

INDIAN BANK

CIRCLE OFFICE - BHUBANESWAR
B-2, EAST, SAHID NAGAR,
BHUBANESWAR-751007

TENDER DOCUMENT

***ELECTRICAL INSTALLATION WORK
OF KALINGA VIHAR BRANCH OF INDIAN BANK
AT KALINGA VIHAR, BHUBANESWAR,
ORISSA.***

NAME AND ADDRESS OF THE TENDERERS

.....

DATE AND TIME OF OPENING OF THE TENDER : **29.12.2010 AT 1530 HRS.**

ARCHITECTS/CONSULTANTS:

ARCHITECTS CREATION,
B-9(2nd.FLR.), SAHEED NAGAR,
(NEAR DIPAK NURSING HOME),
BHUBANESWAR-751 007.

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NOTICE OF INVITATION TO TENDER

Sealed item rate tenders, in duplicate, are invited from Bank's empanelled contractor only and on behalf of:

**The Zonal Head,
Indian Bank, Zonal Office,
B-2, East, Sahid Nagar,
Bhubaneswar-751007**

for the following work:-

- 1) **Name of the work** : Electrical Installation works of Kalinga Vihar Branch of Indian Bank, Bhubaneswar, Orissa.
- 2) **Place of the work** : Kalinga Vihar, Bhubaneswar, Orissa.
- 3) **Time of completion** : 10 (Ten) calendar Days.
- 4) **Earnest Money** : Rs.2,500.00(Rupees Two thousand Five hundred) Only & by cross demand draft/Pay order of any nationalized Bank, drawn in favour of **Indian Bank** payable at Bhubaneswar. Tender without earnest money in proper form will be rejected.
- 5) **Estimated Cost** : Rs.2.45 Lakhs.
- 6) **Availability of Tender Document:** The complete tender document can be down loaded from Bank's official Web site ([http:// www. Indianbank..in](http://www.Indianbank.in)) while submitting tender, a crossed D.D./pay order of Rs.500.00 (Five hundred only) (non refundable) payable at Bhubaneswar Favoring DGM Indian Bank Bhubaneswar to be enclosed against cost of the tender, or can be deposited in CA No 416038727 in any Indian Bank Branch.
- 7) **Time, date and place of submission of Tender** : On or before 1400 Hrs. 29.12.2010
At the office of the:-
**The Zonal Head,
Indian Bank, Zonal Office,
B-2, East, Sahid Nagar, i
Bhubaneswar-751007**
- 8) **Time, date and place of opening of tender** : Part-I of the Tender will be opened first at 1530 Hrs. on the same day at the office of the :-

**The Zonal Head,
Indian Bank, Zonal Office,
B-2, East, Sahid Nagar,
Bhubaneswar-751007**

Date & time of opening of the Part-II (Price Bid) will be intimated on the same day/ to be decided by the Tender Committee constituted by the Bank.

- 09) **Tender to be addressed to** : **The Zonal Head,
Indian Bank, Zonal Office,
B-2, East, Sahid Nagar,
Bhubaneswar-751007**
- 10) **Procedure of submission of Tender** : Tenders in duplicate are to be submitted in two parts viz; Part-I & Part-II separately sealed and superscribed with the name of the work along with the required document and manner as detailed in General rules and instruction for the guidance to the tenderers.
- 11) **Inspection of drawing and clarifications** : May be obtained from the office of the consultant on all working hours and days upto 28.12.2010.
- 12) **Validity of Tender** : Three (3) calendar months from the stipulated last date of submission of tender.
- 13) **Sales Tax / Value Added Tax or any other tax on** materials or finished work like Works Contract Tax, Turn Over Tax etc. in respect of this contract whether in vogue or may be imposed in future shall be payable by the contractor and the Bank will not entertain any claim whatsoever in this respect. However any benefit due to reduction of taxes etc. shall be passed to the employer.
- 14) **Delay in submission** arising out of postal or any other irregularities will not be considered. The Bank in any case will not be responsible for any damage in transit in case of postal delivery.
- 15) The Bank will not be bound to accept the lowest tender and reserves the rights to accept or reject any or all the tenders without assigning any reason whatsoever.

For,

Indian Bank, Zonal Office
B 2 East Saheed Nagar
BHUBANESWAR-751007.

**GENERAL RULES AND INSTRUCTIONS
FOR THE GUIDANCE OF TENDERERS**

1. Tenders are hereby invited on behalf of **The Circle Head, Indian Bank, Circle Office, B-2, East, Sahid Nagar, Bhubaneswar-751007** for **Electrical Installation Works of Kalinga Vihar Branch of Indian Bank at Bhubaneswar, Orissa** at an Estimated cost of **Rs.2.45 Lakhs**.
2. Tender document consisting of the following:
 - i. Notice of Invitation of Tender.
 - ii. General Rules and instructions for the Guidance of Tenderers.
 - iii. Form Of Tender.
 - iv. Article of Agreement.
 - v. General Condition of Contract.
 - vi. Special Conditions and Annexures.
 - vii. Technical Specifications for Electrical Installation
 - viii. Bill of Quantities.
 - ix. Tender Drawings.
3. The site for the work is readily available.
4. Tenders, which shall always be placed in sealed cover, with the name of the project written on the envelopes will be received by **The Circle Head, Indian Bank, Circle Office, B-2, East, Sahid Nagar, Bhubaneswar-751007, Orissa** on or before time and date and will be opened by him in his office on the same day as stipulated in the Tender Notice.
 - 4.1 Tender in duplicate, will have to be submitted in two parts PART:I and PART:II separately superscribed, sealed and both contained in another sealed envelope, superscribed with the name of the work.
 - 4.1.1 **PART : I Shall contain :-**
 - a). The covering letter without any condition and without dis-closing any of the quoted rate or total tender sum.
 - b). A Letter of authorisation in favour of the representative attending the Tender.
 - c). Earnest Money in required shape.

However, if a tenderer voluntarily offers an unconditional rebate for payment, this may be considered under the sole discretion of the Bank and should only be reflected in Part-I of the Tender.

4.1.2 PART-II Shall contain :-

Offered price with the tender document duly filled with all the items of the bill of quantities enclosed together with the tender document.

4.1.3 Part-I will be opened first on the date and time as stipulated in Tender Notice.

In case E.M.D. in improper shape or No E.M.D. is found then the Tender shall be rejected and the 'Part-II' of the tender will remain unopened thus rendering the Tender as 'NON-BONAFIDE'.

The contents of this part will be scrutinised. The Tender with conditions, what-so-ever, which, in the opinion of the Bank, may have financial implication, will be out-rightly rejected and in the event of the same the part-II of the Tender will remain un-opened and the same will be returned back to the tenderer without assigning any reason whatsoever.

The Bank, then, will proceed with the opening of the Part-II (price bid) immediately after the scrutiny of part-I is over unless and otherwise Bank defers the date and time due to any reason whatsoever then the contractors will be intimated with the new date and time of the opening of Part-II on the same day.

Tenderers are **strictly warned, not to advise any thing other than the prices** which is to be offered in words as well as in figure for all the items listed in the bill of quantities. The tender will be summarily rejected in case of any advice made other than the offered prices in the requisite columns and also in case of any of the item found without rate. No opportunity will be given to fill/quote for any omission/s thus rendering the tender as incomplete tender and the tender will be summarily rejected under the sole discretion of the Bank.

5. The time allowed for carrying out of the work will be **10 (Ten) Calender Days** to be reckoned from the Seventh days after the date of written order to commence work or handing over the site whichever is later.
6. The contractors should quote in figures as well as in words the rate, and amount tendered by them. The amount for each item should be worked out and the requisite totals given.

All corrections shall be attested by the initials of the tenderers with the seal of the firm. In case any discrepancy / difference is found on checking between rates quoted by the Contractor in words and figures or in the amount worked out by him, the following procedure shall be followed:

- a) When there is a difference between the rates in figure and in words, the rates which corresponds to the amount worked out by the Contractor, shall be taken as correct.
 - b) When the amount of any item is not worked out by the Contractor or it does not correspond with the rate written either in figures or in words, then the rates quoted by the Contractors in words shall be taken as correct.
 - c) When the rates quoted by the Contractor in figure and in words tally but the amount is not worked out correctly, rate quoted by the Contractor shall be taken as correct and not the amount.
 - d) Amendments as mentioned above shall be based on the tender marked "original" only.
7. When a contractor signs a tender in an Indian Language, the tendered amount and total amount tendered shall also be written in the same language. In the case of illiterate contractors the rates or the amounts tendered should be attested by a witness.
 8. Earnest money in the form of Bank Draft of any nationalized Bank drawn in favour of **Indian Bank** must accompany each tender and each tender is to be in a sealed cover super scribed "**Tender for Interior Furnishing Works of Kalinga Vihar Branch of Indian Bank at Bhubaneswar, Orissa and addressed to The Circle Head, Indian Bank, Circle Office, B-2, East, Sahid Nagar, Bhubaneswar-751007, Orissa.**"

9. The contractor, whose tender is accepted will be required to furnish by way of security deposit for the due fulfillment of his contract, such sum as will amount as detailed in subsequent clause, hereinafter, of the General Conditions of the Contract.

The EMD of the contractor whose tender is accepted, shall be forfeited in full in case he does not submit the initial Security Deposit within the stipulated period or start the work by the stipulated date mentioned in the award letter.

10. The acceptance of a tender will rest with the Bank who does not bind itself to accept the lowest tender, and reserves to itself the authority to reject any or all of the tenders received without the assignment of a reason. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are to be rejected.

The Bank reserves the right to accept the tender in full or in part and the tenderer shall have no claim for revision of rates or other conditions if his tender is accepted in parts.

11. Canvassing in connection with tenders is strictly prohibited and the tender submitted by the contractors who resort to canvassing will be liable to rejection.
12. All rates shall be quoted on the proper form of the tender alone.
13. An item rate tender containing percentage below / above will be summarily rejected.
14. On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Employer/Architects shall be communicated to the Employer.
15. Special care should be taken to write the rates in figures as well as in words and the amounts in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. In case of figures, the words "Rs." should be written before the figure of rupees and words "P" after the decimal figures, e.g. Rs.2.15p. and in case of words, the word "Rupees" should precede and the word "Paise" should be written at the end, unless the rate is in whole rupees and followed by the words "only", it should invariably be up to two decimal places. While quoting the rate in schedule of quantities, the word "only" should be written closely following the amount and it should not be written in the next line.
16. The Bank does not bind itself to accept the lowest or any tender and reserves to itself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
17. All taxes including Sales Tax / Value Added Tax or any other tax on material or on finished works like work's contract tax, Turn-over Tax, etc. in respect of this contract shall be payable by the contractor and the Bank will not entertain any claim whatsoever in this respect. Sales Tax / Value Added Tax or any other tax on materials or finished work like Works Contract Tax, Turn Over Tax etc. in respect of this contract whether in vogue or may be imposed in future shall be payable by the contractor and the Bank will not entertain any claim whatsoever in this respect. However any benefit due to reduction of taxes etc. shall be passed to the employer.
18. The contractor shall give a list of his relatives working with the Bank along with their designations and addresses.
19. No employees of the Bank is allowed to work as a contractor for a period of two years of his retirement from Bank service, without the previous permission of the Bank. The contract is

liable to be canceled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the Bank as aforesaid before submission of the tender or engagement in the contractor's service.

20. The tender for works shall remain open for acceptance for a period of Three months from the date of opening of tenders. If any tenderer withdraws his tender before the said period, then the Bank shall be at liberty to forfeit Earnest Money paid along with the tender.
21. The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and had/have tendered for the same work. Failure to observe this condition would render tenders of the contractors tendering as well as witnessing the tender liable to summary rejection.
22. It will be obligatory on the part of the tenderer to tender and sign and tender documents for all the component parts and that, after the work is awarded, he will have to enter into an agreement for each component with the Competent Authority in the Bank.
23. The tenderer, apart from being a competent contractor must associate himself with agencies of the appropriate class who are eligible to tender for (i) Electrical (ii) Sanitary and Water supply installations and (iii) Specialist's Work.

For and On Behalf of:
Indian Bank, Zonal Office
B-2, East, Sahid Nagar,
Bhubaneswar-751007

FORM OF TENDER.

To,

The Zonal Head,
Indian Bank, Zonal Office,
B-2, East, Sahid Nagar,
Bhubaneswar-751007

Dear Sir,

Ref : Electrical Installation works of Kalinga Vihar Branch of Indian Bank at Bhubaneswar, Orissa.

I/We refer to the tender published on your web for the Electrical Installation work in connection with the above.

2. I/We do hereby offer to perform, provide, execute, complete and maintain the works in conformity with the conditions of contract, specifications, bill of quantities for the sum of Rs. _____ arrived at the respective rates quoted in the bill of quantities.
3. I/We have satisfied myself/ourselves as to the site conditions, examined the drawings and all aspects of the tender conditions, subject to above, I/We do hereby agree, should this tender be accepted in whole or in part.
 - a). Abide by and fulfill all the terms and provisions of the said conditions annexed hereto ;
 - b). Complete the works within **10 (Ten) calendar days** as stipulated by working in two or more shifts or at night if considered necessary and if directed by the Architects/Consultant/Owner/Employer at no extra cost to the Owner/Employer
4. I/We have deposited the earnest money of Rs. ----- (Rupees, _____) only in the form of demand draft/pay order/Bankers Cheque which, I/We note, will not bear any interest and is liable to forfeiture solely at Bank's discretion:
 - i) If the offer is withdrawn within the validity period of acceptance.
Or
 - ii) If the contract is not executed within 7 days from award of contract.
Or
 - iii) If the works is not commenced within 7 days after issue of work order or the day on which I/We will be instructed to take possession of the site, whichever is later.
Or
 - iv) If the initial security is not deposited within 7 days of issue of work order.
5. The acceptance of this tender shall constitute a binding contract on me/us and any failure as mentioned in Cl.4, above shall constitute a breach of contract by me/us, and the tender accepting authority shall be entitled to have the work executed at our risk and cost and to claim extra cost/expenditure incurred by them, from me/us.
6. I/We understand that you are not bound to accept the lowest or any tender you receive.
7. Our Bankers are :
 - i) _____
 - ii) _____

The names of partners/Directors of our firm are

i) -----

ii) -----

(Name of the partner/Directors of the firm Authorised to sign).

Name of person having power of attorney to sign the contract. (Certified true copy of the power of attorney should be attached).

Signature and addresses of Witnesses.

1.

2.

Your's faithfully,

Place:

Date:

Signature of Tenderer.

]

ARTICLE OF AGREEMENT

ARTICLES OF AGREEMENT made this _____ day of _____ Two Thousand Eleven BETWEEN Indian Bank, represented by **`The Zonal Head, Zonal Office, B-2, East, Sahid Nagar, Bhubaneswar-751007'**; a corporate body constituted under the Banking Companies (Acquisition and Transfer of Undertakings) Act-5 of 1970, carrying on business of Banking and having its Head Office at **66, Rajaji Salai, Chennai-600001** (hereinafter called "the EMPLOYER") which expression should include its successor/s and assignee/s of the ONE PART.

AND

M/s _____ having its office at _____ (hereinafter called the **`CONTRACTOR'** which expression should include in successor/s and assignee/s of the OTHER PART.

WHEREAS the Employer is desirous of executing the Electrical Installation works in connection with the **`Electrical Installation Works of Kalinga Vihar Branch of Indian Bank at Bhubaneswar, Orissa'**(hereinafter called the **`WORKS'**).

AND WHEREAS the Owner/Employer in order to effectively carry out the said works, has engaged Messers **Architects Creation, B-9, Sahid Nagar, Bhubaneswar-751007**. (hereinafter referred to as the ARCHITECTS/CONSULTANTS to prepare drawings, specifications, describing the works to be executed, to call for the tenders from contractors for the job, to open tenders received at the office of the Owner/Employer, to scrutinize and recommend to the Employer the name or names of the contractor or contractors from whom the tenders were received and to issue work order after having the approval and acceptance thereof from the Employer.

AND WHEREAS the Owner/Employer has caused drawings and specifications, priced schedule of quantities of the said works as per General Conditions of Contract, Special Conditions, Additional Conditions, Instruction to the Tenderer etc. all which have been prepared with the assistance of the said Architects/Consultants subject to which the offer of the contractor has been accepted.

AND WHEREAS the Contractor has agreed to execute upon and subject to the conditions set forth herein and Schedule of items and quantities, General Conditions of Contract, Special Conditions of Contract including all other conditions as mentioned in the tender document, specifications and all correspondence exchanged by or between the parties from the submission of tender till the award of work, both letters inclusive, (all of which are collectively hereinafter referred to as "the said conditions") the work shown upon the said drawings and/or described in the said specification and included in the schedule of items and quantities at the respective rates therein set forth amounting to the sum of Rs. _____ (Rupees _____) only as therein arrived at or such other sum as shall become payable thereunder (Hereinafter referred to as "the said Contract amount") or such other amount as shall become payable hereunder at the times and in the manner specified in the said conditions.

AND WHEREAS the tender of the Contractor for execution of the said work has been approved by the Owner/Employer.

AND WHEREAS the contractor has deposited with the owner Rs. _____ (Rupees _____) Only. as Initial Security Deposit for the due performance of the Agreement.

AND WHEREAS the said Architect/Consultant has issued the work order thereafter to the Contractor.

AND WHEREAS the said DRAWINGS numbered as mentioned in the tender document and to be issued from time to time, the Specifications and the Schedule of items and quantities have been signed by and on behalf of the parties hereto.

NOW IT IS HEREBY AGREED AS FOLLOWS:

1. In consideration of the said contract amount to be paid at the times and in the manner set forth in the said conditions, the Contractor shall upon and subject to the said conditions execute and complete the work shown upon the said drawings etc. and such further detailed drawings as may be furnished to the contractor through the Architect/Consultant as described in the said specifications and the schedule of items and quantities.
2. The Consultant in the said conditions shall mean the said **M/s Architects Creation, B-9(2nd floor), Sahid Nagar, Bhubaneswar-751007** or, in the event of their ceasing to be the Consultant for the purpose of this contract for whatever reason, such other person or persons as shall be nominated for the purpose by the Employer. Provided always that no person subsequently appointed to be the Consultant under this contract shall be entitled to disregard or over rule any previous decision or approval or direction given or expressed in writing by the Consultant for the time being.
3. The said conditions and Appendices thereto shall be read and considered as forming part of this Agreement, and the parties hereto shall respectively abide by, submit themselves to the said conditions and perform the agreement on their part respectively in the said conditions contained.
4. The plans, agreements and documents mentioned herein shall form the basis of this contract.
5. This contract is neither a fixed lump sum contract nor a piece work contract but is a contract to carry out the work in respect of **Electrical Installation Works of Kalinga Vihar Branch of Indian Bank at Bhubaneswar, Orissa** as per the scope described and to be paid for according to actual measured quantities at the rates contained in the Schedule of rates and probable quantities or as provided in the said conditions.
6. The said contract comprises the building and the relevant development work as mentioned in tender document and all subsidiary works connected therewith within the same site as may be ordered to be done from time to time by said employer through the Architect/Consultants or other Architects/Consultants as the case may be even though the said works may not be shown on the drawings or described in the said specifications or the priced schedule of quantities.
7. The Employer reserves to itself the right of altering the drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this contract.
8. Time shall be considered as the essence of this contract and the contractor hereby agrees to commence the work on the day of handing over of the site or within fourteenth days from the date of issue of formal work order whichever is later as provided for in the said conditions and to complete the entire work within 18 (eighteen) calendar months subject never the less to the provisions of extension of time.
9. All payments by the Employer under this contract will be made at Bhubaneswar.

10. Any dispute arising under this agreement between the parties hereto shall be deemed to have arisen at Bhubaneswar and shall be referred for adjudication to a sole arbitrator in the manner and in terms of the provisions as laid down in the General Conditions of Contract and Courts in Bhubaneswar shall have jurisdiction to determine the same..
11. That the several parts of this contract have been read by the contractor and fully understood by the contractor.
12. In witness whereof the Employer and the contractor have set their respective hands to these presents through their duly authorised official and the said two duplicates hereof to be executed on its behalf of the day and year first herein above written.

Signed by the Owner/Employer _____ Signed by the Contractor _____

In the presence : In the presence:
 (1) Signature _____ (1) Signature _____
 Name and Address _____ Name & Address _____

 (2) Signature _____ (2) Signature _____
 Name and Address _____ Name & Address _____

GENERAL CONDITIONS OF CONTRACT

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GENERAL CONDITIONS OF CONTRACT

Except where provided for in the description of the individual items in the schedule of quantities and in the specifications and conditions laid down hereinafter and in the Drawings, the work shall be carried out as per standard specifications and under the direction of the Employer/Consultant.

1. **Interpretation:**

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

- i) **Employer** : The term Employer shall denote **Indian Bank** with their **Head Office at 66, Rajaji Salai, Chennai-600001** and any of its employees/representative authorised on their behalf.
- ii) **Consultants**: The term Consultant shall mean "**Architects Creation, B-9, (2nd Floor), Saheed Nagar, Bhubaneswar-751007**" or in the event of their ceasing to be the Consultant for the purpose of this contract such other person/s as the Employer shall nominate for the purpose.
- iii) **Contractor**: The term contractor shall mean the individual or firm or company whether incorporated or not, undertaking the work and shall include legal representative(s) of such individual or persons composing such firm or company or successors of such firm or company as the case may be and permitted assigns of such individual or firm or company.
- iv) **Site**: The site shall mean the site where the works are to be executed as shown within boundary in red border on the site plan including any building and erections thereon allotted by the Employer for the contractor's use.
- v) **Site Engineer**: The Site Engineer shall be appointed by the Bank. The Bank may also determine the number of Site Engineers and the supporting staff at site office to assist them and also whether the Site Engineer shall be temporary or permanent. As far as possible, the Site Engineer should assume charge of his post before the contractor reports on site of work. Where more than one Site Engineer is appointed, one of them shall be designated as Senior Site Engineer by the Bank and the other Site Engineer shall be reporting to the Senior Site Engineer. Wherever PMC is engaged, Site Engineer, if any, will work in close co-ordination with PMC.
- vi) **Drawings**: The work is to be carried out in accordance with drawings, specifications, the schedule of quantities and any further drawings which may be supplied or any other instruction, which may be given by the Employer/Consultant during the execution of the work.

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

In case any detailed Drawings are necessary contractor shall prepare such detailed drawings and/or dimensional sketches therefor and have it confirmed by the Employer/Architects/ as case may be prior to taking up such work.

The contractor shall ask in writing for all clarifications on matters occurring anywhere in drawings, specifications and schedule of quantities or to additional instructions at least 10

days ahead from the time when it is required for implementation so that the Employer may be able to give decision thereon.

- vii) **"The Works"** shall mean the work or works to be executed or done under this contract.
- viii) **"Act of Insolvency"** shall mean any act as such as defined by the Presidency Towns Insolvency Act or in Provincial Insolvency Act or any amending statutes.
- ix) **"The Schedule of Quantities"** shall mean the schedule of quantities as specified and forming part of this contract.
- x) **"Priced Schedule of Quantities"** shall mean the schedule of quantities duly priced with the accepted quoted rates of the contractor.

2. **Scope:**

The work consists of Electrical Installation works relating to **Electrical Installation Works Of Kalinga Vihar Branch of Indian Bank at Bhubaneswar, Orissa** and all subsidiary works connected therewith within the same site in accordance with the "drawings" and "Schedule of Quantities". It includes furnishing all materials, labour, tools and equipment and management necessary for and incidental to the construction and completion of the work. All work, during its progress and upon completion, shall conform to the lines, elevations and grades as shown on the drawings/detail specifications furnished by the Employer/Architects. Should any detail essential for efficient completion of the work be omitted from the drawings/specifications it shall be the responsibility of the contractor to inform the Employer/Architects and to furnish and install such detail with Employer's/Architect's concurrence, so that upon completion of the proposed work the same will be acceptable and ready for use.

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

- a) The variation or modification of the design quality or quantity of works or the addition or omission or substitution of any work.
- b) Any discrepancy in the drawings or between the schedule of quantities and/or drawings and/or specification.
- c) The removal from the site of any defective material brought thereon by the contractor and the substitution of any other material thereof.
- d) The demolition removal and/or Re-execution of any work executed by the contractor/s.
- e) The dismissal from the work of any persons employed thereupon.
- f) The opening up for inspection of any work covered up.
- g) The rectification and making good of any defects under clauses hereinafter mentioned and those arising during the maintenance period (Defect Liability period).

The contractor shall forthwith comply with and duly execute any work comprised in such Employer's / Architect's instructions, provided always that verbal instructions, directions and explanations given to the contractor's or his representative upon the works by the Employer / Architects shall, if involving a variation, be confirmed in writing to the contractor/s within seven days. No works for which rates are not specifically mentioned in the priced schedule

of quantities, shall be taken up without written permission of the Employer or his agent/Architects. Rates of items not mentioned in the priced schedule of quantities shall be fixed by the employer in consultation with the Architects as provided in Clause "variation".

The contractor shall set up a field laboratory with necessary equipments for day to day testing of materials like grading of coarse and fine aggregates, silt content and bulkage of sand etc.

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

3. Tenderer shall Visit the Site.

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

4. Tenders

The entire set of tender paper issued in duplicate to the tenderer should be submitted fully priced and also signed on the last page together with initials on every page. Initial/signature will indicate the acceptance of the tender papers by the tenderer.

The schedule of quantities shall be filled in as follows:

- i) The "Rate" column to be legibly filled in ink in both English figures and English words.
- ii) Amount column to be filled in for each item and the amount for each sub head as detailed in the "Schedule of Quantities".
- iii) All corrections are to be initialed.
- iv) The "Rate Column" for alternative items shall be filled up.
- v) The "Amount" column for alternative items of which the quantities are not mentioned shall not be filled up.
- vi) In case of any errors/omissions in the quoted rates, the rates given in the tender marked "Original" shall be taken as correct rates.

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

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

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

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

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

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

The tenderer shall note that his tender shall remain open for consideration for a period of three months from the date of opening of the tender.

5. Agreement

The successful contractor shall be required to sign agreement as per the draft agreement within the time as stipulated herein before the date of issue of the formal work order and shall pay for all stamps and legal expenses, incidental thereto.

6. Permits and Licenses

The contractor shall pay all royalties and license fee. He shall also defend all suits and claims for infringement of any patent rights and shall save the Employer harmless from loss on account thereof.

Permits and licenses for release of materials which are under Government control will be arranged by the contractor. The employer will render necessary assistance, sign any forms or applications that may be necessary.

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

7. Government and Local Rules

The contractor shall conform to the provisions of all local Bye-laws and Acts relating to the work and to the Regulations etc., of the Government and Local Authorities and of any company with whose system the structure is proposed to be connected. The contractor shall give all notices required by said Act, Rules, Regulations and Bye-laws etc., and pay all fees payable to such authority/authorities for execution of the work involved. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities for licenses, fees for footpath encroachment and restorations etc., and shall indemnify the Employer against such liabilities and shall defend all actions arising from such claims or liabilities.

8. **Taxes and Duties**

The tenderers must include in their tender prices quoted for all duties royalties, cess and sale tax or any other taxes or local charged if applicable. No extra claim on this account will in any case be entertained.

9. **Quantity of Work to be Executed**

The quantities shown in the schedule of quantities are intended to cover the entire work indicated in the schedule of works but the Employer reserves the right to execute only a part or the whole or any excess thereof without assigning any reason therefor. If at any time after the commencement of the work, the Employer / Consultant shall for any reason whatsoever not require the whole work thereof as specified in the tender to be carried out, the consultant/employer shall give notice in writing of the fact to the contractor who shall have no claim to any payment or compensation whatsoever on amount of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the full amount of the work not having been carried out, neither shall he have any claim for compensation by reason of any alterations having been made in the original specification and instructions which shall involve any curtailment of the work as originally contemplated.

The schedule of quantities (BOQ) unless or otherwise stated shall be deemed to have been prepared in accordance with the Indian Standard Method of Measurements and quantities. The rate quoted shall remain valid for variation of quantity against individual item to any extent.

The quantities shown in the schedule of items are approximate and may vary to any extent. No compensation, whatsoever, shall be entertained for increase or decrease of any/all quantities shown against the item of works in the schedule of quantity.

No order in writing shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this clause, but is the result of actual quantities varying from those stated in the schedule of quantities.

Any error in the description or in quantity or omission of any item from the schedule of quantities shall not vitiate the contract but shall be adjusted by adding to or deducting from the contract sum provided that no rectification errors, if any shall be allowed in the contractors schedule of rates.

10. **Other Persons Engaged by the Employer**

The employer reserves the right to execute any part of the work included in this contract or any work which is not included in this contract by other Agency or persons and contractor shall allow all reasonable facilities and use of his scaffolding for the execution of such work. The general civil contractor shall extend all co-operation in this regard.

11. **Earnest Money and Security Deposit**

The tenderer will have to deposit an amount of **Rs.2,500.00(Rupees Two thousand Five hundred)** only in the form of Bank Draft/Pay Order/Banker's Cheque drawn in favour of "Indian Bank" at the time of submission of tender as an Earnest Money. The employer is not liable to pay any interest on the Earnest Money. The Earnest Money of the unsuccessful tenderers will be refunded without any interest soon after the decision to award the work is taken or after the expiry of the validity period of the tender.

The successful tenderer to whom the contract is awarded will have to deposit as initial security deposit a further sum to make up 2% of the value of the accepted tender including the Earnest Money subject to a ceiling of Rs. 5.00 Lakhs. The initial Security Deposit will have to be made within 7 days from the date of acceptance of tender, failing which the Employer at his discretion may revoke the letter of acceptance and forfeit the Earnest Money Deposit furnished along with the tender. The Initial Security Deposit will be invested by the Employer in a fixed deposit account for the duration of the contract period. It shall be refunded to the contractor along with accrued interest within fourteen days after the issue of certificate of virtual completion.

Apart from the Initial Security Deposit made as above, retention money shall be deducted from progressive running bills @ 8% of the gross value of each running bill until the Total Security Deposit, i.e., the initial Security Deposit plus the retention money equals:

- a) 10.00% on the first Rs.1,00,000 of the cost of work.
- b) 7.5% on the next Rs.1,00,000 of the cost of work.
- c) 5.0% on the next amount upto Rs.2 crores of the cost of work.
- d) 2.0% for the amount in excess of Rs. 2 crores of the cost of work subject to a ceiling on the Total Security at Rs.25,00,000.

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

A part of the Security Deposit if and as decided by the Bank can also be furnished in the form of a Bank Guarantee on a Bank other than of the constituent Bank.

However, the retention money will not be deducted from progressive running bills till the amount of the initial security deposit is covered Also the retention money will not be deducted from the contractor's running bills if Bank Guarantee from a Nationalized bank other than **Indian Bank** covering the retention money calculated as above, is submitted by the contractor.

After realization of the total retention money by deduction from the bills of the contractor as specified above, 50 % of the total retention money will be refunded to the contractor on completion of work subject to the following:-

- i). Issue of the virtual completion certificate by the consultant
- ii). Contractor's removal of his materials, equipment, labour force, temporary sheds/stores etc. from the site. Excepting for small presence required if any for the defect liability period and approved by the Bank.

Balance 50 % will be released to the contractor within a reasonable period after the end of 'Defect Liability Period' provided he has satisfactorily carried out all the works, submitted all documents including as built drawings etc. No interest is allowed on retention money and earnest money deposit.

The retention amount can be kept with the Bank in the form of Fixed Deposit pledged to the Bank or Bank Guarantee.

Further, if some dues to the Employer from the contractor have still to be recovered, then the Employer reserves the right to withhold of payment of so much of retention money as in his opinion, represents the cost of the same.

12. Contractor to Provide Everything Necessary

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

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

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

The contractor shall also provide such temporary road on the site as may be necessary for the proper performance of the contract, and for his own convenience but not otherwise. Upon completion, such roads shall be broken up and leveled where so required by the drawings/specifications unless the Employer shall otherwise direct.

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

13. Time of Completion, Extension of Time & Progress Chart

13.1. Time of Completion: The entire work is to be completed in all respects within the stipulated period. The work shall be deemed to be commenced within Seven days from the date of acceptance letter or date of handing over of site, whichever is later. Time is the essence of the contract and shall be strictly observed by the contractor.

The work shall not be considered as complete until the Employer/Consultant have certified in writing that this has been completed and the Defects Liability Period shall commence from the date of such certificate.

13.2 Extension of Time: If in the opinion of the Employer/Architect/Consultant the works be delayed

- (a) reason of any exceptionally inclement weather,
- or
- (b) by reason of instructions from the Employer in consequence of proceedings taken or threatened by or disputes, with adjoining or neighboring owners
- or
- (c) by the works, or delay, of other contractors or tradesmen engaged or nominated by the Employer and not referred to in the specification
- or
- (d) by reason of authorised extra and additions
- or
- (e) by reason of any combination of workmen or strikes or lock-out affecting any of the building trades
- or
- (f) from other causes which the Employer may consider being beyond the control of the contractor, the Employer at the completion of the time allowed for the contract shall make fair and reasonable extension of time for completion in respect therefor. In the event of the Employer failing to give possession of the site upon the day specified above the time of completion shall be extended suitably.

In case of such strikes or lock-outs, as are referred to above, the contractor shall, immediately give the Employer, written notice thereof. Nevertheless, the contractor shall use his best endeavors all that to prevent delay, and shall do all that may be reasonably required, to the satisfaction of the Employer to proceed with the works and on his doing so that it will be ground of consideration by the Employer for an extension of time as above provided. The decision of the Employer as to the period to be allowed for an extension of time for completion hereunder (which decision shall be final and binding on the contractor) shall be promulgated at the conclusion of such strike or lock-out and the Employer shall then, in the event of an extension being granted, determine and declare the final completion date. The provision in clause 15 with respect to payment of liquidated damages shall, in such case, be read and construed as if the extended date fixed by the Employer were substituted for and the damage shall be deducted accordingly.

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

14. Liquidated Damages

Should the work be not completed to the satisfaction of the Employer/Architect/Consultant within the stipulated period, the contractor shall be bound to pay to the Employer a sum calculated as given below by way of liquidated damages and not as penalty during which the work remains uncommenced or unfinished after the expiry of the completion date.

For contracts having
time for completion
6 months and less

1.00% of the estimated amount
shown in the tender per week
subject to a ceiling of 10.0%
of the accepted contracted sum

15. Action when whole of security deposit is forfeited.

In any case which under any clauses of this contract, the contractor shall have rendered himself liable to pay liquidated damages amounting to the whole of his security deposit (whether paid in one sum or deducted by installments) the Employer/ Consultant shall have power to adopt any of the following courses as they may deem best suitable to the interest of the Employer :

- a) To rescind the contract (of which rescission notice in writing to the contractor under hand of the Employer shall be conclusive evidence), and in which case the security deposit of the contractor shall stand forfeited and be absolutely at the disposal of the Employer.
- b) To employ labour 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 price of material (of the amount of which cost and price of a certificate of the consultant 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 this contract and the certificate of the Employer as to the value of the work done, shall be final and conclusive against the contractor.
- c) To measure up the work of the contractor, and to take such part thereof as shall be unexecuted, out of his hands, and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor, if the whole work had been executed by him (of the amount of which excess the certificates in writing of the Consultant 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 the contract or otherwise, or from his security deposit or the proceeds of sale thereof, or a sufficient part thereof.

In the event of any of the above courses being adopted by the Employer/Consultant the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements, or make any advances on account of, or with a view to the execution of the work or the performance of the contract.

And in case the contract shall be rescinded under the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under this contract unless and until the Employer/Consultant will have certified in writing the performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value so certified.

16. Tools, Storage of Materials, Protective Works and Site Office Requirements

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

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

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

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

Protective Measures: The contractor from the time of being placed in possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night, on Sundays and other holidays.

Contractor shall indemnify the Employer against any possible damage to the building, roads, or members of the public in course of execution of the work.

The contractor shall provide necessary temporary enclosures, gates, entrances, etc., for the protection of the work and materials and for altering and adopting the same as may be required and removing on completion of the works and making good all works disturbed.

Storage of materials: The contractor shall provide and maintain proper sheds for the proper storage and adequate protection of the materials etc. and other work that may be executed on the site including the tools and materials of sub-contractors and remove same on completion.

Cement godown shall be constructed for storing about six weeks' requirement of cement and stored as per norms with a stack of 10 bags each and 2 feet opening all around with 2 feet passage of each stock. Structure shall be water-proof from all the sides and top. Cement should be stored one foot above the ground level and have pucca raised floor.

So also reinforcement bars are to be stored above the ground level to prevent the same from getting rusted.

Tools: The all tools, equipments, levels, prismatic compass, chain, steel and metallic tapes and all other surveying instruments found necessary on the works shall be provided by the contractor for the due performance of this contractor.

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

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

The contractor should cover in his rates for making provisions for all reasonable facilities for the use of his scaffolding, tools and plant etc., by sub-contractors for their work or for work to be carried out by other agencies employed by the Employer/Consultant.

17. Clearing Site and Setting out Works

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

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

18. Datum

The average ground level will be considered as the crown of the nearest road, which should be taken as "Datum" which is however, subject to final confirmation by the Employer/Architects. All levels shown in the drawings are to be strictly adhered to.

19. Benches

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

These benches will consist of salwood post of adequate length and minimum diameter 75 mm to be driven in the ground at suitable distance as directed encased with brick work. The wire nails will be driven on the top of salwood post on the centre lines of columns, walls, inside and outside faces of foundation trenches, in order that lines may be stretched between the benches and accurate intersection of excavation. Centre line of walls columns etc., may be clearly indicated and checked at any time if it is so required.

20. Contractor Immediately to Remove All Offensive Matters

All soil, filth or other matters of any offensive nature taken out of any trench, sewer, drain, cesspool or other place shall not be deposited on the surface but shall be at once carted away by the contractor to a safe place as per rules of the appropriate authorities/instruction of the Employer/Consultant.

The contractor shall keep the foundations and works free from water and shall provide and maintain at his own expenses electrically or other power driven pumps and other plant to the satisfaction of the Employer for the purpose, until the building is handed over to the Employer. The contractor shall arrange for the disposal of the water so accumulated to the satisfaction of the Employer and local authority and no claims will be entertained afterwards if he does not include in his rates for the purpose.

21. Access

Any authorised representative of the Employer/Consultant shall at all reasonable times have free access to the work and/or to the workshops, factories or other places where materials are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained, and the contractor shall give every facility to the Employer or their representatives necessary for inspection and examination and test of the materials and workmanship. Except the representatives of the Employer and

Consultant no person shall be allowed at any time without the written permission of the Employer.

22. Materials, Workmanship, Samples, Testing of Materials

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

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

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

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

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

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

23. Removal of Improper Work

The Employer/Consultant shall during the progress of the work have power to order in writing from time to time the removal from the work within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Employer /Consultant are not in accordance with specification or instructions, the substitution or proper re-execution of any work executed with materials or workmanships not in accordance with the drawings and specifications or instructions. In case the contractor refuses to comply with the order the Employer shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental thereto as certified by the Employer/Consultant shall be borne by the contractor or may be

deducted from any money due to or that may become due to the contractor. No certificate which may be given by the Employer/Consultant shall relieve the contractor from his liability in respect of unsound work or bad materials

24. Site Engineer

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

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

25. Contractor's Employees

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

The contractor shall employ at least one graduate engineer having min. 6 years of experience or a senior diploma holder having minimum 10 years of experience. In case contractor fails to employ the technical staff as aforesaid then the contractor shall be liable to pay a sum of Rs. 7500/- each month or part thereof for default. The decision of Architects/Consultants as to the period of default shall be final and binding on the contractor.

The contractor shall employ local labourers on the work as far as possible.

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

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

The contractor shall comply with the provisions of all labour legislation including the requirements of

- a) The Payment of Wages Act
- b) Employer's Liability Act
- c) Workmen's Compensation Act
- d) Contract Labour (Regulation & Abolition) Act, 1970 and Central Rules 1971.
- e) Apprentices Act 1961

- f) Minimum Wages Act
- g) Any other Act or enactment relating thereto and rules framed thereunder from time to time.

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

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

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

26. Dismissal of Workmen

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

27. Assignment

The whole of the works included in the contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign or under let the contract or any part, share or interest therein nor, shall take a new partner, without written consent of the Employer and no subletting shall relieve the contractor from the full and entire responsibility of the contract or from active superintendence of the work during their progress.

28. Nominated Sub-Contractor

All specialists, Merchants, Tradesmen and others executing any work or supplying and fixing any goods for which prime cost prices or provisional sums are included in the Schedule of Quantities/Rates and/or specifications and who may be nominated or selected by the Employer are hereby declared to be sub-contractors employed by the contractor and are herein referred to as nominated sub-contractors.

No nominated sub-contractor shall be employed on or in connection with the work against whom the contractor shall make reasonable objection or save where the Employer and contractor shall otherwise agree who will not enter into a contract provided:

- a) That the nominated sub-contractor shall indemnify the contractor against the same obligations in respect of the sub-contract as the Contractor is under in respect of this contract.

- b) That the nominated sub-contractor shall indemnify the contractor against claims in respect of any negligence by the sub-contractor, his servants or agents or agents or any misure by him or them of any scaffolding or other plants the property of the contractor or under any Workman's compensation Act in force.
- c) Payment shall be made to the nominated sub-contractor by the contractor within seven days of his receipt of the Consultant's certificate provided that before any certificate is issued the contractor shall upon request furnish to the Consultant proof that all nominated sub-contractor's accounts included in previous certification have been duly discharged, in default whereof the Employer may pay the same upon a certificate of the Consultant and deduct the amount thereof from any sums due to the contractor. The exercise of this power shall not create privity of contract between the Employer and the sub-contractor.

29. Damage to Persons and Property Insurance Etc.

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

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

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

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

30. INSURANCE.

Unless otherwise instructed the contractor shall insure the works and keep them insured until the virtual completion of the contract against loss or damage by fire and/or earth quake, flood. The insurance must be placed with a company approved by the Employer, in the joint names of the Employer and the contractor for such amount and for any further sum if called to do so by the employer, the premium of such further sum being allowed to the contractor as an authorised extra.

Moreover, the contractor will be required to obtain "Workmans Compensation Insurance" from an approved insurance company at his own cost.

Insurance is compulsory and the Contractor shall effect insurance before undertaking construction work and deposit the policy and receipt for premiums paid with the Employer within 7 (Seven) days from the date of issue of work order unless otherwise instructed. In default of the contractor insuring as provided above, the Employer on his behalf may so insure and may deduct the premiums paid from any money due, or which may become due to the contractor. The contractor shall as soon as the claim under the policy is settled or the work reinstated by the Insurance Company should they elect to do so, proceed with due diligence with the completion of the works in the same manner as though the fire has not occurred and in all respects under the conditions of the contract. The contractor in case of rebinding or reinstatement after fire shall be entitled to extension of time for completion as the Employer may deem fit.

31. ACCOUNTS RECEIPTS & VOUCHERS

The contractor shall, upon the request of the Employer furnish them with all the invoices, accounts, receipts and other vouchers that they may require in connection with the works under this contract.

If the contractor shall use materials less than what he is required under the contract, the value of the difference in the quantity of the material he was required to use and that he actually used shall be deducted from his dues. The decision of the Employer shall be final and binding on the contractor as to the amount of materials the contractor is required to use for any work under this contract.

32. MEASUREMENT OF WORK

The contractor will record the measurements in the approved printed measurement books available in the Consultant's office on payment, and submit measurements for verification and endorsement of site Engineer / site representative/s of the Consultant, if any. The contractor should submit the bill to the Consultant with such endorsement.

The Consultant shall upon receipt of the bill intimate to the contractor that he requires the work to be measured, and the contractor shall forthwith attend or send a Qualified Agent to assist the Consultant or the Consultant's representative/Employer's Representatives in taking such measurements and calculations and to furnish all particulars or to give all assistance required by either of them.

Should the contractor not attend or neglect or omit to send such Agent then the measurement taken by the Consultant or a representative approved by him shall be taken to be the correct measurement of the work.

The Contractor or his Agents may at the time of measurement take such notes and measurements as he may require. All authorised extra work, omissions and all variations made without the Consultant's knowledge, if subsequently sanctioned by him in writing, with the approval of the Employer shall be included in such measurements. The final measurement should be done within three weeks from the date of completion of work jointly by the Consultant and/or his representative. If the contractor fails to comply, the measurements taken by the Consultant will be final.

33. METHOD OF MEASUREMENT

Unless otherwise mentioned elsewhere in the tender document, measurements will be on the net quantities of work produced in accordance with upto date rules laid down by the

Indian Standard Institution. In the event of any dispute with regard to the measurement of the work executed, the decision of the Consultant/Employer shall be final and binding on the contractor.

34. ACTION WHERE NO SPECIFICATION

In the case of any class of work for which there is no such specification in Technical Specification, such work shall be carried out in accordance with the I.S. specification, and in the event of there being no I.S. specification, then in such case the work shall be carried out in all respects in accordance with the instructions and requirements of the Consultant/Employer.

**35. CONTRACTOR NOT TO DEPOSIT MATERIALS
IN A MANNER THAT MAY CAUSE INCONVENIENCE
TO THE PUBLIC**

The contractor(s) shall not deposit materials on any site which will cause inconvenience to the public. The Employer/Consultant may require the contractor to remove any materials, which are considered by him to be a danger or inconvenience to the public or cause them to be removed at the contractor's cost.

36. Payments

All bills shall be prepared by the contractor in the form prescribed by the Employer/Consultant. Normally one interim bill shall be prepared each month subject to minimum value for interim certificate as stated in appendix herein referto. The bills in proper forms must be dully accompanied by detailed measurements in support of the quantities of work done and must shown deductions for all previous payments, retention money etc.

The Consultant shall issue a certificate after due scrutiny of the contractors' bill stating the amount due to the contractor from the Employer and the contractor shall be entitled to payment thereof, within the period of honouring certificates named in these documents. In case of delay due to some reasons in the processing of such bills for payment, an adhoc advance of 75% of the billed amount may be paid on the request of the contractor for the smooth progress of the work.

The amount stated as in appendix, in an interim certificate shall be the total value of work properly executed and 75% of invoiced / assecced value of material brought to site for permanent incorporation into the work up to the date of the bill less the amount to be retained by the Employer as retention money of these conditions and less installments previously paid under these conditions, provided that such certificate shall only include the value of said material and goods as and from such time as they are reasonably, properly and not prematurely brought to or placed adjacent to the work and then only if adequately protected against weath or other causalities.

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

All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed, and shall not preclude the requiring of bad, unsound, and imperfect or unskilled work to be removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect or the accruing of any claim, nor shall, it conclude, determine or affect in anyway the power of the Employer under these

conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for completion of the work or of the date of certificate of completion furnished by the Consultant and payment shall be made by the Employer within three months from date of receipt of the final bill duly verified & certified by the Consultant.

The Employer/Consultant reserves the right to withhold in part or full payment of bills in case of non-compliance/violation of any terms and conditions stipulated in the agreement. The contractor shall neither suspend the work nor claim for extension of time for non-payment/withholding of payment on this account and no interest is also payable on the payment with-held/due.

37. Final Payment

The final bill shall be accompanied by a certificate of completion from the Consultant. Payments of final bill shall be made after deduction of Retention Money as specified herein before of this documents, which sum shall be refunded after the completion of the defects Liability Period after receiving the Employer's/ Consultants' certificate that the contractor has rectified all defects to the satisfaction of the Employer/Consultant. The acceptance of payment of the final bill by the contractor would indicate that he will have no further claim in respect of the work executed.

38. Variation/Deviation

No alteration, omission or variation ordered in writing by the Architect/Consultant shall vitiate the contract. In case of The Bank/Architect/Consultant thinks proper at any time during the progress of work to make any alteration in, or addition to or omission from the works or any alteration in the kind or quality of the materials to be used therein, the Architect/Consultant shall give notice thereof in writing to the contractor or shall confirm in writing within seven days of giving such oral instructions the contractor shall alter to, add to, or omit from as the case may be in accordance with such notice, but the contractor shall not do any work extra to or make any alternations or additions to or omissions from the works or any deviation from any of the provisions of the contract, stipulations, specifications or contract drawings without previous consent in writing of the Architect/Consultant and the value of such extras, alterations, additions or omissions shall in all cases be determined by the Architect/Consultant and the same shall be added to or deducted from the contract value, as the case may be.

39. Valuation of Variations

No claim for an extra shall be allowed unless it shall have been executed by the authorization of Employer/Consultant. Any such extra is herein referred to as authorised extra and shall be made in accordance with the following provisions.

- a)(i) The net rates or prices in the contract shall determine the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced herein.
- (ii) Rates for all items, wherever possible should be derived out of the rates given in the priced BOQ. If in arriving at the contract sum the contractor have added to or deducted from the total of the items in the tender any sum either as a percentage or proportion, the same percentage or proportion shall apply to all items of works for valuation of variations.

- b) The net prices of the original tender shall determine the value of the items omitted, provided if omissions do not vary the conditions under which any remaining items of works are carried out, otherwise the prices for the same shall be valued under sub-clause (c) hereunder.
- c) Where the extra works are not of similar character and/or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items or works are carried out, then the contractor shall within 7 days of the receipt of the letter of acceptance inform the Architect/Consultant of the rate which he intends to charge for such items of work, duly supported by analysis of the rate based on the National Building Organisation, CPWD or in case such is not available therein, from the approved schedule with the various elements valued at local market price plus 15% (fifteen percent) towards profit and over heads.
- d) Where extra work cannot be properly measured or valued the contractor shall be allowed day work prices at the net rates stated in the tender of the BOQ or, if not, so stated then in accordance with the local day work rates and wages for the district provided that in either case, vouchers specifying the daily time (and if required by the Architect/Consultant) the workman's name and materials employed be delivered for verifications to the Architect/Consultant at or before the end of the week following that in which the work has been executed.
- e) It is further clarified that for all such authorised extra items where rates cannot be derived from the tender or from any approved analysis of rate viz; C.P.W.D. or N.B.O., the Contractor shall submit rates duly supported by rate analysis worked on the "Market Rate Basis" for material, labour, hire/running charges of equipment and wastages etc. plus 15% towards establishment charges, contractor's overheads and profit. Such items shall not be eligible for escalation.
- f) Works Contract Sales Tax, if applicable will also be considered over and above 15%.
- g) Rates arrived at by any of the above methods and approved by Architects/Consultants is final and binding on contractor.

40. **Substitution**

Should the contractor desire to substitute any materials and workmanship, he/they must obtain the approval of the Employer/Consultant in writing for any such substitution well in advance. Materials designated in this specification indefinitely by such term as "Equal" or "Other approved" etc. specific approval of the Employer/Consultant has to be obtained in writing prior to execution.

41. **Preparation of Works for Occupation and Use on Completion**

The whole of the work will be thoroughly inspected by the contractor and deficiencies and defects put right. On completion of such inspection the contractor shall inform the Employer that he has completed the work and it is ready for inspection.

On completion the contractor shall clean all windows and doors including the cleaning and oiling if necessary, of all hardware, inside and outside, all floors, stair-cases, and every part of the building. He will leave the entire building neat and clean and ready for immediate occupation and to the satisfaction of the Employer/Consultant.

42. **Clearing Site on Completion**

On completion of the works the contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and the works clean and in a workmanlike condition to the satisfaction of the Employer/Consultant.

43. Defects after Completion

The contractor shall make good at his own cost and to the satisfaction of the Employer all defects, shrinkage, settlements or other faults which may appear within 12 (Twelve) months after completion of the work. In default the Employer may employ and pay other persons to amend and make good such damages, losses and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor and such damages, loss and expenses shall be recoverable from him by the Employer or may be deducted by the employer, in lieu of such amending and making good by the contractor, deduct from any money due to the contractor a sum equivalent to the cost of amending such work and in the event of the amount retained being insufficient, recover that balance from the contractor from the amount retained together with any expenses the Employer may have incurred in connection therewith.

44. Concealed Work

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

45. Escalation

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

46. Idle Labour

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

47. Suspension

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

After such notice shall have been given, the contractor shall not be at liberty to remove from the site of the works or from any ground contiguous thereto any plant or materials to subsist from the date of such notice being given until the notice shall have been complied with. If the contractor fails to start the work within seven days after such notice has been given to

proceed with the works as therein prescribed, the Employer may proceed as provided in this clause (Termination of Contract by Employer).

48. Termination of Contract by Employer

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

49. ARBITRATION.

All disputes or differences of any kind whatsoever which shall at any time arise between the parties hereto touching or concerning the works or the execution or maintenance thereof of his contract or the rights thereof this contract or the construction remaining operation or effect hereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after determination, for closure or breach of the contract (other than those in

respect of which the decision of any person is by the contract expressed to be final and binding shall after written notice by either party to the contract to the other of them and to the appointing Authority who shall be appointed for this purpose by the employer be referred for adjudication to a sole arbitrator to be appointed as thereafter provided.

It is also a term of the contract that if Contractor(s) do/does not make any demand for arbitration in respect of any claim(s) within 90 days of receiving intimation from Employer/Consultant that the bill after due verification is passed for payment of a lesser amount, or he has accepted the payment as per clause 45 whichever is earlier or otherwise, the Contractor's right under this agreement to refer to arbitration shall be deemed to have been forfeited and Employer/Consultant shall be relieved and discharged of their liability under this agreement in respect of such claims. Further, it is agreed that for the purpose of this clause, such notice is deemed to have been received by the Contractor(s) within 2 days of posting of the letter by Employer/Consultant or when delivered by hand immediately after receipt thereof by the Contractor(s), whichever is earlier. Further, a letter signed by the officials of Employer/Consultant that the letter so posted to the Contractor(s) shall be conclusive.

For the purpose of appointing the sole Arbitrator referred to above, the Appointing Authority will send within 30 days of receipt by him of the written notice, aforesaid to the contractor a panel of 3 names of persons who shall be presently unconnected with the organisation for which the work is executed from the following categories of arbitrators.

The contractor shall on receipt by him of the names as aforesaid select any one of the persons named to be appointed as a sole Arbitrator and communicate his name to the Appointing Authority within 30 days of receipt by him of the names. The Appointing authority shall thereupon without any delay appoint the said person as the sole Arbitrator. If the contractor fails to communicate such selection as provided above within the period specified, the Appointing Authority shall make the selection and appoint the selected person as the sole Arbitrator.

If the Employer fails to send to the Contractor the panel of three names as aforesaid within the period specified, the contractor shall send to the Employer a panel of three names of persons who shall all be unconnected with either party. The Employer shall on receipt by him of the names as aforesaid select any one of the person named and appoint him as the sole Arbitrator. If the Employer fails to select the person and appoint him as the sole Arbitrator within 30 days of receipt by him of the panel and inform the contractor accordingly, the contractor shall be entitled to appoint one of the persons from the panel as the sole Arbitrator and communicate his name to the Employer.

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

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

The Arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties fixing the date of the first hearing.

The Arbitrator may from time to time, with the consent of the parties, enlarge the time for making and publishing the award.

The Arbitrator shall give a separate award in respect of each dispute or difference referred to him. The Arbitrator shall decide each dispute in accordance with the terms of

the contract and give a reasoned award. The venue of arbitration shall be such place as may be fixed by the Arbitrator in his sole discretion.

In all cases, where the amount of claim in dispute is Rs.50,000/- (Rupees Fifty thousand) and above, the Arbitrator shall give reasons for the award.

The fees, if any, of the Arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties, the cost of the reference and of the award including the fees if any, of the Arbitrator who may direct to and by whom and in what manner, such costs or any part thereof shall be paid and may fix or settle the amount of costs to be so paid.

The award of the Arbitrator shall be final and binding on both the parties.

Subject to aforesaid the provisions of the Arbitration Act.1940 or any statutory modification or re-enactment thereof and the rules made thereunder, and for the time being enforce, shall apply to the Arbitration proceeding under this clause.

The Employer and the contractor hereby also agree that arbitration under clause shall be a condition precedent to any right to action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

50. Excepted Matters:

If the disputes or differences pertain to the under noted matters (called excepted matters), the decision in writing of the officer of Indian Bank designated in and signing the contract documents shall be final, conclusive and binding on the parties. No arbitration shall arise in such matters except either by mutual agreement or under the directions of a competent Court.

- i) Instruction
- ii) Transactions with local authorities
- iii) Proof of quality of materials
- iv) Assigning or under letting of the contract
- v) Certificate as to the causes of delay on the part of the contractor and justifying extension of time.
- vi) Rectification of defects pointed out during the defects liability period.
- vii) Notice to the contractor to the effect that he is not proceeding with due diligence.
- viii) Certificate that the contractor has abandoned the contract.
- ix) Notice of determination of the contract by the Employer.

51. SECURITY ARRANGEMENTS

Proper arrangements shall be made to keep all records under lock and key.

It shall be ensured that the contractor provides for adequate fences, watch and ward and security of basic materials such as cement and steel etc.

Movement of material, stores and plant, especially of those in which the Bank has got a financial interest or those which influence progress of work, shall be strictly controlled. Checks shall be exercised at gate (entrance and exit shall be preferably through one gate only).

When the work is completed and handed over to the use, the responsibility of proper security arrangements shall rest with the users.

52. **WORKING HOURS.**

Site Office working hours shall normally be fixed as may be prevailing in the locality.

Normally no construction work of important structural nature shall be carried out on Sundays, Holidays and during nights. In exceptional circumstances, however, the work may be carried out with prior approval of the Site Engineer who shall depute supervising staff to be present on the occasion.

APPENDIX HEREINBEFORE REFERED TO

CLAUSE :

45. Defect liability period	:	6 months from the date of completion of work.
39. Period of final measurement	:	3 months from the date of completion of work.
13. Date of commencement	:	7th days from the date of issue of work order. OR Handing over the site Whichever is later.
13. Time of completion	:	10 calender days from the date of commencement of work.
38. Value of works for interim certificate.	:	Rs. 1,00,000.00
38. Period for honouring Interim certificate.	:	7 Days.
14. Liquidated damages	:	1.00% of the estimated amount at the Rate of shown in the Tender per week subject to a ceiling of 10.0% of the accepted contracted sum.
38. Installment after the issue	:	50 % of the total S.D. retained of completion certificate

SPECIAL CONDITIONS

C O N T E N T S

D E S C R I P T I O N	C L A U S E No.	P a g e No.
Inspection by Technical Examiner	1	45
Safety code	2	45
Register of work	3	45
Submission of R.A. Bill	4	45
Adjustment of Error	5	45
Land for contractors establishment	6	45
Water	7	46
Power	8	46
First-Aid Facilities	9	46
Fire Fighting Arrangements	10	46
Reports and Returns	11	47
Site Book	12	47
Rates all inclusive	13	47
Sales Tax on works contract	14	47
Income Tax	15	47
Item rate tender	16	47
Completion Inventory	17	48
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Completion Drawings, and Photographs	20	48

ANNEXUES

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SPECIAL CONDITIONS

CL.1. INSPECTION BY TECHNICAL EXAMINER.

The proposed work covered under this tender is subject to inspection by the Chief Technical Examiner / Technical Examiner or by an officer of the Vigilance cell of the Authority on behalf of the Owner/Employer/Architects/Consultants. The contractor shall be required to extend all assistance and facilities for such inspections.

CL.2. SAFETY CODE

The Contractor shall strictly comply with the provision of safety code Refer Annexure-I.

CL.3. REGISTERS OF WORKS.

The contractor will be required to maintain the registers at site of work and should produce the same for inspection of Architects/ Consultants/ Owner/ Employer whenever desired by them. Typical proforma are enclosed. Refer Annexure-XV.

CL.4. SUBMISSION OF R.A. BILLS.

The Contractor will have to submit their running account bills in printed forms shown in annexure-IV.

CL.5. DISCREPANCIES AND ADJUSTMENT OF ERRORS.

The several documents forming the contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawings and figured dimensions in preference to scaled dimensions.

In the case of discrepancy between schedule of quantities, the specifications and/or the drawings, the following order of reference shall be observed;

- a). Description in the schedule of items and Quantities.
- b). Technical specifications.
- c). Drawings

If there are varying or conflicting, provisions made in any one document forming part of the contract, the accepting shall be the deciding authority with regard to the intention of the document.

Any error in description, quantity or rate in schedule of Quantities or any omission there from shall not vitiate the contract or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.

CL.6. LAND FOR CONTRACTORS ESTABLISHMENT.

For the purpose of construction of contractor's store-yard, godowns, site office and ancillaries, the contractor may utilise portion of the land belonging to the employer at such location as would not interfere with the execution of the works. For all these, the contractor shall have to obtain permission of the Architects/Consultant/Owner/Employer. The contractor shall for this purpose submit to the Architects/Contractor/Owner/Employer for his approval a plan or plans of the proposed layouts for the site facilities. The Architects/Consultants reserves the right to alter and modify the contractor's proposal as he may deem fit. the contractor may arrange at his own cost lands for the said purpose from

municipalities, local bodies, or other authorities if so required on terms as they may prescribe but this is subject to approval of Architects/ Consultant/Owner/Employer.

CL.7. WATER.

The rates quoted by the contractor shall include all expenditure for providing all the water for the full contract required for the works, including that for the work people and all staff on the site. He shall make his own arrangement for the supply of good quality water suitable for use in the works and the work people. He shall obtain municipal connection and all charges for connection shall be borne by him. If municipal water is not available or inadequate, he shall make other arrangements like sinking tube wells, making bore wells, or transport from outside by tankers or any other suitable means entirely at his cost, and no separate payment for the same will be made.

CL.8. POWER.

The Contractor shall at his own cost arrange for necessary power for construction and lighting for the entire period of contract. If power is available in the area, the contractor shall make his own arrangement to obtain necessary connections, maintain an efficient service of electric lights and power and shall pay for all requisite charges for the same.

The Owner/Employer, as well as the Architects/Consultant shall give all the recommendations necessary to obtain power and water connections from the concerned authorities, but the responsibility for obtaining the same shall rest with the contractor. If any other contractor, appointed by the employer, is required to use water and power, he shall be allowed to use the same and make temporary connections from the supply arranged by the contractor at rates and terms that may be mutually agreed upon by both, failing which, at rates, terms and conditions that may be decided by the Architect/Consultant/Owner/Employer will be final and binding upon him.

CL.9. FIRST - AID - FACILITIES.

The Contractor shall at his own expense arrange to ensure availability of medical attendance promptly when necessary. He shall provide properly equipped first aid station In-Charge of qualified person at suitable location within easy reach of the workmen and staff. The contractor shall also provide for transport of serious cases to the nearest hospital.

CL.10. FIRE FIGHTING ARRANGEMENTS.

The Contractor shall at his own expense provide at suitable, prominent and easily accessible places requisite number of Fire Extinguishers and Buckets, some filled with sand and some with water.

CL.11. REPORTS AND RETURNS.

Contractor shall maintain at site daily records of progress with regard to the works carried out, labour engaged and construction equipment deployed. These will be used as the basis for preparation of fortnight returns which are to be submitted to Architect/ Consultant/Owner/Employer regularly in the Progress Report forms. These daily records shall be made accessible to the Architect/ Consultant/Owner/Employer as and when required by him. Enlarged photographs are also to be submitted as and when advised by the Architect/Consultant/Owner/Employer.

CL.12. SITE BOOK.

For the purpose of quick communication the contractor should maintain and preserve at site a book with machine numbered pages in triplicate. Any instruction/advice given and recorded in the site order book by the Architect/Consultant/Owner/Employer shall be considered as a notice served on the contractor.

CL.13.RATES ALL INCLUSIVE.

The rates shall be inclusive of all duties and taxes, turn over tax, excise duty, octroi and any other tax, duty or levy levied by the Central Government, State Government, and local Authority including Value Added tax / Sales Tax on Work's Contract. The rate quoted shall be deemed to be for the finished item of work to be measured at site, and shall be inclusive of cost of all materials, labour, transport, constructional plant and other services like water, power and all that is necessary to conform to the general conditions, special conditions and all other terms and conditions embodied in the contract and all incidentals so far as the necessity for providing the same is specified in or is reasonable inferred from the contract, as also all overheads and profits. The Bank will not entertain any claim whatsoever in this respect.

CL.14.SALES TAX ON WORKS CONTRACT.

The rates quoted shall also be inclusive of sales tax on works contract as applicable at the time of tender. However, the sales tax on works contract shall be deducted at source at prevailing rate from the bills or as prescribed by the Govt. of Orissa from time to time.

CL.15.INCOME TAX.

This shall be deducted at source as per rules at prevailing rates, unless certified if any, for deductions at lesser rate or nil deduction is furnished from appropriate authority.

CL.16.ITEM RATE TENDER.

The tenderer should note that the tender is strictly on the item-rate basis and his attention is specially drawn to the fact that the rate for each individual item should be correct, workable irrespective of the quantity actually done notwithstanding the quantity stated in the schedule of quantities.

CL.17.COMPLETION INVENTORY.

The contractor, while reporting completion should also furnish inventory of all fittings / fixture fixed by him in the work.

CL.18.GUARANTEE.

Wherever the tender provides for submission of a specific guarantee to keep any specialised work efficient and trouble free for a specific period, the same shall be submitted from the specialised agency along with a counter guarantee by the main Contractor engaged for the work. The specialised agency and the main contractor shall furnish the guarantee as mentioned above on non-judicial stamp papers of appropriate values. If the Contractor is required to submit guarantee/guarantees for any item/items for a period of more than 12 months, the guarantee/guarantees in case of those items shall remain valid even after expiry of the defect liability period of 6 months as stipulated in the contract.

CL.19. POSSESSION PRIOR TO COMPLETION

The Employer shall have the right to take possession of or use any completed or partially completed part of the work. Such possession or use shall not be an acceptance of any work not completed in accordance with the contract agreement.

CL.20.COMPLETION DRAWINGS, AND PHOTOGRAPHS

The contractor, while reporting on completion of their work, shall furnish along with to the Consultant:-i) "as done" completion drawing of services viz; sanitary/plumbing, electrical work etc. on ammonia prints, ii) inventory of all fittings fixed by him in the work, & iii) Enlarged completed photographs of the work.

ANNEXURE - I.

SAFTY CODE

1. This shall be maintained in a readily accessible place first aid appliances including adequate supply of sterilised dressing and cotton wool.
2. An injured person shall be taken to a public Hospital with out loss of time in cases where the injury necessitates hospitalisation.
3. Suitable and strong scaffolds should be provided for work men for all works that cannot safely be done from ground.
4. No portable single ladder shall be over 8 metres in length. The width between the side rails shall not be less than 30 cm. (clear) and the distance between two adjacent rungs shall not be more than 30 cm. when a ladder is used, an extra majdoor shall be engaged for holding the ladder.
5. The excavated materials shall not be placed within 1.5 Metres of the edge of the trench or half of the depth of trench which ever is more. All trench and excavations shall be provided with necessary fencing and lighting.
6. Every opening in the floor of a building or in the working plat form be provided with suitable means to prevent the fall of persons or heights shall be one meter.
7. No floor, roof or other part of the structure shall be so over loaded with debris or materials as to render it unsafe.
8. Workers employed on mixing and handling materials such as asphalt with protective footwear and rubber hand-gloves.
9. Those engaged in welding works shall be provided with welder's protective eye shiels and gloves.
10. (i).No paint containing lead or lead products shall be used except in the form of paste or ready made paint.
(ii). Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or surface having lead paint dry rubbed and scrapped.
11. Overall shall be supplied by the contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during the periods of cessation.
12. Hoisting machines and tackles used in the works, including their attachments, anchorage and supports shall be in perfect condition.
13. The ropes used in hoisting or lowering materials or as a means of suspension shall be durable quality and adequate strength and free from defects.

PROFORMA OF BILLS

Name of the contractor/ Agency :
 Name of the work :
 Sr. No. of this Bill :
 No. and date of previous Bill :
 Reference to Agreement No. :
 Date of written order to commence :
 Date of completion as per agreement :

Sl. No.	Item Description	Unit	Rate as per tender Qty.	Amount Rs.	upto previous R/A Bill Qty.	Amount Rs.	upto date (gross) Qty.	Amount Rs.
1	2	3	4	5	6		7	

NOTE :-

- 1). If part rate is allowed for any time, it should be indicated with reasons for allowing such a rate.
2. If adhoc payment is made, it should be mentioned specifically.

 (Net value sine ())

PROFORMA FOR APPLICATION FOR EXTENSION OF TIME PERIOD.

1. Name of Contractor :
2. Name of the work as given in the agreement :
3. Agreement No. :
4. Estimated tender amount :
5. Date of commencement of work :
6. Period allowed for completion of work as per Agreement :
7. Date of completion stipulated in agreement :
8. Period for which extension of time has been given previously :
9. 1st Extension vide Architect's / Bank's letter
No. dated Month Days
10. 2nd Extension vide Architect's/ Bank's letter
No. dated Month Days
11. 3rd Extension vide Architect's /Bank's letter.
No. dated Month Days
12. 4th Extension vide Architect's/ Bank's letter
No. dated Month Days
- Total Extension previously given. :
14. Reasons for which extension have been previously given (copies of the previous application should be attended). :
15. Period for which extension is applied for :
16. Hindrances on account of which extension is applied for with dates on which hindrances occurred and the period for which these are likely to last. :
 - a. Serial No. :
 - b. Nature of hindrance :

- c. Date of occurrence :
 - d. Period for which it is likely to last :
 - e. Period for which extension required for
Reference to item (e) above :
 - f. Net extension applied for :
 - g. Remarks, if any :
-
- 17. Details of extra work and the amount involved :
 - 18. Details of extra work and the amount involved. :
 - 19. Total value of extra work :
 - 20. Proportionate period of extension of time
on estimated amount put to tender :
 - 21. Total extension of time required for 11 & 12 :
 - 22. Submitted to the Architects / Bank :

Signature of Contractor

Date :

PROFORMA OF HINDRANCE REGISTER

Name of work : _____ Date of state of work: _____
 Name of contractor: _____ Period of completion: _____
 Agreement No.: _____ Date of completion: _____

Sr. No.	Nature of hindrance of hindrance removed	Date of occurrence	Date of which hindrance was	Period of hindrance	Signature S E/PE	Remarks

SE = Site Engineer

PE = Project Engineer

PROFORMA OF SITE ORDER BOOK

Name of the

Date of Commencement

Sr. No.	Remarks/ Instruc- tions of the site Engineer/ Architect	Dated initials of Site Engineer/ Architect	Initials of the Contractor for having received the instructions	Action taken with date	Dated initials the site Engineer	Remarks of the Architects PMC/C.C. Officials
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TECHNICAL SPECIFICATION FOR INTETECHNICAL SPECIFICATION FOR THE ELECTRICAL WORKS

1. All installations shall comply with the requirements of the Indian Electricity Rules, 1956, as amended from time to time and as per relevant laws of National Electrical Code, 1985.
2. All materials to be arranged by the contractor for use in the work must be got approved from the Engineer-in-Charge well in advance before these are actually used on the work.
3. Bad workmanship is liable to be rejected in to-to.
4. All repairs and patch work shall be neatly carried out to match with the original finish and to the entire satisfaction of the owner/Architect. Any damages to the building due to execution of work shall have to be made good immediately by the contractor at his own cost.
5. The contractor shall make his own arrangements for storing the materials and watch & ward at his own cost, even for the installation till the date of completion and handing over the site.
6. The contractor shall make his own arrangement his own cost for general and electrical tools and plants required for the work.
7. All debris due to the electrical works shall be removed and site shall be cleared by the contractor as soon as the work is completed.
8. Wiring conduit routes shall be marked at site fist and get approved from the Engineer-in-Charge before the commencement of the actual work.
9. The work shall ordinarily be carried out according to the drawings supplied with the schedule of work at the time of award of work, subject to any change made by the Engineer-in-Charge.
10. All the materials to be used on the work shall conform to one of the following specifications in order of priority.
 - a) The materials should conform to ISI Specifications and should be ISI marked wherever available.
 - b) If materials to be used are not covered by any one of the above specifications, it should be get approved from the Owner/Architect.

Unless otherwise mentioned in the schedule of work, the contractor shall use the Materials in the work according to the LIST OF SUGGESTED MANUFACTURERS' enclosed with the CONTRACT DOCUMENT.

In case the particular make of material mentioned are not available at the time of execution of the work, the alternative make of materials has to be approved from the Bank/Architect before its use.

11. The rates quoted shall include cost of for service connection charges, the cost of metering connection, PVC cables, cable sockets etc. unless-otherwise mentioned.
12. Distribution wiring shall include circuit wiring. No extra payment shall be made for circuit wiring unless-otherwise mentioned.

13. Rates quoted for point wiring of PVC wires on surface shall include cost of switches, ceiling roses etc. on wooden board or partly concealed as stated in the Schedule of items. No extra cost for switches, ceiling roses, boards etc. shall be allowed.
14. Rates quoted for point wiring in surface conduit/concealed conduit will include switches, ceiling roses etc. on M.S. Board as specified. No extra cost for switches, ceiling roses, boards etc. shall be allowed.
15. The rates for erection of ceiling fan and fluorescent fittings must include the cost of supplying down rod as necessary and flexible wires, connection charges, fixing of regulator and testing etc. unless otherwise mentioned. If necessary fans with down rod and fittings may be supplied by the employer.
16. The rates for plug socket point wiring shall include the cost of socket-outlet, plug top and control switch in box and necessary connection charges including earthing as specified.
17. The rates or fittings shall include cost of supply and fixing of fittings, lamps, etc. and connection and testing charge.
18. The rates for cable-laying shall include the cost of cable trenches with tiles, sands etc. and also the cost of saddle clamp (incase of surface wiring) providing G.I. pipes under road crossing, drain etc. necessary clamps etc.
19. The rates for cable joining shall include the cost of labour and materials including land, cable box clamp etc.
20. The rates for earthing shall include the cost of jointing earth wire with busbar by means of cable sockets, etc. and cost of earthing with specified earth wire. No deviation from the specification for earthing work including earth stations will be accepted. Cost of required caution notices should be included in the rates of earthing.
21. The wiring includes painting of installations with two coats of approved paints, and painting should match with the interior decoration of wall and ceiling. No extra charge for painting shall be entertained.
22. General spirit of the technical specification and method of measurement shall be as laid down in the latest addition of I.S. code of practice. Rates quoted for all items shall include for the cost of supplying, labour and materials fixing and/or erection complete with all the appliances necessary for the proper execution and carrying out of the work to the truest sense of drawing and specification though this may not be mentioned in particular item of work in the schedule of items.
23. All materials, fittings, appliances etc. used in the External shall conform to relevant Indian Standard Specification/R.E.C. Specification and construction Standard wherever these exists. All the materials used shall be got approved by the Architect/Owner prior to actual use.

DEFINITIONS:

Distribution Wiring:

This shall include all works necessary from final sub-circuit wiring from a way of Branch Distribution Board/Connectors Box to the point of utilisation of the Electricity/Load to be applied for the wiring of light, fan or plug point etc. No extra payment will be made for circuit wiring.

Fan Point:

Distribution wiring from connector box/fixture, (for looping in system) to ceiling rose at the other end and also the switch wiring either from connector box or from any other source as decided by Architect/Consultant/Owner/Employer. The point shall be complete with a ceiling rose, a switch and regulator Board suitable to accommodate regulator.

Light Point:

Distribution wiring from connector box or another fixture (for looping-in-system) to ceiling rose/holder/bracket at the other end and also switch wiring from connection box or any other source as decided by the Architect/Consultant/Owner/Employer.

The point shall be completed with a switch, circuit wiring batten holder, bracket block for light fitting, ceiling rose etc.

5A, 250 V.3 Pin Plug Point:

Necessary wiring from nearest connector box/B.D.B. to 3 Pin Plug with 1 x 14 SWG G.I. wire or 1 x 16 SWG Copper wire drawn along with the wiring as a part of wiring and shall be complete with supply and fixing 3 pin socket outlet with at incoming side.

3 Pin 250 V, 10/15A Power Plug Point:

Necessary wiring to 3 Pin 10/15A power point from a separate way of B.D.B./Main Switch including supply and fixing socket, switch, 1 x 16 SWG Copper / 1 x 14 SWG Copper wire continuous earth and suitable sheet metal boards.

LOOP-IN-JUNCTION BOX

The junction boxes shall be drip-proof type and dust and vermin proof construction fabricated from 16mm thick sheet steel or seasoned teak wood board having internal dimensions of 200 x 150 x 100 depth for single phase distribution system with bakelite top cover with brass screw.

WORKMANSHIP AND INSTALLATION WORK.

The workmanship shall be of Good commercial quality and all supply material and installation work shall be completed to the full satisfaction of the Consultant/Bank.

METHOD OF MEASUREMENT

Unless otherwise mentioned in the schedule of quantities, measurement will be on net quantities of work produced. In the event of any dispute with regard to the measurement of work executed the decision of the Consultant/Bank shall be final, and binding to the contractor.

CONDUIT WIRING

All conduit shall be conforming IS:1653-1972 or B.S. 31 and finished with galvanized or stove enameled surface. All conduit accessories shall be conforming to IS: 4557-PART-II and the threaded type. Conduit less than 19 mm in diameter shall not be used. All conduit shall be of 16 Gauge upto 30 mm and 14 Gauge above 30 mm size.

The conduit for each circuit shall be erected complete with necessary bushes before drawing in of any wire T.W. spacer of 10 mm thick shall be used between the conduit

saddle and fixing surface. The saddle shall be fixed at an interval of not more than 750 mm apart for vertical run and 600 mm apart for horizontal run.

WIRES

Unless otherwise mentioned in the schedule of quantities, only single core PVC/Polythene insulated cable consisting of single/ multi strand copper conductor shall be used for wiring in conduit system.

EARTHING.

All exposed metal parts of the electrical equipments shall be connected to earth electrodes by not less than two separate and distinct earth connection in accordance with Indian Electricity Rules, and the relevant Indian Code of practice for earthing 3043-1966.

EARTH ELECTRODE

The earth electrode shall be G.I. pipe 'B' class having 50 mm internal diameter 3 Mt. long in one single pipe with holes 12 mm dia. on all sides at 150 mm center, upto a minimum height of 2.5 Mt. from bottom and two holes 15 mm dia. at 100 mm from the top end to receive a 76 mm (3") long G.I. bolt, double nuts, washers and complete with wire-mesh funnel. No joints will be allowed in the earth electrode. The electrode shall be driven at least 2 Mt. clear from masonry structure and the distances between two electrode shall be not less than twice the length of the electrode. A masonry inspection pit of size 600 mm x 600 mm x 150 mm deep shall be built with 125 mm thick cement mortar (6:1) brick work both inside and outside plastered 20 mm thick and neatly cemented 1.5 mm thick, inside top and outside around the top of the earth pipe, so that the top of the G.I. pipe is 250 mm below the finished ground level and the opening on top shall be provided with G.I. manhole with C.I cover fixed flush with the outside finished ground level.

4.0 SPECIFICATION FOR PVC SYSTEM OF WIRING:

- 4.1 H.W. Battens for Distribution wiring shall be from 1st class well seasoned hard wood free from knots and saps.

Battens shall be 13mm thick and wide enough to accommodate total number of wire placed parallel on horizontal or vertical run.

- 4.2 The Batten shall be secured to ceiling/wall with Deto fix. Spacing of screws shall not exceed 450mm and 600mm for horizontal and vertical run respectively.

- 4.3 The wiring shall be done with good workmanship and neat appearance.

- 4.4 All Batten joints shall be half lapped or dove tailed.

- 4.5 The size of regulator board shall sufficient to accommodate switches for light, fan, fan regulator plug that are to be controlled from the board.

- 4.6 Back sides of T.W. materials shall be painted in with 2 coats of black anticorrosive paint to prevent moisture ingress before fixing on wall.

The fronts shall be highly polished with clear shellac varnish of approved quality in 2 coats.

- 4.7 Flat head Brass coated pins with link clips (made of at least 27 SWG thick soft aluminium sheet) shall be used to fasten PVC wires on wooden batten.

- 4.8 Total wiring length (except wiring on the switch or regulator board) shall be painted with 2 coats of synthetic enamel paint of approved colour and quality.
- 4.9 Mechanical Protection:
- a) Wiring/Cables passing through wall shall be through a protective tube to prevent any possibility of cables coming in contact with wall.
 - b) All wiring/cables passing through floor shall be through suitable G.I. conduit upto a height of 1.5m and shall be flush floor below.
- 5.0 Conduits used shall be heavy gauge type, threaded and coupled and with marker's label at the end of each standard length.
- 5.1 Conduit fittings like bend, tees, couplers, etc. shall be inspection type made of pressed M.S. or Malleable C.I.
- 5.2 The fittings shall either be black stove enamelled or galvarised with zinc both outside and inside.
- 5.3 Conduits on surface on wall/ceiling shall be secured with screw and phil plug and spaced not more than 0.77m apart for vertical run and 0.6m for horizontal run.
- 5.4 When conduit run on exposed beams/truss, clamps made 25mm x 2mm iron flat having suitable holes to receive fixing screws to be used.
- 5.5 Lighting and Power cables shall be drawn through separate conduits.
- 5.6 The Conduit System shall be electrically and mechanically continuous through out its length as per I.E.E. Regulations.
- 6.0 Cables for medium pressure system shall be laid in under ground with brick/pipe protection as indicated.
- 6.1 Cables shall be terminated with compression gland.
- 7.0 R.C.C. B.S. shall be current operated type as per I.S. 12640/1988.
- 8.0 The system shall be effectively connected to the General Body of Earth.
- 8.1 The Earth Electrode shall be placed in position by the Contractor only after the inspection of excavated holes. The excavated area around the electrode shall be back filled with loose soil, then properly rammed and consolidated by adding water.
- 8.2 Each lead shall be mechanically protected with suitable G.I. pipe and filled with approved Brand bituminous compound for hermetically sealing.
- 9.0 All Bus-Bar Chambers shall be fabricated from No.16 SWG sheet, in run proof totally enclosed chamber on angle iron frame.
- 9.1 The Bus-Bars shall be made from Aluminium flats having sufficient area. Neutral section shall be at least 50% of phases.
- 9.2 The Bus-Bar chambers shall be rust proof with stove enamelled paint finish and separate earth bolt and nut.

- 9.3 Incoming and outgoing switches to be mounted in tier formation below or above the chamber in a compact design.
- 10.0 Brass Bracket: Swan neck brackets shall be made from heavy gauge brass tubing duly polished and having projection of 227mm.
- 10.1 Base plates and holders shall be properly screwed at both ends.
- 10.2 Normally swan neck type is acceptable but other shapes may be used on prior approval.
- 11.0 All fittings and accessories for internal/external wiring supplied by the Contractor shall be fixed in the manner decided by Architect/Consultant/Owner/Employer.
- 11.1 All light fittings shall be complete with choke, starters, lamp holder, pre-wired in manufacturer's factory and with all accessories and fixing arrangements as necessary for completing the installation.
- 11.2 The ballast for fluorescent fittings shall be of high P.F. compensating type and suitable for heavy duty. In addition P.F. Improvement capacitors to be incorporated.

METHOD OF MEASUREMENT

All stove enameled black M.S. conduit, C.I. conduit/pipe and rigid PVC conduit shall be measured for net length as laid or fixed cover all fitting. Bonds, elbows, tees, etc. shall not be paid separately.

Installation measurement will be based on length from gland to gland with an allowances of 300 mm from cable entering fitting and accessories and one linear meter for cable entering switch boards.

Unless otherwise mentioned in the schedule of quantities measurement will be on net quantities of work produced. In the event of any dispute with regard to the measurement of work executed, the decision of the Consultant/Engineer-in-Charge shall be final and binding to the Contractor.

Thimbles are to be provided wherever required without any extra charge of cables terminations of size 16 Sq.mm. above.

The adopter boxes are to be made up of not less than 16 SWG thick M.S. sheet.

Where unless specified, the G.I. boxes should be 600 mm deep (inside). The brass batten holders/angle holders should be of as per ISI specifications and ISI approved.

The work shall comprise of entire labour including supervision and all materials necessary to make a complete installation and such test as commissioning may be required to give a satisfactory working installation to the satisfaction of the company.

All necessary safety features required as per various statutory authorities for the entire installation of work shall be taken into consideration by the contractor and work to be carried out accordingly.

SUGGESTIVE LIST OF MATERIALS AND THEIR MANUFACTURERS

ELECTRICAL

ITEM	MAKE/BRANDS
1. Switch fuse with H.R.C. fuse	ALSTOM/L&T/SIEMENS
2. Switch fuse with rewirable type fuses	ALSTOM/ENGLISH ELECTRIC/ CROMPTON/L&T/SIEMENS
3. Isolator	ALSTOM/ENGLISH ELECTRIC/ CROMPTON/L&T/SIEMENS
4. Splitter Switch	-do-
5. Iron clad change-over switch	-do-
6. 1.10 K.V. grade PVC insulated armored aluminium cables, STI PVC	CCI/GLOSTER/NICCO/ FINOLEX
7. a) 440 V/1.10 K.V. grade PVC insulated & un sheathed/copper wire, PVC insulated and flexible cords FR & HR PVC	FINOLEX/ANCHOR/HAVELS
8. Steel conduit pipes and Accessories Black enameled	1st class as per I.S.9537 Part-II, 1981 (Pipe samples to be approved) 1st class G.I. Pipe. Galvanized -do-
9. PVC/Polythen pipes	1st class pipe (Heavy Type)
10. G.I. Pipe	-do-
11. 30A/60A DP molded Isolating switch	ANCHOR/G.E.C./L&T
12. Miniature Circuit Breaker/M.C.B. Type Isolator with factory made D.B. Board	MDS/L&T/SIEMENS/LEGRAND
13. Voltmeter/Ammeter/Selection switch	L&T/AE
14. 15 Amp./5 Amp. piano key type switch & Flushed type plug socket	ANCHOR/CONA
15. Ceiling Rose/Angle Holders	ANCHOR/CONA
16. Telephone Wire Holder	FINOLEX/DELTON/ANCHOR/ INCAB/NETCO

17. Luminous indicating type buzzer with cancellation push	ANCHOR/HAVELS
18. Buzzer	HAVELS-C RABTREE-ATHENA
19. 15 Amp./5 Amp./plate type modular switches and sockets over PVC/GI. metallic boxes	-DO- -DO-
20. Call bell/Alarm bell	ELLORA/ANCHOR
21. Bulk head light fittings	G.E.C./COMPTON/BAJAJ/PHILIPS
22. Flourescent & M.V. light	Phillips/G.E.C./Bajaj/CROMPTON
23. Ceiling Fan	G.E.C./Crompton/KHAITAN/USHA/ANCHOR/ALMONARD
24. Exhaust Fan	G.E.C./CROMPTON/KHAITAN/USHA/ANCHOR/ALMONARD
25. Paint	Shalimar/Jenson & Nicholson/British paint/Tata
26. Mirror Optics Lights	Phillips/ECG/Decon/Anchor/Oasis
27. Compact Florescent Light	Phillips/Crompton Greeves
28. 150KVA, 11/0.4 KV	OEU/KT PVT. LYD/ALPHA DYN-11, ONAN Type cooling
29. Data wire & Assoceries	D-Link/SYSMAX
30. Automatic A.C. starter	GEC/L&T

SCHEDULE OF RATES.

1. The Schedule of Rates shall be read with all the other sections of this tender.
2. The tenderer shall be deemed to have studied the drawings, specifications and details of work to be done within the time schedule attached and to have acquainted himself of the conditions prevailing at site.
3. The quantities shown against the various items are only approximate and may vary to any extent individually. No extra shall be entertained whatsoever.
4. The Owner reserves the right to interpolate the rates for such items of work falling between similar items of lower and higher magnitude.
5. All works, item-wise, shall be measured upon completion and paid for at the rates quoted and accepted.
6. The Owner reserves the right to cancel the order for any item or group of work, or split the work between two or more contractors if necessary.
7. All the items of work mentioned in the Schedule of Rates and covered by the contract shall be carried out as per drawings, specifications and directions of Architect & the Engineer-in-Charge of owner and shall include all labor material, transportation, lift floor, handling, duties, octroi, wastage, tools and plants, tackles, testing if any with Contractor's testing appliances etc., required to complete the job in all respects.
8. Unless otherwise specifically provided in the Schedule of Rates, rates quoted for various items shall be deemed to be applicable for works at all levels and positions.
9. Contractors should note that their rates should be inclusive of all attendance on their sub-contractors and also for making good any holes and chases left by the sub-contractors before the builder's work is completed.
10. The contractor shall be responsible for procuring all required materials sufficiently in advance and see that the work is never hindered for want of materials or due to any other reason or restrictions.
11. The contractor shall have to carry out all connected work within the boundary of the proposed work and inside the building if ordered to do so by the Architect/Employer at the rates quoted in the Schedule of items.
12. All materials which shall be used in the work must be from the list of the approved materials as mentioned in the specifications. Samples of materials proposed to be used shall be submitted for approval and nothing shall be used which are not approved.
13. The rates for service connection charges include the cost of metering connection of PVC cables, cable sockets etc.
14. Distribution wiring shall include circuit wiring. No extra payment shall be made for circuit wiring.
15. Rates quoted for point wiring of PVC wires on surface shall include cost of switches, ceiling roses etc. on wooden board or partly concealed as stated in the Schedule of items. No extra cost for switches, ceiling roses, boards etc. shall be allowed.

16. Rates quoted for point wiring in surface conduit/concealed conduit will include switches, ceiling roses etc. on M.S. Board as specified. No extra cost for switches, ceiling roses, boards etc. shall be allowed.
17. The rates for erection of ceiling fan and fluorescent fittings must include the cost of supplying down rod as necessary and flexible wires, connection charges, fixing of regulator and testing etc. If necessary fans with down rod and fittings may be supplied by the employer.
18. The rates for plug socket point wiring shall include the cost of socket-outlet, plug top and control switch in box and necessary connection charges including earthing as specified.
19. The rates or fittings shall include cost of supply and fixing of fittings, lamps, etc. and connection and testing charge.
20. The rates for cable-laying shall include the cost of cable trenches with tiles, sands etc. and also the cost of saddle clamp (incase of surface wiring) providing G.I. pipes under road crossing, drain etc. necessary clamps etc.
21. The rates for cable joining shall include the cost of labour and materials including land, cable box clamp etc.
22. The rates for earthing shall include the cost of jointing earth wire with busbar by means of cable sockets, etc. and cost of earthing with specified earth wire. No deviation from the specification for earthing work including earth stations will be accepted. Cost of required caution notices should be included in the rates of earthing.
23. The wiring includes painting of installations with two coats of approved paints, and painting should match with the interior decoration of wall and ceiling. No extra charge for painting shall be entertained.
24. General spirit of the technical specification and method of measurement shall be as laid down in the latest addition of I.S. code of practice. Rates quoted for all items shall include for the cost of supplying, labor and materials fixing and/or erection complete with all the appliances necessary for the proper execution and carrying out of the work to the truest sense of drawing and specification though this may not be mentioned in particular item of work in the schedule of items.

**BILL OF QUANTITIES OF ELECTRICAL INSTALLATION WORK
FOR KALINGA VIHAR BRANCH OF INDIAN BANK**

SUMMERY

SECTION-I : ELECTRICAL INSTALLATION WORKS	Rs.
SECTION-II : LAN WIRING	Rs.
TOTAL	Rs. <hr/>

SECTION-I : ELECTRICAL INSTALLATION WORK

Sl. No.	Particulars	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
1	MAIN PANEL LT DISTRIBUTION BOARD				
	Supplying, fabrication and installation of L.T. Distribution panel Box , wall mounting type made out of CRCA M.S. Sheet of thickness 18 SWG with provision for neoprene rubber gasket at all joints/doors etc, to make the panel dust, vermin and water proof. The clearance between phase to phase of the Bus-Bar and phase to earth shall be 25.4 mm. (minimum) and between Neutral and earth shall be 19 mm. (Minimum) and connections from Bus Bar to Cut-outs/Switches/ MCB's/Meters etc. shall be shrouded/insulated in order to avoid accidental touch and all the Bus Bars shall be suitable colour coded. All Cable entry shall be from the bottom and all cable exists shall be from the top only. The connection from the Bus-Bar chamber to the Meters shall be through M.S. conduit pipes welded at the base of the box and the doors of all meter chambers and the Bus-Bar chambers shall have provision for sealing so as to make them tamper proof. The width of the cable alley wherever required shall be a minimum of 150 mm. The panel shall be treated with acid and thoroughly washed and dried before painting to remove all rust and dust and then in two coats of Anti-corosive red oxide metal primer painted and two coats of smoke grey enamel paint. The door shall have hinges and suitable thumb screws/panel locks and danger plates of appropriate rating. The drawing of the panel shall be made by the fabricator basing on the single line diagram provided before fabrication of the panel and the same should be approved.				
	Incoming :				
	125 Amp TPN SFU with HRC fuse - 1 set				
	125 Amp TPNE BUS BAR - 1 set				
	Terminated in two Bus bar thourgh equipments as given below.				
	Termination - 1				
*	63 Amp 4 Pole C.O. - 1 No.				
*	RYB (LCD) Indicator - 1 Set				
*	0-500 V voltmeter - 1 Set				
*	selection switch for above - 1 No				
*	0-100 Amp ammeter - 1 Set				
*	selection switch for above - 1 No				
*	CT 100/5 Amp - 1 Set				
*	63 Amp TPN Cu Electrolytic - 1 Set				
*	Bus No.-I				

Sl. No	Particulars	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
	With Outgoing :				
	63 Amp TPN MCB to single phase A.C.D.B. - 1 No.				
	Termination 2				
*	63 Amp 4 Pole C.O. - 1 No.				
*	RYB (LCD) Indicator - 1 Set.				
*	0-500 V voltmeter - 1 Set.				
*	selection switch for above - 1 No.				
*	0-100 Amp ammeter - 1 Set.				
*	selection switch for above - 1 No.				
*	CT 100/5 Amp - 1 Set.				
*	63 Amp TPN Cu Electrolytic - 1 Set.				
*	Bus No.II				
	With Outgoing:				
	63 Amp TPN MCB to UPS - 2 Nos.				
	40 Amp DP MCB to LDB - 4 Nos.	Set	1.00		
2	Rate in words : Rupees				
	SERVICE CABLE				
	Supplying and laying of size 50 Sq.mm. 3.5 core armoured cable of Aluminium conductor PVC insulated inner sheath of PVC tape, then strips armoured, PVC Sheathed overall of 650/1100 Volt grade conforming to IS:1554 (Part-I) of 1988 as amended upto date laid on wall with the help of G.I. Bar and saddles. The work should be completed with all labour, materials and making connections and end crimping of the cable including cutting hole in the masonry wall wherever required and mending good all damages.	Mtr.	30.00		
	Rate in words : Rupees				
3	UPS INPUT DB				
	Supply, fitting and fixing in position Single phase UPS Input DB (Company made with double door cover to be used) M.S. cubical Type duly flushed with the wall surface including making good to all damages with following arrangements:-	Set	1.00		
	Incoming : 63 amp. DP MCB - 1 No.				
	Outgoing : 40 amp. DP MCB - 3 Nos.				
	Rate in words : Rupees				
4	UPS OUT PUT DB				
	UPS Output DB for single phase UPS (Company made with double door cover to be used) M.S. Cubical Type duly flushed with the wall surface including making good to all damages with following arrangements:-	Set	1.00		

Sl. No.	Particulars	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
5	Incoming : 32 amp. DP MCB - 2 Nos.	Set	1.00		
	Outgoing : 25 amp. DP MCB - 3 Nos.				
	Rate in words : Rupees				
	COMPUTER DB				
	Computer Terminal DB (Company made with double door cover to be used) M.S. Cubical Type duly flushed with the wall surface including making good to all damages with following arrangements:-				
	Incoming : 25 amp. DP MCB - 1 No.				
	Outgoing : 6 amp. SP MCB - 10 Nos.				
	Rate in words : Rupees				
6	LIGHT DB	Set	2.00		
	Light D.B. (Company made with double door cover to be used) M.S. Cubical Type duly flushed with the wall surface including making good to all damages with following arrangements:-				
	Incoming : 32 amp. DP MCB - 1 No.				
	Outgoing : 10 amp. SP MCB - 10 Nos.				
	Rate in words : Rupees				
7	A.C.D.B.	Set	1.00		
	A.C.D.B.(for single phase A.C.): - 4 way TPN DB Company made with double door cover to be used M.S. cubical type duly flushed with the wall surface including making good to all damages with following arrangements:-				
	Incoming : 40 amp. TPN MCB - 1 No.				
	Outgoing : 25 amp. DP MCB - 6 Nos.				
	Rate in words : Rupees				
8	SUB-MAIN WIRING				
	Supplying and laying partly recessed (concealed) in wall and partly on surface of the R.C.C.ceiling / under false ceiling of Sub-Main and computer wiring drawn in 25 mm. outer diameter M.S. conduit pipe as per IS:9537 (Part-II) with two runs of single core PVC insulated un-sheathed cable of copper conductor of size as specified below of 650/1100 Volt grade with running earth continuity wire of insulated (250/650) Volt grade) single core Solid Copper Conductor of size 1.0 Sq.mm. (1/18 SWG). with Circuit wiring, Air Conditioner point, power plug point and hall for taking connection to computers as detailed below.				
	From Main Panel to AC DB and to UPS Input DB (10 Sqmm. x 4 + 4.0 Sqmm.x 1) PVC single core copper wire.	Mtr.	30.00		

SI. No.	Particulars	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
	Rate in words : Rupees				
	From main panel to LDB and UPS out-put DB to computer DB and from AC DB to A.C.(6 Sqmm.x 2 + 2.5 Sqmm.x 1) PVC single core copper wire.	Mtr.	120.00		
	Rate in words : Rupees				
9	From computer terminal DB to computer terminal Board (2.5 Sqmm. x 2 + 1 Sqmm. x 1) PVC single core copper wire.	Mtr.	70.00		
	Rate in words : Rupees				
	AC : INDUSTRIAL SOCKET:				
10	Supply and fixing 25 Amp. Power Unit of 'Havells' make comprises of industrial plug socket, plug top, MCB etc. complete (For A.C.)	Nos.	6.00		
	Rate in words : Rupees				
	POINT WIRING:				
	Recessed (concealed) wiring to new light, fan, exhaust fan etc. points described below in 25 mm. outer diameter M.S. Conduit pipe as per IS:9537 (Part-II) with single core PVC insulated, unsheather cable of copper conductor of size 1.5 Sq.mm. (22 /0.3mm.) for point wiring and 2.5 Sq.mm. (36/0.3mm.) for Circuit wiring drawn from B.D.B. to loop in box, junction box, switch board etc. of 650/1100 volt grade with fixing of company made Galvanized Boxes of 50 mm. deep of appropriate size inside the wall, 5 Amps. 230/250 Volts modular clip-in type switches, Angle batten holder/Batten holder / Ceiling rose (as required), 25/50 mm. deep R.J. Box with 3 mm. thick Bakelite cover of the required sizes on R.J.box switch box, junction box etc. and earth continuity wire of insulated (250/650 Volts grade) single core Solid Copper Conductor of size 1.0 Sq.mm. (1/18 SWG).				
	a)With one 5 Amp switch controlling two nos. of light points.	Pts.	25.00		
	Rate in words : Rupees				
11	b)With one 5 Amp switch controlling one no. of points.	Pts.	30.00		
	Rate in words : Rupees				
	5A PLUG SOCKET:				
	Recessed (concealed) wiring to 5 Amp. 250 Volts 2/3 Pin wall socket with Switch as detailed below in 25 mm. outer diameter M.S. conduit pipe as per IS:9537 (Part-II) with single core PVC insulated, un-sheathed cable of copper conductor of size 1.5 Sq.mm. x 2 (22/0.3 mm.) for point wiring and 2.5 Sq.mm. (36/0.3mm) for Circuit wiring drawn from B.D.B. to loop-in-box, junction box, switch board etc. of 650/1100 Volts grade modular clip-in-type Switches and sockets, G.I. company make boards of appropriate size inside the wall and earth continuity wire of insulated (250/650 Volts grade) single core Solid Copper Conductor of size 1.0 Sq.mm. (1/18 SWG).				

SI. No.	Particulars	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
a)	In existing switch Board	Pts.	2.00		
	Rate in words : Rupees				
b)	Wiring to 5 Amps, 2/3 Pin socket outlet as above on separate switch board at an height of 1.0 Meters from the finished floor level.	Pts.	14.00		
	Rate in words : Rupees				
12	RAW-POWER:-				
	Supplying & fixing no. of modular clip in type 16 amp. plug socket on galvanized boxes along with 16 Amp switch. The item to be made recessed in wall. (Raw power - 2 Nos. on counters).	Nos.	2.00		
	Rate in words : Rupees				
13	COMPUTER TERMINAL:				
	Supplying and fixing recessed modular clip-in-type Computer terminals having : 3 Nos. of 6 Amp. switches, 3 Nos. of 6 Amp. sockets and 1 No. of indicator to be fixed on galvanized boxes of company made.	Sets.	5.00		
	Rate in words : Rupees				
14	PRINTER TERMINAL:				
	Supplying & fixing of modular clip-in-type computer's printer terminals having : 1 No. of 16 amp. switch with 1 No of 16 amp. socket, 2 Nos. of 6 amp. switch with 2 Nos. of 6 amp. socket and 1 No.of Indicator to be fixed on galvanized boxes of company made.	Sets	2.00		
	Rate in words : Rupees				
15	EARTHING:				
	Supplying all materials & making earthing with 600 x 600 x 3 mm. copper plate & 40 mm dia 2.5 mtr. long G.I. pipe for watering, brick masonry chamber 300x300, charcoal &				
	salt etc. all as per I.E. rule including duly painted M.S. cover with locking arrangement all complete.	Sets	2.00		
	Rate in words : Rupees				
16	EARTH LEAD:				
	Supplying and laying earth lead with No.8 copper wire, one earth lead from each copper earth electrodes. Both electrodes are again shorted.	Mtr.	25.00		
	Rate in words : Rupees				
17	FITTING & FIXTURES				
a)	Fitting & Fixing Round white powder coated recessed limunaries 2x18 Watt compact flourcent lamp including supply of necessary connecting wire and installation and testing.	Nos.	50.00		

	Rate in words : Rupees				
Sl. No.	Particulars	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
b)	Fitting & fixing 4'0" long Box type fluorescent tube light fittings suitable for following 36 Watt FTL fittings including tube, choke, starter, 20 mm black anelled down rod with enamel painting wall socket, necessary connecting wire, installation and testing complete.				
i)	1 x 36 Watt FTL fitting (Philips TMC 501/136 HPF or its equivalent Bajaj/Crompton).	Nos.	13.00		
	Rate in words : Rupees				
c)	Supplying & fixing of Angle batton Holder fittings with 13 watt CFL Lamp. (Anchor/Cona).	Nos.	3.00		
	Rate in words : Rupees				
d)	Fitting & Fixing of Wall bracket fan of 400 mm dia including pipe clamp to fix to structure of Usha/Crompton/Bajaj.	Nos.	12.00		
	Rate in words : Rupees				
e)	Fixing of 48" Sweep Ceiling fan with supply of modular type electronic fan regulator. (Crompton/Bajaj/Usha.)	Nos.	4.00		
	Rate in words : Rupees				
f)	Fixing of Exhaust fan 300 mm dia including cutting hole in masonry work and mending good to damages. (Crompton/Bajaj/Usha.)	Nos.	2.00		
	Rate in words : Rupees				
	Total				

SECTION-II : LAN WIRING

Sl. No.	Particulars	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
1	Providing following items to set up Computer Lan net work of D-Link or any other standard make having ETIL and UL Certification and 350 MHz frequency support after obtaining prior approval from the Consultant	Rmt	90.00		
	Supplying and laying of all materials CAT-6 cable for Lan- wiring to Computer points in partly pre-laid				
	conduits in floor and party by supplying and laying recessed PVC conduits in partition wall/masonry wall by cutting, chasing etc. including mending all damages.				
	Rate in words : Rupees				
2	Supplying of @ 1.00 Mtr. long patch chord each with RJ 45 jacks and installation of the same in position	Nos.	6.00		
	Rate in words : Rupees				
3	Supplying of Patch Chord @ 2.00 Mtr. Long with RJ 45 jacks and installation of the same in position.	Nos.	6.00		

	Rate in words : Rupees				
4	Supplying and fixing of Information out-let box (Single)(for RJ 45 connector of D-link make)	Nos.	6.00		
	Rate in words : Rupees				
5	Supplying and fixing of 16 PORT Switch : 10/100/1000 Mbps Gigabit Smart switch (DGS-1224T) D-link make.	Nos.	1.00		
	Rate in words : Rupees				
6	Supplying and fixing of 16 Port UTP Patch Panel .	Nos.	1.00		
	Rate in words : Rupees				
7	Supplying and fixing in position of wall mounted rack with cable manager of following sizes:-				
	Rate in words : Rupees				
a)	5U Height	Nos.	1.00		
	TOTAL				