall/making hole in the wall and making good the same in case of recessed conduit as required.				

a	25 mm.	200.00	metre		
b	50 mm.	10.00	metre		
23	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed steel/ PVC conduit as required. (Cable should be D -Link / Digi link make only) (cable should be marrked by ferrule at both ends)				
a	1 run of cable	100.00	metre		
b	2 run of cable	250.00	metre		
c	3 run of cable	250.00	metre		
24	Supply and fixing one no. wall mounting CAT 6 I/O connection box punch type internet socket with shutter on existing modular box complete in all respect excluding connections as required. (I/O box should be of Norisys/ D -Link/, Molex,AMP-Netconnect, make only.	20.00	each		
25	Supply of following size of XLPE insulated, PVC sheathed, aluminum conductor armoured cable ISI mark of 1.1 KV grade as required. Make should be havells/Polycab/KEI etc.				
a	3½ X 70 sq. mm	25.00	metre		
26	Laying and fixing of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
a	Above 35 sq. mm and upto 95 sq. mm (clamped with 25/40x3mm MS flat clamp)	25.00	metre		

27	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.				
a	3½ X 70 sq. mm (50mm)	2.00	each		
28	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	70.00	metre		
29	Dismantling and disconnection of recessed/surface, old DB's / small panels, switch board including boxes, tube, light fitting, fan, cable, wiring, conduit, etc including necessary repairs, as required, as following.				
(a)	TL fitting, switch socket board, fans, Db'/small panels etc.	111.00	each		
(b)	Wiring , cable and Conduit etc.	100.00	metre		
30	Supplying, installation, testing & commissioning of smoke detector with builtin LED and mounting base complete with all connections and of approved make, etc. as required.	14.00	each		
31	Supplying, installation, testing & commissioning of manual call boxes of MS construction in surface/recess with stainless steel chain & hammer assembly complete with glass and push button etc. as required.	2.00	each		
32	Supplying, installation, testing & commissioning response indicator on surface/recess MS box having two LEDs metallic cover complete with all connections etc. as required.	3.00	each		
33	Supplying, installation, testing & commissioning fire alarm sounder with facility to make announcement, mounted in M.S. box (16 SWG) with hinged cover plate & suitable for operation with amplifier i/c line matching transformer etc. complete as required.	2.00	each		

34	Supplying, installation, testing & commissioning sector panel suitable for 4 zones, complete with visual indications for short circuit fault, open circuit fault, fire condition and all other standard facilities as per IS:2189 with mimic diagram for all area/zone covered, complete with all connections, interconnections as required.	1.00	each		
35	Supplying & laying of 2x1.5 sqmm fire survival armoured cable, 600/1000V rated with annealed copper conductor having glass mica fire barrier tape covered by an extruded layer of Cross Linkable Ethylene Propylene Rubber (EPR) insulation and LSZH inner bedding, steel wire armouring & LSZH outer sheath complete as required.	100.00	Metre		
36	Supplying & laying of 2x1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS outer sheath complete as required.	75.00	Metre		
37	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
A	63 A	3.00	each		
38	Dismantelling of 1.5 T Split AC including Reinstallation after renovation work, including service and gas top-up as per requirement.	11.00	each		
39	Providing and Fixing additional copper pipe, cable, drain pipe, etc. of required size, as per requirement for re- installation of old split AC of 1.5 T, including Clamping etc. complete.	15.00	metre		
40	Providing and Fixing exhaust system including exhaust fan of size 400mm, G.I. duct of cross-section 15X15 inch. (approx.) and of 3 meter length (approx.), complete including grill and louver.	1.00	job		

41	Providing and Fixing storage water heater of 15L capacity with minimum 4 star rating, 2yr coil warranty and 5yr tank warranty with digital display including connection pipes. Make - Bajaj/crompton/v-guard/or equivalent.	1.00	each		
Total for Electrical work (Y)					

SAMPLE DOCUMENT

S.No	Description	Qty	Unit	Rate(in fig. & words)	Amount
1	Providing and laying Vitrified tiles in floor in diferent 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. Double charge vitrified tile polished finish, size of Tile 800 x 800 mm. Make - Kajaria, Somany, orient bell, AGL, CERA	241	sqm	Rs 1540/- Rs one thousand five hundred & forty only	Rs. 3,71,140/-
2	Deduct for not using 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) bedding in laying of floor tiles and jointing with grey cement slurry @ 3.3 kg/ sqm.	241	sqm	Rs 860/- Rs Eight hundred sixty only	Rs. 2,07,260/-
3	Deduct for not grouting the joints with white cement and matching pigment in the items of fixing or vitrified tiles.	264	sqm		
4	Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3 mm thickness.	241	sqm		
5	Providing and laying Vitrified tiles in diferent 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, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS: 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).Size of Tile 800x800 mm. Make - Kajaria, Somany, orient bell, AGL, CERA.	23	sqm		
6	Providing and laying Vitrified tiles in floor in diferent 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 tiles Matt/Antiskid finish of size,Size of Tile 600 x 600 mm. Make - Kajaria, Somany, orient bell, AGL, CERA	31	sqm		