Tender ID	AMR201911008
Date	02.11.2019

SBI INFRA MANAGEMENT SOLUTIONS PVT. LTD., (SBIIMSPL),

(WHOLLY OWNED SUBSIDIARY OF SBI)

AMARAVATI CIRCLE OFFICE

INVITES e-TENDERS ON BEHALF OF

STATE BANK OF INDIA

THROUGH E-TENDERING PROCESS

FOR

AIR CONDITIONING WORKS AT RAJAMAHEDRAVARAM TILAK ROAD BRANCH (CODE:20889)

Manufacturers, Contractors/Approved Dealers of O- General, Diakin, Carrier, Voltas, Blue star, Mitsubhishi, LG, Panasonic and Hitachi are only eligible.(Contractors/Vendor should submit proof of the same)

Note:Firm should possess valid digital signature for this tender.

Last date for submission of e-Tender: 3:00 P.M. (IST) on 13.11.2019
Opening of e Tenders: 4:00 P.M. (IST) on 13.11.2019

The Vice president,
SBI Infra Management Solutions Pvt. Ltd.
Amaravati Circle Office,
2nd Floor, SBI Amaravati LHO Building,
Gun foundry, Abids,
Hyderabad – 500 001.
Ph: 040-23387364, 365

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NOTICE INVITING TENDER (NIT)

SBI Infra Management Solutions Pvt Ltd. invites online e tenders on behalf of SBI for the below mentioned work from the ***Manufacturers, Contractors / Approved Dealers of O- General, Diakin, Carrier, Voltas, Blue star, Mitsubhishi, LG, Panasonic and Hitachi are only eligible.(Contractors/Vendor should submit proof of the same).***

1	Name of the work	**AIR CONDITIONING WORKS AT RAJAMAHEDRAVARAM TILAK ROAD BRANCH (CODE:20889)**
2	Cost of Tender Documents	**1) Rs 1000/-** to be paid through **SB Collect Payment Portal** (in account of respective Tender ID mentioned above) available in SBI internet banking site **https://www.onlinesbi.com/**. **2)** Proof for crediting the amount i.e. Reciept / Unique Reference No. should be enclosed along with EMD. For further details see clause 5 in "Instructions to the Tenderer".
3	Date and Time where tender forms are available	Available from **01.11.2019** to 13.11.2019 at **(i).** https://etender.sbi/ **(ii).** SBI Procurement news.
4	Time and last date of submission of online e-Tender	Up to **3.00pm** on 13.11.2019
5	Place, Time& Address for submission of e tender/contact person /telephone no/email address.	Up to **3.00 pm** on 13.11.2019 **A)** Tender documents (as specified) through online at **https://etender.sbi/** **B)** EMD, Tender fees credit proof physically at the Address: SBI Infra Management Solutions Pvt. Ltd. Amaravati Circle Office 2nd Floor, SBI Amaravati LHO Building, Gun foundry, Abids Hyderabad – 500 001 Ph : 040-23387364, 365 e- mail id : **headand.sbiims@sbi.co.in**
6	Date, Time and Place of opening of e - Tenders	On 13.11.2019 at **4:00 PM** SBI Infra Management Solutions Pvt. Ltd. Amaravati Circle Office 2nd Floor, SBI Amaravati LHO Building, Gun foundry, Abids Hyderabad – 500 001 Ph: 040-23387364, 365 email id : **headand.sbiims@sbi.co.in**
7	Quantum of Earnest Money Deposit (EMD).	**Rs. 3,800.00 /-** (DD-Drawn in favor of SBI Infra Management Solutions Pvt. Ltd payable at Mumbai)

8	Quantum of Security Deposit (SD).	1. Initial Security Deposit (ISD) – 2% of the Tender value including EMD. 2. Retention Money- Deductible in running bills @ 10% of the value of work and Total deductible is 5% of value of work including EMD, ISD.
9	Estimated cost	**Rs.3.72 Lacs**
10	Terms of payment of Bills	1. No Advance will be paid 2.One running bill minimum of **2 lakhs** will be paid.
11	Penalty clause/Liquidated Damages	**@ 0.5%** of the value of work per week of delay subject to a maximum penalty of **5%** of the value of work would be strictly imposed.
12	Stipulated time for completion of the work/supply.	**FOUR WEEKS**
13	Validity period of the tender.	**90 days** from last date for receipt of tender
14	Eligible Taxes	**A)** Income Tax will be deducted at source as per Govt. Guidelines. **B)** Reimbursement of GST will be made only on submission of proper GST invoice as per applicable GST provisions/Rules. The contractor should comply with the following; ◆ Contractor should have GST Registration Number. ◆ Invoice should specifically/separately disclose the amount of GST levied at applicable rate as per GST provisions/Rules. ◆ In case of Correction in the bills after scrutiny, contractor should submit fresh bills for payment. ◆ Contractor should timely file his GST return in accordance with GST provisions to enable the bank to claim the credit of GST paid to the contractor. ◆ The GST Number of State Bank Of India are For Andhra Pradesh state-37AAACS8577K1ZO For Telangana State -36AAACS8577K1ZQ For Puducherry U.T - 34AAACS8577K1ZU
15	Electronic Payment	Electronic payment shall be preferred. All the contractor must furnish contact details for communication in addition to, 1) Name of the their bank 2) Name of their branch 3) Account number 4) Name of the account holder as in the bank account 5) IFSC No of the branch 6) PAN number.
16	For further Clarifications on Technical matters & Agency for arranging e-tender/online bidding	**1**. All e-Tender/Online bidding related issues, e-Procurement technologies Limited, Ahmedabad. Primary Contact Numbers:- Ms. Shubhangi Banodiya, Contact No.:- 079-68136826/6824/6868, +91-9879996111, Email:

		shubhangi@auctiontiger.net ➢ Sujith Nair:- 079-68136857, sujith@eptl.in ➢ JaymeetRathod:07968136829,jaymeet.rathod@eptl.in ➢ Vinayak Khambe:- 079-68136835, vinayak.k@eptl.in ➢ Nadeem Mansuri:- 079-68136853, nadeem@eptl.in ➢ Nandan Valera:- 079-68136843, nandan.v@eptl.in ➢ Hemangi Patel:- 079-68136852, hemangi@eptl.in ➢ Kanchan Kumari:- 079-68136820, kanchan.k@eptl.in ➢ Deepak Narekar:- 079-68136863, deepak@eptl.in ➢ Anshul Juneja:- 079-68136840, anshul.juneja@eptl.in ➢ Salina Motani:- 079-68136831, salina.motani@eptl.in ➢ Devang Patel:- 079-68136859, devang@eptl.in Alternate Contact No.:- Mr. Samjad khan, Contact No.:- 079-68136868, +91-9265871720, Email: **samjad@auctiontiger.net** **2**. All technical matters contact , Sri. Ramesh Kumar K, DM (Elect), +91-9567254549
17	Defect Liability Period.	**One year** from date of Virtual Completion
18	Any additional Information	The quoted rate should be inclusive of materials, labour, wages, fixtures, transportation, installation, all taxes (excluding GST), wastage's, Octroi, machinery, temporary works such as scaffolding, cleaning, overheads, profit, statutory expenses, incidental charges and all related expenses to complete the work

- *Any clarifications sought after opening of the tenders will not be entertained at any cost. Firm should visit the website till last date of submission for changes/ corrigendum if any.*
- *In case the date of opening of tenders is declared as a holiday, the tenders will be opened on the next working day at the same time.*
- *The SBIIMS reserves the right to cancel or postpone the tenders at any stage without assigning any reason.*

For and behalf of State Bank of India,
VICE PRESIDENT,
SBIIMSPL,
AMARAVATI.

MANDATORY / CHECKLIST DOCUMENTS

TO BE SUBMITTED BY BIDDER

 *Scanned copy of **Tender Fees / Cost credit proof paid through SB Collect** must be uploaded and physically the same needs to be submitted at given address within due date of tender.*

 *Scanned copy of **D.D/B.C of EMD** must be uploaded and physically the same needs to be submitted at given address within due date of tender.*

 *Scan copy of letter of **Authorized dealership from Manufacturer** should be uploaded, failing which tender summarily rejected.*

 *Scan copy of **Declaration copy** duly filled & signed by the respective bidder to be uploaded.*

 *Scan copy of **Tender Form / Form of Submission** duly filled & signed by the respective bidder to be uploaded.*

 *The signed and scanned copy of entire **Tender document** in pdf format which is downloaded from* https://etender.sbi/**.**

 *Scan copy of **GST Registration certificate, PAN** of respective bidder to be uploaded.*

 ***Communication details** of the bidder including details as per Pt No. 16 in Notice Inviting Tender(NIT).*

INSTRUCTIONS TO THE TENDERER

1.0 NAME OF WORK

Sealed Tenders are invited by M/s SBIIMSPL for and behalf of State Bank of India for the work of **AIR CONDITIONING WORKS AT RAJAMAHEDRAVARAM TILAK ROAD BRANCH (CODE:20889)**

1.1 SITE AND ITS LOCATION

The proposed work is to be carried out at : State Bank of India,
VISAKHAPATNAM SAGAR NAGAR BRANCH,
VISAKHAPATNAM,
Andhra Pradesh.

2.0 TENDER DOCUMENTS

2.1 The work has to be carried out strictly according to the conditions stipulated in tender consisting the following documents and the most workman like manner,

Instructions to tenderer
General Conditions of Contract
Special Conditions of Contract
Additional Conditions for AIR CONDITIONERS
Technical Specifications
Drawings
Priced Bid

2.2 The above documents shall be taken as complementary and mutually explanatory of one another but in case of ambiguities or discrepancies, shall take precedence in the order given below :

Price Bid
Technical Specifications
Additional Conditions for AIR CONDITIONERS
Special Conditions of Contract
General Conditions of Contract
Instructions to Tenderer

2.3 Complete set of tender documents including relative drawings can be obtained/downloaded from the (i). https://etender.sbi/
(ii). SBI Procurement news
on any Day during the period mentioned in the NIT.

2.4 The tender documents are not transferable.

3.0 SITE VISIT

3.1 The tenderer must obtain himself on his own responsibility and his own expenses all information and data which may be required for the purpose of filling this tender document and enter into a contract for the satisfactory performance of the work. The Tenderer is requested satisfy himself regarding the availability of water, power, transport and communication facilities, the character quality and quantity of the materials, labour, the law and order situation, climatic conditions local authorities requirement, traffic regulations etc; The tenderer will be fully responsible for considering the financial effect of any or all the factors while submitting his tender.

3.2 The tenderer should visit the site to ascertain the working conditions and local authority regulations / restrictions if any and other information required for the proper execution of the work. The work

should be carried out at any floor.

4.0 TENDER EVALUATION

4.1 Submission of Bids/Tender:

Tenders should be submitted online in the website https://etender.sbi/.The tender shall be submitted online in two parts, viz., Technical Bid and Financial/Price Bid with acceptance of Tender Conditions. In addition, scanned copies of required(as mentioned in NIT) Mandatory checklist documents should be submitted online with help of our service provider on the website at https://etender.sbi/ . The tender document is not required to be sent to us in hard copy.

4.2 Technical bid

The list of documents, which are mandatory & specified in Tender Notice are to be furnished by the bidder. Only Technical Bids of those contractors, who submit the earnest money in the prescribed manner, will be opened. All Technical bid documents will be verified at the tender opening time specified in Notice Inviting Tender.

1. Technical bids of bidders whose EMD was not received physically, will not be opened.

2. If the Bidders failed to submit the listed mandatory documents, they will be disqualified.

3. Tender documents found partly or fully modified / altered/ corrected etc shall stand summarily rejected.

4. Any clarifications sought after opening of the tenders will not be entertained at any cost.

5. Tender Document duly signed & stamped by the respective bidder in pdf format only will be validated.

6. If any bidder submit false/fake document they will be banned from doing work in SBI.

Financial bids of those bidders who qualified in technical bid will only be opened.

4.3 Financial bid

The rates to be quoted in Financial Bid should be in Indian Rupees and excluding GST. The rates are summed up automatically in the SBI e-Tender portal. The rates quoted by the Bidder will be validated/scrutinized by committee and compared to market price for adaptability. The lowest total rate quoted will be considered for award of work.

The Bank/SBIIMS will not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever.

5.0 TENDER FEES / COST OF TENDER DOCUMENTS

The Tender Fees as mentioned in Notice shall be paid through **"SB Collect" Payment Portal** available in SBI internet banking site https://onlinesbi.com/**.**

For Tender Fees Payment process follow the below mentiones steps,

1. Tenderer needs to use SBI internet banking site i.e. https://onlinesbi.com/ and select **SB Collect** from the Task bar / Top menu bar for quick access.

2. Go through the **"Terms used"** in the home page of State Bank Collect and click on **"Proceed"** button after accepting terms & conditions.

3. Select **"All India"** in State of Corporate / Institution & select **"Commercial Services"** in Type of Corporate / Institution. Click on "Go" button below shall lead to next page.

4. Select **"SBI Infra Mnagement Solutions"** in Commercial Services Name and click on **"Submit"** button below for proceed to next page.

5. In Select Payment Category opt for **"Tender Application Fee"** & Enter Tender ID exactly as mentioned above in Tender Notice. Click on **"Submit"** button below to proceed to next page.

6. The next page shall be ready with few of the Preloaded Tender details such as Tender ID, Tender name, Opening date, End date...etc., remaining blank details to be filled up by tenderer.

7. Tenderer have to fill up the fields properly whichever mentioned and complete the payment process through portal.

8. After completing the payment, a reciept will be generated with a **Unique Reference No.** A copy of reciept to be send to SBIIMSPL, Amaravati Office address (mentioned in NIT) along with EMD and same to be uploaded online in technical bid.

Tenderer have to pay the tender fee within stipulated time as given in Notice. Tenders uploaded without Tender Application fees shall be rejected summarily. For any Clarification, Contact the SBIIMSPL representative / SBIIMSPL Circle Office as mentioned in NIT.

6.0 EARNEST MONEY DEPOSIT

6.1 The tenderer are requested to submit the Earnest Money (as mentioned in NIT) in the form of Demand Draft or Banker's Cheque in favour of State Bank of India drawn on any Bank in India.

6.2 EMD in any other form other than as specified above will not be accepted. Tender not accompanied by the EMD in accordance with clause 4.1 above shall be rejected.

6.3 No interest will be paid on the EMD.

6.4 EMD of unsuccessful tenderer will be refunded within 30 days of award of Contract.

6.5 EMD of successful tenderer will be retained as a part of security deposit.

Forfeit of EMD : *The EMD will be forfeited under the following conditions:*

(a) If the tenderer withdraws or amend, impairs or derogates from the tender in any respect within the period of validity of the tender.

(b) If the bidder withdraws the bid before the expiry of the validity period of 90 days of the bid or within the time frame of extension given by SBI in special case communicated before the expiry of the bid.

(c) If the bidder fails to comply with any of the provisions of the terms and conditions of the bid document.

(d) If the selected bidder fails to execute agreement in prescribed format and furnish the Bank Guarantee within the prescribed time.

7.0 INITIAL SECURITY DEPOSIT

The successful tenderer will have to submit a sum equivalent to 2% of contract value less EMD by means of D/D drawn in favour of State Bank of India within a period of 15 days of acceptance of tender.

8.0 SECURITY DEPOSIT

8.1 Total security deposit comprise of :

Earnest Money Deposit
Initial Security Deposit
Retention Money

and shall be 5% of contract value. Out of this 2% of contract value is in the form of initial security deposit which includes the EMD. Balance 3% shall be deducted from the running account bill of the work at the rate of 10% of the respective running account bill i.e. deduction from each running bill account will be 10% till total 3% of contract value is reached. 50% of the total security shall be paid to the contractors on the basis of SBI/SBIIMSPL/Architects certifying the virtual completion. The balance 50% would be paid to the contractors after the defects liability period as specified in the contract.

8.2 No interest shall be paid to the amount retained by the Bank as Security Deposit.

9.0 SIGNING OF CONTRACT DOCUMENTS

The successful tenderer shall be bound to implement the contract by signing an agreement and conditions of contract attached herewith within 15 days from the receipt of intimation of acceptance of his tender by the Bank. However, the written acceptance of the tender by the Bank will constitute a binding agreement between the Bank and successful tenderer whether such formal agreement is subsequently entered into or not.

10.0 COMPLETION PERIOD

The Successful Tenderer shall be complete the work within time period(as mentioned in the NIT) from the date of the work order issued to the contractor to commence the work.

i) The work shall be considered as complete only when the certificate of virtual completion is issued by the architects/Bank/SBIIMS.
ii) The 'defects liability period' as prescribed in the contract shall commence only from date of such virtual completion.
iii) Any defect that may appear within the defects liability period shall be rectified by the contractor within reasonable time on receipt of necessary instructions from Bank/SBIIMS to that effect.

11.0 VALIDITY OF TENDER

Tenders shall remain valid and open for acceptance for a period of 3 (Three) months from the date of opening price bid. If the tenderer withdraws his/her offer during the validity period or makes modifications in his/her original offer which are not acceptance to the Bank without prejudice to any other right or remedy the Bank shall be at liberty to forfeit the EMD.

12.0 PAYMENT TERMS

No advance payment in any from will be granted for the works proposed. Running A/c Bills shall be granted in approved format as mentioned in NIT. Period of taking up the final bill will be one month from/ after satisfactory virtual completion or the date of submission of the final bill whichever is later.

13.0 TAXES AND DUTIES

The tenderer must include in their tender prices quoted for all taxes(except GST) and duties royalties, cess ,local charges if applicable. No extra claim on this account will in any case be entertained.

14.0 RATES AND PRICES

14.1 The tenderer shall quote their rates for individual items both in words and figures in case of discrepancy between the rates quoted in words and figures the unit rate quoted in words will prevail. If no rate is quoted for a particular item the contractor shall not be paid for that item when it is executed.

The amount of each item shall be calculated and the requisite total is given. In case of discrepancy between the unit rate and the total amount calculated from multiplication of unit rate and the quantity the unit rate quoted will govern and the amount will be corrected.

14.2 The tenderer need not quote their rates for which no quantities have been given. In case the tenderer quote their rates for such items those rates will be ignored and will not be considered during execution.

14.3 The tenderer should not change the units as specified in the tender. If any unit is changed the tenders would be evaluated as per the original unit and the contractor would be paid accordingly.

The tenderer should not change or modify or delete the description of the item. If any discrepancy is observed he should immediately bring to the knowledge of the SBI/SBIIMSPL/ Bank.

14.4 Each page of the BOQ shall be signed by the authorized person and cutting or overwriting shall be duly attested by him.

14.5 Each page shall be totaled and the grand total shall be given.

14.6 The rate quoted shall be firm and shall include all costs, allowances, taxes, VAT, levies, etc. excluding GST.

14.7 Bank/SBIIMS has the right to offer the contractor to modify the old material wherever/ whenever necessary instead of new supplies.

14.8 The quantities of various items given in the schedule of quantities are approximate. The quantities of work may vary at time of allotment / execution of work. Bank/SBIIMS reserves the right to omit / delete any item(s) of work from the schedule at the time of allotment / before. Contractor will be paid for the actual work done at the site duly verified by the concerned official of the Bank/SBIIMS.

The acceptance of a tender will rest with the Competent Authority, who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all of the tenders received, without assigning any reasons. All tenders in which any of the prescribed conditions are not fulfilled, or are incomplete in any respect are liable to be rejected.

-Sd-
SBI Infra Management Solutions Pvt Ltd,
Amaravati.

FORM OF SUBMISSION OF TENDER

(To be filled by the tenderer)

The Vice president,
SBI Infra Management Solutions Pvt. Ltd.,
Amaravati Circle Office,2nd Floor,
SBI Amaravati LHO Building,Gun foundry,
Abids,Hyderabad – 500 001.

Dear Sir/s,

Ref: **TENDER FOR AIR CONDITIONING WORKS AT RAJAMAHEDRAVARAM TILAK ROAD BRANCH (CODE:20889)**

I/ We hereby declare that I/ We have carefully gone through the conditions laid down in the Notice Inviting Tender, General notes, General Conditions of Contract, Special conditions, Schedule of approximate quantities and rates, Form of Agreement, General Specification, Approved manufacturers/ natural source of materials Technical Specifications of schedule of quantities, and clearly understood all the same and on the basis of the same I/We quoted our rates in the Schedule of Quantities (i.e. BOQ) attached with the tender documents.

I / We do here by undertaken to execute and complete the whole or part of the work (as desired by you) at the respective rates quoted. I/ We are depositing a sum of **Rs._____.00** (**Rupees _____ _____ ONLY**) as earnest money deposit by way of demand draft drawn in favor of SBIIMSPL payable at Mumbai along with this tender for due execution of the work at my/ our tendered rates.

In the event of this Tender being accepted I/ We agree to enter into the agreement and submit the declaration on requisite non-judicial stamp papers as and when required and execute the contract according to your form of Agreement etc., in default whereof, I/ We do hereby bind my-self / ourselves to forfeit the aforesaid deposit. In the event of this Tender being accepted I/ We agree to obtain the labor license and the CAR and Third party insurance policy and deposit the balance E.M.D. amount and adhere/comply to all other instructions as given in TENDER DOCUMENT.

I / We further agree to complete the work included in the said schedule of quantities within time FOUR WEEKS from the date of the work order issued to commence the same. Date of commencement shall be either one week from the date of work order issued to the contractor or the date on which mark out of work at site has been given to contractor; whichever is later.

I / We agree not to employ sub-contractors other than those that may be approved by Employer. I / We agree to pay all taxes(except GST), insurance charges as prevailing from time to time, on such items for whom same is to be levied by/ for the government, and the rates quoted by me / us are inclusive of all the same.

Yours Faithfully,

Signature of Witness:

Contractor's Signature_____

1.

Name: _____

2.

Address: _____

3.

GENERAL CONDITIONS OF CONTRACT

1.0 Definitions

"**Contract**" means the documents forming the tender and the acceptance thereof and the formal agreement executed between State Bank of India (Client) and the contractor, together with the documents referred therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the SBI/SBIIMSPLs/Bank and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

1.1 In the contract the following expressions shall, unless the context otherwise requires, have the meaning hereby respectively assigned to them.

1.1.1 '**SBI**' shall mean State Bank of India (client) a body Corporate created under State Bank of India Act 1955, having its Corporate Centre at State Bank Bhavan, Madame Cama Road, Mumbai 400 021 and a LHO at Hyderabad and includes the client's representatives, successors and assigns.

1.1.2 '**SBIIMSPL**' shall mean SBI Infra Management Solutions Pvt Ltd .

1.1.3 '**Site Engineer**' shall mean an Engineer appointed by the Bank as their representative to give instructions to the contractors.

1.1.4 '**The Contractor**' shall mean the individual or firm or company whether incorporated or not, undertaking the works and shall include legal personal representative of such individual or the composing the firm or company and the permitted assignees of such individual or firms of company.

1.1.5 The expression '**works**' or '**work**' shall mean the permanent or temporary work described in the 'Scope of Work" and/or to be executed in accordance with the contract and includes materials, apparatus, equipment, temporary supports, fittings and things of all kinds to be provided, the obligations of the contractor hereunder and work to be done by the contractor under the contract.

1.1.6 '**Engineer**' shall mean the representative of the SBI/SBIIMSPL/Architect.

1.1.7 '**Drawings**' shall mean the drawings prepared by the SBI/SBIIMSPLs and issued by the Engineer and referred to in the specifications and any modifications of such drawings as may be issued by the Engineer from time to time 'Contract value shall mean the value of the entire work as stipulated in the letter of acceptance of tender subject to such additions thereto or deductions there from as may be made under the provision herein after contained.

1.1.8 '**Specifications**' shall mean the specifications referred to in the tender and any modifications thereof as may time to time be furnished or approved by the SBI/SBIIMSPL/ Architect "Month" means calendar month.

1.1.9 "**Week**" means seven consecutive days.

1.1.10 "**Day**" means a calendar day beginning and ending at 00 Hrs and 24 hrs respectively.

2.0 Scope of Work

The contractor shall carry out, complete and maintain the said work in every respect strictly in accordance with this contract and with the directions of and to the satisfaction of the Bank to be communicated through the SBIIMSPL/Architect. The SBIIMSPL/Architect at the directions of the Bank

from time to time issue further drawings and/or written instructions, details directions and explanations which are hereafter collectively referred to as SBI/SBIIMSPL's/Architect's instructions in regard to : the variation or modification of the design, quality or quantity of work or the addition or omission or substitution of any work, any discrepancy in the drawings or between the BOQ and/or drawings and/or specifications, the removal from the site of any material brought thereon by the contractor and the substitution of any other materials thereof, the demolition, removal and/or re-execution of any work executed by him, the dismissal from the work of any person employed/engaged thereupon.

3.0 (i) Letter of Acceptance
Within the validity period of the tender the Bank shall issue a letter of acceptance either directly or through the Architect/SBIIMSPL by registered post or otherwise depositing at the address of the contractor as given in the tender to enter into a Contract for the execution of the work as per the terms of the tender. The letter of acceptance shall constitute a binding contract between the SBI and the contractor.
(ii)Contract Agreement
On receipt of intimation of the acceptance of tender from the SBI/SBIIMSPL/Architect the successful tenderer shall be bound to implement the contract and within fifteen days thereof he shall sign an agreement in a non-judicial stamp paper of appropriate value.
Copies of Agreement
Two copies of agreement/tender document duly signed by both the parties with the drawings shall be handed over to the contractors.

4.0 Detailed drawings and instructions
The SBI through its SBIIMSPL/Architects shall furnish with reasonable promptness additional instructions by means of drawings or otherwise necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the contract documents, true developments thereof and reasonably infer-able there from.

The work shall be executed in conformity therewith and the contractor prepare a detailed programme schedule indicating therein the date of start and completion of various activities on receipt of the work order and submit the same to the SBI through the SBIIMSPL/Architect.

Ownership of drawings
All drawings, specifications and copies thereof furnished by the SBI through its SBIIMSPL/ Architects are the properties of the SBI. They are not to be used on other work.

5.0 Commencement of Works
The date of commencement of the work will be reckoned as the recorded date of handing over site by the SBI/SBIIMSPL or 15 days from the date of issue of Letter of Acceptance of Bank, whichever is later.

6.0 Schedule of Quantities
i) The bill of quantities (BOQ) unless or otherwise stated shall be deemed to have been prepared in accordance with the Indian Standard Method of Measurements The rate quoted shall remain valid for variation of quantity against individual item to any extent subject to maximum variation of the contract value by 25%. The entire amount paid under Clause 20 hereof as well as amounts of prime cost and provisional sums, if any, shall be excluded.

ii) Variation exceeding 25% : The items of work executed in relation to variation exceeding 25% shall be paid on the basis of provisions of clause 21(e) hereof.

Approximate Quantities and Rates

- ✓ The quantities given in BOQ are those upon which the lump sum cost of the work is based. They are subjected to alterations omissions, deductions or additions as provided for in the conditions of this contract and do not necessarily show the actual quantities of the work to be done. The unit rate noted below are those governing payment of extras or deductions for omissions, according to the conditions of the contract as set forth in the preliminary specifications of the Andhra Pradesh detailed standard specifications and other conditions or specifications of this contract.

- ✓ It is to be expressly understood that the measured work is to be taken net (notwithstanding) any custom or practice to the contrary according to the actual quantities when in place and finished according to the drawings or as may be directed from time to time by the SBI/SBIIMSPLs, and the cost calculated by measurements or weight, at the respective prices, without any additional charge for any necessary or contingent works connected there with. The rates quoted are for work in site and complete in every respects.

- ✓ If any operation of work, which is specified in the respective items mentioned in the schedule of quantities, is not executed by the contractor then proportionately the amount shall not be paid..

7.0 Language Errors, Omissions and Discrepancies

In case of errors, omissions and/or disagreement between written and scaled dimensions on the drawings or between the drawings and specifications etc, the following order shall apply.

i) Between scaled and written dimension (or description) on a drawing, the latter shall be adopted.

ii) Between the written or shown description or dimensions in the drawings and the corresponding one in the specification the former shall be taken as correct.

iii) Between written description of the item in the specifications and descriptions in bills of quantities of the same item, the latter shall be adopted.

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

v) Between the duplicate/subsequent copies of the tender, the original tender shall be taken as correct.

8.0 Materials, Appliances and Employees

Unless or otherwise specified the contractor shall provide and pay for all materials, labour, water, power, tools, equipment transportation and any other facilities that are required for the satisfactory execution and completion of the work. Unless or otherwise specified all materials shall be new and both workmanship and materials shall be best quality. The contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him. Workman whose work or behavior is found to be unsatisfactory by the SBI/SBI/SBIIMSPL/Architect he shall be removed from the site immediately.

9.0 Quality of Materials, Workmanship & Test

(i) All materials and workmanship

All materials & workmanship shall be best of the respective kinds described in the contract and in accordance with SBI/SBIIMSPL/Architect instructions and shall be subject from time to time to such tests as the SBI/SBIIMSPL/Architect may direct at the place of manufacture or fabrication or on the site or an approved testing laboratory. The contractor shall provide such assistance, instruments, machinery, labour and materials

(ii)Samples

All samples of adequate numbers, size, shades & pattern as per specifications shall be supplied by

the contractor without any extra charges. If certain items proposed to be used are of such nature that samples cannot be presented or prepared at the site detailed literature/test certificate of the same shall be provided to the satisfaction of the SBI/SBIIMSPL/ Architect. Before submitting the sample/literature the contractor shall satisfy himself that the material/equipment for which he is submitting the samples/literature meet with the requirement of tender specification. Only when the samples are approved in writing by the SBI/SBIIMSPL/Architect the contractor shall proceed with the procurement and installation of the particular material/equipment.

The approved samples shall be signed by the SBI/SBIIMSPL/Architect for identification and shall be kept on record at site office until the completion of the work for inspection/comparison at any time. The SBI/SBIIMSPL/Architect shall take reasonable time to approve the sample. Any delay that might occur in approving the samples for reasons of its not meeting the specifications or other discrepancies inadequacy in furnishing samples of best qualities from various manufacturers and such other aspects causing delay on the approval of the materials/equipments etc shall be to
the account of the contractor.

(iii)Cost of tests

The cost of making any test shall be borne by the contractor if such test is intended by or provided for in the specifications or BOQ.

(iv)Cost of test not provided for

If any test is ordered by the SBI/SBIIMSPL/ Architect which is either :
(a) If so intended by or provided for or (in the cases above mentioned) is not so particularized or through so intended or provided for but ordered by the SBI/SBIIMSPL/Architect which is either to be carried out by an independent person at any place other than the site or the place of manufacture or fabrication of the materials tested or any Government/approved laboratory, then the cost of such test shall be borne by the contractor.

10.0 Work Performed at Contractors Risk

The contractor shall take all precautions necessary and shall be responsible for the safety of the work and shall maintain all lights, goods, signs, temporary passages or other protection necessary for the purpose. All works shall be done by the contractor's risk and if any loss or damage shall result from fire or from others cause, the contractor shall promptly repay or replace such loss or damage free from all expenses to the employer. The contractor shall be responsible for any loss or damage to materials, tools or other articles used held for use in connection with the work. The work shall be carried on to completion without interferences with the operations of existing machinery or equipment, if any

11.0 Authorities, Notices, Patent rights and Royalties

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

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

The Contractor shall identify the Employer against all claims in respect of patent rights, designs, trademarks or name or the protected rights in respect of any constructional plant, machine, work or material used for or in connection with the works or temporary works and from and against all claims,

demands, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto. The Contractor shall defend all actions arising from such claims, unless he has informed the SBI/SBIIMSPLs, before any such infringement and received their permission to proceed and shall himself pay all royalties, license fees, damages, coat and charges of all and every sort that may be legally incurred in respect thereof.

12.0 Permits, Laws and Regulations

Permits and licenses required for the execution of the work shall be obtained by the contractor at his own expenses. The contractor shall give notices and comply with the regulations, laws, and ordinances rules, applicable to the contractor. If the contractor observes any discrepancy between the drawings and specifications, he shall promptly notify the SBI in writing under intimation of the SBI/SBIIMSPL/Architect. If the contractor performs any act which is against the law, rules and regulations he shall meet all the costs arising there from and shall indemnify the SBI any legal actions arising there from.

13.0 Setting out Work

The contractor shall set out the work and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions, levels, dimensions, and alignment of all parts thereof and get it approved by the SBI/SBIIMSPL/Architect before proceeding with the work. If at any time any error in this respect shall appear during the progress of the works, irrespective of the fact that the layout had been approved by the SBI/SBIIMSPL/Architect the contractor shall be responsible for the same and shall at his own expenses rectify such error, if so, required to satisfaction of the SBI.

14.0 Protection of works and property

The contractor shall continuously maintain adequate protection, of all his work from damage and shall protect the SBI's properties from injury or loss arising in connection with contract. He shall make good any such damage, injury, loss due to his fault or negligence except which are due to causes beyond his control. He shall take adequate care and steps for protection of the adjacent properties. The contractor shall take all precautions for safety and protection of his employees on the works and shall comply with all applicable provisions of Government and local bodies' safety laws and building codes to prevent accidents, or injuries to persons or property of about or adjacent to his place of work. The contractor shall take insurance covers as per clause 22.0 at his own cost. The policy may be taken in joint names of the contractors and the SBI and the original policy may be lodged with the SBI.

15.0 Obtaining Information related to execution of work

No claim by the contractor for additional payment shall be entertained which is consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the work nor any misunderstanding or the obtaining incorrect information or the failure to obtain correct information relieve him from any risks or from the entire responsibility for the fulfillment of contract.

16.0 Contractor's superintendence

The contractor shall give necessary personal superintendence during the execution of the works and as long, thereafter, as the SBI/SBIIMSPL/Architect may consider necessary until the expiry of the defects liability period, stated hereto.

17.0 Dismissal of Workmen

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

18.0 Rate of progress
Whole of the materials, plant and labour to be provided by the contractor and the mode, manner and speed of execution and maintenance of the works are to be of a kind and conducted in a manner to the satisfaction of the SBI/SBIIMSPL/Architect. Should the rate of progress of the work or any part thereof be at any time be in the opinion of the SBI/SBIIMSPL/ Architect too slow to ensure the completion of the whole of the work by the prescribed time or extended time for completion the SBI/SBIIMSPL/Architect shall thereupon take such steps as considered necessary by the SBI/SBIIMSPL/Architect to expedite progress so as to complete the woks by the prescribed time or extended time. Such communications from the SBI/SBIIMSPL/Architect neither shall relieve the contractor from fulfilling obligations under the contract nor he shall be entitled to raise any claims arising out of such directions.

19.0 Assignment and subletting
The whole of work included in the contract shall be executed by the contractor and he shall not directly entrust and engage or indirectly transfer assign or under let the contract or any part or share thereof or interest therein without the written consent of the SBI through the SBIIMSPL and no undertaken shall relieve the contractor from the responsibility of the contractor from active superintendence of the work during its progress.

20.0 Variations:
No alteration, omission or variation ordered in writing by the SBI/SBIIMSPL/Architect shall vitiate the contract.

In case the SBI/SBIIMSPL/Architect thinks proper at any time during the progress of works to make any alteration in, or additions to or omission from the works or any alteration in the kind or quality of the materials to be used therein, the SBI/SBIIMSPL/Architect 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 alteration 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 SBI/SBIIMSPL/Architect and the value of such extras, alterations, additions or omissions shall in all cases be determined by the SBI/SBIIMSPL/Architect and the same shall be added to or deducted from the contract value, as the case may be.

21.0 Valuation of Variations
No claim for an extra shall be allowed unless it shall have been executed under the authority of the SBI/SBIIMSPL/Architect with the concurrence of the SBI as herein mentioned. Any such extra is herein referred to as authorized 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 Bill of Quantities.

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 SBI/SBIIMSPL/Architect of the rate which he intends to charge for such items of work, duly supported by analysis of the rate or rates claimed and the SBI/SBIIMSPL/Architect shall fix such rate or prices as in the circumstances in his opinion are reasonable and proper, based on the market rate.

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 SBI/SBIIMSPL/Architect) the workman's name and materials employed be delivered for verifications to the SBI/SBIIMSPL/Architect 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 authorized extra items where rates cannot be derived from the tender, 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 wastage's etc plus 15% towards establishment charges, contractor's overheads and profit. Such items shall not be eligible for escalation.

22.0 Insurance of Works

22.1 Without limiting his obligations and responsibilities under the contract the contractor shall insure in the joint names of the SBI and the contractor against all loss or damages from whatever cause arising other than the excepted risks, for which he is responsible under the terms of contract and in such a manner that the SBI and contractor are covered for the period stipulated in clause 23 of GCC and are also covered during the period of maintenance for loss or damage arising from a cause, occurring prior to the commencement of the period of maintenance and for any loss or damage occasioned by the contractor in the course of any operations carried out by him for the purpose of complying with his obligations under clause.

a)The works for the time being executed to the estimated current Contract value thereof, or such additional sum as may be specified together with the materials for incorporation in the works at their replacement value.

b)The constructional plant and other things brought on to the site by the contractor to the replacement value of such constructional plant and other things.

c)Such insurance shall be effected with an insurer and in terms approved by the SBI which approval shall not be unreasonably withheld and the contractor shall whenever required produce to the SBI/SBIIMSPL/Architect the policy of insurance and the receipts for payment of the current premiums.

22.2 Damage to persons and property

The contractor shall, except if and so far as the contract provides otherwise indemnify the SBI against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation of damages for or with respect to :

a)The permanent use or occupation of land by or any part thereof.

b)The right of SBI to execute the works or any part thereof, on, over, under, in or through any

lands.

c)Injuries or damages to persons or properties which are unavoidable result of the execution or maintenance of the works in accordance with the contract.

d)Injuries or damage to persons or property resulting from any act or neglect of the SBI, their agents, employees or other contractors not being employed by the contractor or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of the SBI, their employees, or agents or other employees, or agents or other contractors for the damage or injury.

22.3 Contractor to indemnify SBI
The contractor shall indemnify the SBI against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the provision sub-clause 22.2 of this clause.

22.4 Contractor's superintendence
The contractor shall fully indemnify and keep indemnified the SBI against any action, claim, or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claim made under or action brought against SBI in respect of such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expenses to settle any dispute or to conduct any litigation that may arise there from, provided that the contractor shall not be liable to indemnify the SBI if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the SBI/SBIIMSPL/Architect in this behalf.

22.5 Third Party Insurance
25.5.1 Before commencing the execution of the work the contractor but without limiting his obligations and responsibilities under clause 09.0 of GCC shall insure against his liability for any material or physical damage, loss, or injury which may occur to any property including that of SBI, or to any person, including any employee of the SBI, by or arising out of the execution of the works or in the carrying out of the contract, otherwise than due to the matters referred to in the provision to clause 2.0 & 9.0 thereof.

22.5.2 Minimum Amount of Third Party Insurance : Such insurance shall be affected with an insurer and in terms approved by the SBI which approval shall not be reasonably withheld and for at least the amount stated below. The contractor shall, whenever required, produce to the SBI/SBIIMSPL/Architect the policy or policies of insurance cover and receipts for payment of the current premiums.

22.6 Minimum Insurance Cover
The minimum insurance cover for physical property, injury, and death is Rs.5.0lacs per occurrence with the number of occurrences limited to four. After each occurrence contractor will pay additional premium necessary to make insurance valid for four occurrences always.

22.7 Accident or Injury to Workmen
22.7.1 The SBI shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workmen or other person in the employment of the contractor or any sub-contractor,save and except an accident or injury resulting

from any act or default of the SBI or their agents, or employees. The contractor shall indemnify and keep indemnified SBI against all such damages and compensation, save and except as aforesaid and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

22.7.2 Insurance against accidents etc to workmen

The contractor shall insure against such liability with an insurer approved by the SBI during the whole of the time any person employed by him on the works and shall,when required, produce to the SBI/SBIIMSPL/Architect such policy of insurance and receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor the contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the sub contractor shall have insured against the liability in respect of such persons in such manner that SBI is indemnified under the policy but the contractor shall require such sub-contractor to produce to the SBI/SBIIMSPL/Architect when required such policy of insurance and the receipt for the payment of the current premium.

22.7.3 Remedy on Contractor's failure to insure

If the contractor fails to effect and keep in force the insurance referred to above or any other insurance which he may be required to effect under the terms of contract,then and in any such case the SBI may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the SBI as aforesaid and also deduct 15%of contract value from any amount due or which may become due to the contractor,or recover the same as debt from the contractor.

22.7.4 Without prejudice to the other rights of the SBI against contractors, in respect of such default, the Bank shall be entitled to deduct from any sums payable to the contractor the amount of any damages costs, charges, and other expenses paid by the SBI and which are payable by the contractors under this clause. The contractor shall upon settlement by the insurer of any claim made against the insurer pursuant a policy taken under this clause, proceed with due diligence to rebuild or repair the works destroyed or damaged. In this event all the monies received from the insurer in respect of such damage shall be paid to the contractor and the contractor shall not be entitled to any further payment in respect of the expenditure incurred for rebuilding or repairing of the materials or goods destroyed or damaged.

23.0 Extension of Time

If, in the opinion of the SBI/SBIIMSPL/Architect, the work be delayed for reasons beyond the control of the contractor, the SBI/SBIIMSPL/Architect may submit a recommendation to the SBI to grant a fair and reasonable extension of time for completion of work as per the terms of contract. If the contractor needs an extension of time for the completion of work or if the completion of work is likely to be delayed for any reasons beyond the due date of completion as stipulated in the contract, the contractor shall apply to the SBI through the SBI/SBIIMSPL/Architect in writing at least 30 days before the expiry of the scheduled time and while applying for extension of time he shall furnish the reasons in detail and his justification if any, for the delays. The SBI/SBIIMSPL/Architect shall submit their recommendations to the SBI in the prescribed format for granting extension of time. While granting extension of time the contractor shall be informed the period extended time which will qualify for levy of liquidated damages. For the balance period in excess of original stipulated period and duly sanctioned extension of time by the SBI the provision of liquidated damages as stated under clause 24.0 of GCC shall become applicable. Further contract shall remain in force even for the period beyond the due date of completion irrespective whether the extension is granted or not.

24.0 Liquidated Damages

If the contractor fails to maintain the required progress in terms of clause 18.0 of GCC or to complete the work and clear the site including vacating their office on or before the contracted or extended date or completion without justification in support of the cause of delay, he may be called upon without prejudice to any other right of remedy available under the law to the SBI on account of such breach to pay a liquidated damages at the rate of 0.5% of the contract value per week subject to a maximum of 5% of the contract value.

25.0 Inspection of Work

The SBI/SBIIMSPL/Architect or their representatives shall at all reasonable time have free access to the work site and/or to the workshop, factories or other places where materials are lying or from where they are obtained and the contractor shall give every facility to the SBI, SBIIMSPL/Architect and their representatives necessary for inspection and examination and test of the materials and workmanship. No person unless authorized by the SBI/SBIIMSPL/Architect except the representative of Public authorities shall be allowed on the work at any time. The proposed work either during its construction stage or its completion can also be inspected by the Chief Technical Examiner's organization a wing of Central Vigilance Commission.

26.0 No compensation for restrictions of work

If at any time after acceptance of the tender SBI shall decide to abandon or reduce the scope of work for any reason whatsoever and hence not require the whole or any part of the work to be carried out, the SBIIMSPL/Architect shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter.

The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the work fully but which he did not derive in consequence of the foreclosure of the whole or part of the work.
Provided that the contractor shall be paid the charges on the cartage only of materials actually and bonafied brought to the site of the work by the contractor and rendered surplus as a result of the abandonment, curtailment of the work or any portion thereof and then taken back by the contractor, provided however that the SBIIMSPL/Architect shall have in such cases the option of taking over all or any such materials at their purchase price or a local current rate whichever is less. In case of such stores having been issued from SBI stores and returned by the contractor to stores, credit shall be given to him at the rates not exceeding those at which were originally issued to the contractor after taking into consideration and deduction for claims on account of any deterioration or damage while in the custody of the contractor and in this respect the decision of SBIIMSPL/Architect shall be final.

27.0 Time for completion

Time is the essence of the contract and shall be strictly observed by the contractor. The entire work shall be completed within a period as mentioned in Notice from the date of commencement. If required in the contract or as directed by the SBIIMSPL/Architect, the contractor shall complete certain portions of work before completion of the entire work. However the completion date shall be reckoned as the date by which the whole work is completed as per the terms of the contract.

28.0 Action Where there is no Specification

In case of any class of work for which is there is no specification mentioned, the same will be carried out in accordance with the Indian Standards Specifications subject to the approval of the Employer / SBIIMSPL.

29.0 Suspension of work

i)The contractor shall, on receipt of the order in writing of the SBIIMSPL/Architect(whose decision shall be final and binding on the contractor) suspend the progress of works or any part thereof for such time

and in such manner as SBIIMSPL/ Architect may consider necessary so as not cause any damage or injury to the work already done or endanger the safety thereof for any of following reasons.

a)On account any default on the part of the contractor, or

b)For proper execution of the works or part thereof for reasons other than the default of the contractor, or

c)For safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the SBIIMSPL/Architect.

ii) If the suspension is ordered for reasons (b) and (c) in sub-Para (i) above :
The contractor shall be entitled to an extension of time equal to the period of every such suspension. No compensation whatsoever shall be paid on this account.

30.0 Action when the whole security deposit is forfeited

In any case in which under any clause or clauses of this contract, the Contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit the SBIIMSPL/Architect shall have the power to adopt any of the following course as they may deem best suited to the interest of the SBI.

a)To rescind the contract (of which rescission notice in writing to the contractor by the SBIIMSPL/Architect shall be conclusive evidence) and in which case the security deposit of the contractor shall be forfeited and be absolutely at the disposal of SBI.

b)To employ labour paid by the SBI 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 materials(the cost of such labour and materials as worked out by the SBIIMSPL/ Architect 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 manner and at the same rates as if it had been carried out by the contractor under the terms of this contract the certificate of SBIIMSPL/Architect as to the value of 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 SBIIMSPLs/Architect shall be final and conclusive) shall be borne by original contractor and may be deducted from any money due to him by SBI under the contract or otherwise, or from his security deposit or the proceeds of sale thereof, or sufficient part thereof.

In the event of any of above courses being adopted by the SBI the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any material 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 to be paid any sum or any work thereto for actually performed under this contract, unless, and until the SBIIMSPL/Architect 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.

31.0 Prices for Extras etc., Ascertainment

The rates of extra items will be ascertained as below

a) The rates will be derived from the rates of items already quoted in the original tender for the

extra work.

b) Where extra work cannot be properly measured or valued, the contractor shall be allowed any work prices at the net rates stated in the tender or the priced schedule of quantities, 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 SBIIMSPL, the workman's name) and materials employed at or before the end of the week following that in which the work has been executed.

c) The measurements and valuations in respect of the extra items of contract shall be completed within the 'period of final measurement' or within three months of the completion of the contract works as defined under clause (Certificate of Virtual Completion)

32.0 Extra Items Rates

The work or extra items shall be started only after the approval of extra items rates by client / SBIIMSPL. Rates for additional or extra items work which cannot be derived from the contract item rates shall be calculated on the basis of actual cost plus 15 % for profit.

33.0 Virtual Completion Certificate (VCC)

On successful completion of entire works covered by the contract to the full satisfaction of the SBI, the contractor shall ensure that the following works have been completed to the satisfaction of the SBI.

a)Clear the site of all scaffolding, wiring, pipes, surplus materials, contractor's labour, equipment and machinery.

b)Demolish, dismantle and remove the contractor's site office, temporary works, structures including labour sheds/camps and constructions and other items and things whatsoever brought upon or erected at the site or any land allotted to the contractor by the SBI and not incorporated in the permanent works.

c)Remove all rubbish, debris etc from the site and the land allotted to the contractor by the SBI and shall clear, level and dress, compact the site as required by the SBI.

d)Shall put the SBI in undisputed custody and possession of the site and all land allotted by the SBI.

e)Shall hand over the work in a peaceful manner to the SBI.

f)All defects/imperfections have been attended and rectified as pointed out by the SBI to the full satisfaction of SBI.

Upon the satisfactory fulfillment by the contractor as stated above, the contractor shall be entitled to apply to the SBI/SBIIMSPL/Architect for the certificate. If the SBI/SBIIMSPL/Architect is satisfied of the completion of the work, relative to which the completion certificate has been sought, the SBI/SBIIMSPL/Architect shall within fourteen (14) days of the receipt of the application for virtual completion certificate, issue a VCC in respect of the work for which the VCC has been applied.

This issuance of a VCC shall be without prejudice to the SBI's rights and contractor's liabilities under the contract including the contractor's liability for defects liability period nor shall the issuance of VCC in respect of the works or work at any site be construed as a waiver of any right or claim of the SBI against the contractor in respect of works or work at the site and in respect of which the VCC has been issued.

34.0 Removal of Improper Work

The Employer 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 / SBI/SBIIMSPLs are not in accordance with specification or instructions, the substitution or proper re-execution of any work executed with materials or workmanship not in accordance with the drawings and specifications or instructions. In case the contractor refuses to comply with the order the Employer shall have the power to employ and pay other agencies to carry out the work and all expenses consequent thereon or incidental thereto as certified by the Employer / SBI/SBIIMSPLs 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, shall relieve the contractor from his liability in respect of unsound work or bad materials.

35.0 Defects after Completion

The contractor shall make good at his own cost and to the satisfaction of the Employer all defects, peeling off laminate, false ceiling cracks, or any other faults, which may appear within 12 months after completion of the work. In the 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(retention money) together with any expenses the Employer may have incurred in connection therewith.

36.0 Works to be measured

The SBI/SBIIMSPL/Architect may from time to time intimate to the contractor that he required the work to be measured and the contractor shall forthwith attend or send a qualified representative to assist the SBI/SBIIMSPL in taking such measurements and calculation and to furnish all particulars or to give all assistance required by any of them. Such measurements shall be taken in accordance with the Mode of measurements detailed in the specifications. The representative of the SBI/SBIIMSPL/Architect shall take joint measurements with the contractor's representative and the measurements shall be entered in the measurement book.

The contractor or his authorized representative shall sign all the pages of the measurement book in which the measurements have been recorded in token of his acceptance. All the corrections shall be duly attested by both representatives. No over writings shall be made in the M book. Should the contractor not attend or neglect or omit to depute his representative to take measurements then the measurements recorded by the representative of the SBI/SBIIMSPL/Architect shall be final. All authorized extra work, omissions and all variations made shall be included
in such measurements**.**

37.0 Final Measurement

The measurement and valuation in respect of the contract shall be completed within six months of the virtual completion of the work.

38.0 Work by other agencies

The SBI/SBI/SBIIMSPL/Architect reserves the rights to use premises and any portion of the site for execution of any work not included in the scope of this contract which it may desire to have carried out by other persons simultaneously and the contractor shall not only allow but also extend reasonable facilities for the execution of such work. The contractor however shall not be required to provide any plant or material for the execution of such work except by special arrangement with the SBI. Such

work shall be carried out in such manners not to impede the progress of the works included in the contract.

39.0 Notices and Statutory Regulations
The contractor shall give all notices and pay all fees and shall comply all Acts and Regulations for the successful completion of the contract works. The whole of the work is to be complied with as per the requirements and bylaws of the relevant statutory authorities including contract labor (Regulation and Abolition) Act 1970.

40.0 Clearing Site on Completion
On completion of the works the contractor shall clear away and remove from the site all machinery, 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/SBI/SBIIMSPLs.

41.0 Architect's Delay in Progress
The SBI/SBIIMSPL may delay the progress of the works in case of rains or otherwise, without vitiating the contract and grant such extension of time with the approval of the employer for the completion of the contract as he may think proper and sufficient in consequences of such delay, and the contractor, shall not make any claim for compensation or damage in relation thereto.

42.0 Failure by Contractor Comply with Architect Employer's Instructions
If the contractor after receipt of written notice from the employer/SBI/SBIIMSPL requiring compliance with such further drawings and / or instruction, fails within seven days to comply with the same, the Employer / SBI/SBIIMSPL may employ and pay other persons to execute any such work whatsoever as may be necessary to give effect thereto and all cost incurred in connection there with shall be recoverable from the contractors by the Employer as a debit or may be deducted from any money due or which become due to the Contractors.

43.0 Owner's Right to Terminate the Contract
If the contractor being an individual or a firm commit any 'Act of Insolvency' or shall be adjusted an insolvent or being an incorporated company shall have an order for compulsory winding up voluntarily or subject to the supervision of Government and of the Official Assignees of the liquidator in such acts of insolvency or winding up shall be unable within seven days after notice to him to do so, to show to the reasonable satisfaction of the SBI/SBIIMSPL/Architect that he is able to carry out and fulfill the contract, and to give security therefore if so required by the SBI/SBIIMSPL/Architect. Or if the contractor (whether an individual firm or incorporated Company) shall suffer execution to be issued or shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the contractor. Or shall assign or sublet this contract without the consent in writing of the SBI through the SBI/SBIIMSPL/Architect or shall charge or encumber this contract or any payment due to which may become due to the contractor there under.

a)Has abandoned the contract; or

b)Has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for 14 days after receiving from the SBI through the SBI/SBIIMSPL/Architect written notice to proceed, or

c)Has failed to proceed with the works with such diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or has failed to remove the materials from the site or to pull down and replace work within seven days after written notice from the SBI through the SBI/SBIIMSPL/Architect that the said materials were

condemned and rejected by the SBI/SBIIMSPL/Architect under these conditions; or has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this contract to be observed and performed by the contractor for seven days after written notice shall have been given to the contractor to observe or perform the same or has to the detriment of good workmanship or in defiance of the SBI's or SBI/SBIIMSPL's/Architect's instructions to the contrary subject any part of the contract. Then and in any of said cases the SBI and or the SBI/SBIIMSPL/Architect, may not withstanding any previous waiver, after giving seven days notice in writing to the contractor, determine the contract, but without thereby affecting the powers of the SBI or the SBI/SBIIMSPL/Architect or the obligation 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 had been executed by or on behalf of the contractor. And, further the SBI through the SBI/SBIIMSPL/Architect, their agents or employees may enter upon and take possession of the work and all plants, tools, scaffolding's, materials, sheds,machines lying upon the premises or on the adjoining lands or roads, use the same by means of their own employees or workmen in carrying on and completing the work or by engaging any other contractors or persons to complete the work and the contractor shall not in any was interrupt or do any act, matter or thing to preventor hinder such other contractor or other persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient the SBI or the SBI/SBIIMSPL/Architect shall give a notice in writing to the contractor to remove his surplus materials and plants and should the contractor fail to do so within 14 days after receipt thereof by him the SBI sell the same by public auction after due publication and shall adjust the amount realized by such auction. The contractor shall have no right to question any of the act of the SBI incidental to the sale of the materials etc.

44.0 Certificate of Payment

The contractor shall be entitled under the certificates to be issued by the SBI/SBIIMSPL/Architect to the contractor within 10 working days from the date of certificate to the payment from SBI from time to time. The SBI shall recover the statutory recoveries and other dues including the retention amount from the certificate of payment. Provided always that the issue of any certificate by the SBI/SBIIMSPL/Architect during the progress of works or completion shall not have effect as certificate of satisfaction or relieve the contractor from his liability under clause.

The SBI/SBIIMSPL/Architect shall have power to withhold the certificate if the work or any part thereof is not carried out to their satisfaction.

The SBI/SBIIMSPL/Architect may by any certificate make any corrections required in previous certificate.

The SBI shall modify the certificate of payment as issued by the SBI/SBIIMSPL/Architect from time to time while making the payment.

The contractor shall submit interim bills only after taking actual measurements and properly recorded in the Measurement book (M.B).

The contractor shall not submit interim bills when the approximate value of work done by him is less than amount specified in NIT and the minimum interval between two such bills shall be one month.

The final bill may be submitted by contractor within a period of one month from the date of virtual completion and SBI/SBIIMSPL/Architect shall issue the certificate of payment within a period of two months. The SBI shall pay the amount within a period of three months from the date of issue of

certificate provided there is no dispute in respect of rates and quantities.

45.0 Settlement of Disputes and Arbitration

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions herein before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the work or the execution or failure to execute the same, whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter :

i)If the contractor considers that he is entitled to any extra payment or compensation in respect of the works over and above the amounts admitted as payable by the SBI/SBIIMSPL or in case the contractor wants to dispute the validity of any deductions or recoveries made or proposed to be made from the contract or raise any dispute, the Contractor shall forthwith give notice in writing of his claim, or dispute to the Assistant General Manager (Premises& Estate)/Dy. General Manager (Premises)and endorse a copy of the same to the SBI/SBIIMSPL, within 30 days from the date of dis allowance thereof or the date of deduction or recovery. The said notice shall give full particulars of the claim, grounds on which it is based and detailed calculations of the amount claimed and the contractor shall not be entitled to raise any claim nor shall the Bank be in any way liable in respect of any claim by the contractor unless notice of such claim shall have been given by the contractor to the Assistant General Manager (Premises& Estate)/Dy. General Manager (premises) in the manner and within the time as aforesaid. The contractor shall be deemed to have waived and extinguished all his rights in respect of any claim not notified to the Assistant General Manager (Premises& Estate)/Dy. General Manager (premises) in writing in the manner and within the time aforesaid.

ii)The Assistant General Manager (Premises& Estate)/Dy. General Manager (premises) shall give his decision in writing on the claims notified by the contractor. The contractor may within 30 days of the receipt of the decision of the Assistant General Manager (Premises& Estate)/Dy. General Manager (premises) submit his claims to the conciliating authority namely the Circle Development Officer/General Manager (Corporate Services) for conciliation along with all details and copies of correspondence exchanged between him and the Assistant General Manager (Premises& Estate)/Dy. General Manager (premises).

iii)If the conciliation proceedings are terminated without settlement of the disputes, the contractor shall, within a period of 30 days of termination thereof shall give a notice to the concerned Chief General Manager/Dy. Managing Director &Corporate Development Officer of the Bank for appointment of an arbitrator to adjudicate the notified claims failing which the claims of the contractor shall be deemed to have been considered absolutely barred and waived.

iv)Except where the decision has become final, binding and conclusive in terms of the contract, all disputes or differences arising out of the notified claims of the contractor as aforesaid and all claims of the Bank shall be referred for adjudication through arbitration by the Sole Arbitrator appointed by the Chief General Manager/Dy. Managing Director &Corporate Development Officer. It will also be no objection to any such appointment that the Arbitrator so appointed is a Bank Officer and that he had to deal with the matters to which the Contract relates in the course of his duties as Bank Officer. If the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid by the said Chief General Manager/Dy. Managing Director &Corporate Development Officer. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each dispute along with the notice for appointment of arbitrator.

It is also a term of this contract that no person other than a person appointed by such Chief General Manager aforesaid should act as arbitrator.

The conciliation and arbitration shall be conducted in accordance with the provisions of the Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules made there under.

It is also a term of the contract that if any fees are payable to the arbitrator these shall be paid equally by both the parties. However, no fees will be payable to the arbitrator if he is a Bank Officer.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. 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) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner, such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

SPECIAL CONDITIONS OF CONTRACT

In the event of any discrepancy with clauses mentioned anywhere else in the tender with the clauses mentioned within special conditions of contract, the clauses mentioned within the special conditions of contract shall supersede those mentioned elsewhere.

1.0 Work during nights and holidays

Subject to any provision to the contrary contained in the contract no permanent work shall save as herein provided be carried on during the night or on holidays without the permission in writing of the SBI/SBIIMSPL/Architect, save when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the work in which case the contractor shall immediately advise the SBI/SBIIMSPL/Architect. However the provision of the clause shall not be applicable in the case of any work which becomes essential to carry by rotary or double shifts in order to achieve the progress and quality of the part of the works being technically required and continued with the prior approval of the SBI/SBIIMSPL/Architect at no extra cost to the SBI. All work at night after obtaining approval from competent authorities shall be carried out without unreasonable noise and disturbance.

2.0 Site Supervision

The contractor shall appoint at his own cost competent and adequate number of qualified Engineers at site,

(1) for joint measurements and preparations of bills,
(2) for testing materials at site and outside laboratory,
(3) for other general supervision. Their appointment shall be approved by the Employer / SBI/SBIIMSPL.
(4) The site Engineers shall not be removed from the site without the written consent of the Employer / SBI/SBIIMSPL.

3.0 Cutting and Making Good

Where it is found necessary to interfere with finished work in order to execute this contract, the contractor will be required to do all necessary work at his expenses. Only approved hangers and bolts or other metal fixing devices shall be used to secure frames panels and other units in position. Wooden plugs will not be permitted .Holes shall be formed with electric drills whenever possible. Structural members shall not be cut or drilled without prior consent of the client.

4.0 Typographical Clerical Errors

The Employer / SBI/SBIIMSPL clarification regarding partially omitted particulars of typographical or Clericals errors shall be final and binding on the contractors.

5.0 Water supply

The contractor shall make his own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions:

i) That the water used by the Contractor shall be fit for construction purpose to the satisfaction of the SBI/SBIIMSPL/Architect.

ii) The Contractor shall make alternative arrangements for the supply of water if the arrangements made by the Contractor for procurement of water in the opinion of the SBI/SBIIMSPL/Architect is unsatisfactory.

6.0 Power supply
The contractor shall make his own arrangements for power and supply/distribution system for driving plant or machinery for the work and for lighting purpose at his own cost. The cost of running and maintenance of the plants are to be included in his tender prices. He shall pay all fees and charges required for the power supply and include the same in his tendered rates and hold the owner free from all such costs. He has to obtain necessary approvals from the appropriate authorities, if required.

7.0 Treasure Trove etc.
Any treasure trove, coin or object antique which may be found on the site shall be the property of SBI and shall be handed over to the Bank immediately.

8.0 Unfixed Materials
When any materials intended for the works shall have been placed at site by the Contract, such material shall not be removed there from (except for the purposes of being used on the works) without the written authority of the Employer / SBI/SBIIMSPL and when the contractor shall have received payment in respect of any certificate in which the SBI/SBIIMSPL shall have stated that he has taken in to account to value of such unfixed materials on the works such material shall become the property of the Employer and the contractor shall be liable for any loss or damage to any such materials.

9.0 Custody and Security of Materials
The contractors shall be responsible for the custody and security of all materials and equipment at site and he will provide full time watchman / watchmen to lock after his materials, stores equipments etc.

10.0 Method of Measurement
Unless otherwise mentioned in the schedule of quantities or in mode of measurement, the measurement will be on the net quantities or work produced in accordance with up to date. Rules laid down by the Bureau of Indian Standards. In the event any dispute/disagreement the decision of the SBI/SBIIMSPL/Architect shall be final and binding on the contractor.

11.0 Maintenance of Registers
The contractor shall maintain the following registers as per the enclosed format at site of work and should produce the same for inspection of SBI/SBI/SBIIMSPL/Architect whenever desired by them. The contractor shall also maintain the records/registers as required by the local authorities/Government from time to time.

i) Register for secured advance
ii) Register for hindrance to work
iii) Register for running account bill
iv) Register for labour

12.0 Force majeure
12.1 Neither contractor not SBI shall be considered in default in performance of their obligations if such performance is prevented or delayed by events such as war, hostilities revolution, riots, civil commotion, strikes, lockout, conflagrations, epidemics, accidents, fire, storms, floods, droughts, earthquakes or ordinances or any act of god or for any other cause beyond the reasonable control of the party affected or prevented or delayed. However a notice is required to be given within 30 days from the happening of the event with complete details, to the other party to the contract, if it is not possible to serve a notice, within the shortest possible period without delay.

12.2 As soon as the cause of force majeure has been removed the party whose ability to perform its obligations has been affected, shall notify the other of such cessation and the actual delay incurred in such affected activity adducing necessary evidence in support thereof.

12.3 From the date of occurrence of a case of force majeure obligations of the party affected shall be suspended during the continuance of any inability so caused. With the cause itself and inability resulting there from having been removed, the agreed time of completion of the respective obligations under this agreement shall stand extended by a period equal to the period of delay occasioned by such events.

12.4 Should one or both parties be prevented from fulfilling the contractual obligations by a state of force majeure lasting to a period of 6 months or more the two parties shall mutually decide regarding the future execution of this agreement.

13.0 Local Laws, Acts, Regulations

The contractor shall strictly adhere to all prevailing labour laws inclusive of contract labour (regulation and abolition act of 1970) and other safety regulations. The contractor shall comply with the provision of all labour legislation including the latest requirements of all the Acts, laws, any other regulations that are applicable to the
execution of the project.

i)Minimum Wages Act, 1948 (Amended)
ii)Payment of Wages Act 1936 (Amended)
iii)Workman's Compensation Act 1923 (Amended)
iv)Contract Labour Regulation and Abolition Act 1970 and Central Rules 1971 (Amended)
v)Apprentice Act 1961 (Amended)
vi)Industrial Employment (Standing Order) Act 1946 (Amended)
vii)Personal Injuries (Compensation Insurance) Act 1963 and any other modifications
viii)Employees' Provident Fund and Miscellaneous Provisions Act 1952 and amendment thereof
ix)Shop and Establishment Act
x)Any other Act or enactment relating thereto and rules framed there under from time to time.

14.0 Amendment

The central government may from time to time add to or amend the regulation and on any question as to the application, interpretation or effect of these regulations the decision of the chief labour commission or deputy chief labour commission to the government of India, or any other person authorized by the central government in that behalf shall be final.

15.0 Contractor's Labour Regulations

Contractors should strictly follow the labour regulations as per the latest Indian Government acts.

15.1.Short title: These regulations may be called the "contractor labour regulations."

15.2.Definitions :– in these regulations, unless otherwise expressed or indicated, the works and expressions shall have the meaning hereby assigned to them respectively, that is to say :

(i)"Labour" means worker employed by the Bank/SBIIMS's contractor directly or indirectly through a sub-contractor or other persons or by an agent on his behalf of a payment not exceeding Rs. _____/- per month and will not include supervisory staff like overseers etc.

(ii)"fair wages" means wages whether for time or piece work notified at the time of inviting tenders for the work and where such wages prescribed by the government of India in the ministry of labour and employment vide S. No. 1917 published in the gazette of India, extraordinary part - ii section (3) sub-section (ii) dated 19-5-1969.

(iii)"contractors' shall include every person whether a sub-contractor or headman or agent employing labour on the work taken on contract.

(iv)"Wages" shall have the same meaning as defined in the payment of wages act and includes time and piece rate wages.

2.a. Normally working hours if an adult employee should not exceed 9 hours a day and in case of a child 4 1/2 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.

2.b. When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week. he shall be paid overtime for the extra hours put in by him at double the ordinary rate of wages. Children shall not be made to work extra.

2.c. Every worker shall be given a paid weekly holiday normally on Sunday in accordance with the provisions of minimum wages (central) rules, 1960 as amended from time to time irrespective of whether such worker is governed by the minimum wages act 1948 or not.

15.3.Display of notice regarding wage etc. the contractor shall:

(a) Before the commences his work on contract, display and correctly maintain and continue to display correctly maintain in a clean legible condition in conspicuous places on the work, notice in English and in the local Indian language spoken by the majority of workers, giving the rate of wages which have been certified by the executive engineer, ZONAL labour commissioner fair as wages and the hours of work for which such wages are earned, and

(b) Send a copy of such notices to the certifying officer.

15.4.Payment of wages under central govt. wages act:–

(i) Wages due to every worker shall be paid to him direct.

(ii) All wages shall be paid in current coin or currency or in both.

(iii) Arrears claimed after 3 months after the completion of the work shall not be entertained.

15.5.Fixation of wage periods:–

(i) The contractor shall fix the wage periods in respect of which the wages shall be payable.

The minimum daily rates of wages fixed under notification of the government of India in the ministry of labour and employment no. 1972 dated 10-5-78 are inclusive of wages for weekly day of restyle and the question of extra payment for week holiday would not arise.

(ii) No wage period shall exceed one month.

(iii) wages of every employed on the contract shall be paid (a) in case of establishments in which wage period is one week within 3 days from the end of the wage period and (b) in the case of other establishments before the expiry of the 7th day or 10th day from the end of the wages period according to the number of workers employed in such establishment does not exceed 1000 or exceeds 1000.

(iv) When the employment of any worker is terminated by or on behalf or the contractor the wages earned by him shall be paid before the expiry the day exceeding the one on which his employment is terminated.

(v) All payment of wages shall be made on a working day except when the work is completed before the expiry of the wage period in which case final payment shall be made within 48 hours of the last working day at work site and during the working time.

Note: The term "working day" means a day on which work on which the labor employed is in progress.

15.6.Wage book and wage slips etc. : the contractor shall maintain a wage book of each worker in such form as may be convenient at the place of work, but the same shall include the following

particulars :-

(a) Name of the worker.
(b) Rate of daily or monthly wages.
(c) Nature of work on which employed.
(d) Total number of days worked during each wage period.
(e) Dates and periods for which worked overtime.
(f) Gross wages payable for the work during each wage period.
(g) All deductions made from the wage with an indication in each case of the ground for which the deduction is made.
(h) Wages actually paid for each wage period.
(i) Signature or thumb impression of the worker.
(j) The contractor shall also issue a wage slip containing the aforesaid particulars to each worker employed by him on the work at least a day prior to the day of disbursement of wages.
(k) The contractor shall issue the employment card in the prescribed form iii to each worker on the day of work or entry in to his employment. If the worker has already any such card with him from the previous employer, the contractor shall merely endorse that employment card with relevant entries. On termination of employment the employment card shall again be endorsed by the contractor and returned to the worker.
(l) **The contractor shall issue an attendance-cum-wages card as perform:** Attached to each worker on the day of each worker on entry into his employment.

15.7. Register of unpaid wages: – the contractor shall maintain a register of unpaid wages in such form as may be convenient at the place of work but the same shall include the following particulars:

(a) Full particulars of the laborers where wages have not been paid.
(b) Reference number of the muster roll and wage register.
(c) Rate of wages.
(d) Wage period
(e) Total amount not paid
(f) Reasons for not making payment
(g) How the amount of unpaid wages was utilized.
(h) Acquaintance with dates.

15.8. Register of accidents: the contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:

(a) Full particulars of the laborers who met with accident.
(b) Rate of wages.
(c) Sex
(d) Age
(e) Nature of accident and cause of accident.
(f) Time and date of accident
(g) Date and time when admitted in hospital
(h) Date of discharge from the hospital
(i) Period of treatment and result of treatment.
(j) Percentage of loss of earning capacity and disability as assessed by the medical officer.
(k) Claim required to be paid under worker's compensation act.
(l) Date of payment of compensation.
(m) Amount paid with details of persons to whom the same was paid.
(n) Authority by whom the compensation was assessed.

(o) Remarks.

15.9.Fines and deductions which may be made from wages:

- The wages of a worker shall be paid to him without any deduction of any kind except the following:
- Fines.
- Deduction for absence from duty i.e. from the place or the places whereby terms of his employment he required to work. The amount of deduction shall be in proportion to the period for which he was absent.
- Deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or loss of money or any other deduction which he is required to account, where such damage or loss is directly attributable to this neglect or default.
- Deduction for recovery of advances or for adjustment of over-payment of wages, advance granted shall be entered in a register.
- Any other deduction which the central government may from time to time allow.
  1. No fine should be imposed on any worker save in respect of such acts and omission on his part as have been approved by the chief labour commissioner.
  2. No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
  3. The total amount of fine which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paisa in a rupee of wages, payable to him in respect of that wage period.
  4. No fine imposed on any worker shall be recovered from him by installment, or after the expiry of sixty days from the date on which it was imposed.
  5. Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

15.10.Register of fines, etc.:

- The contractor shall maintain a register of fines and a register of deduction for damage or loss in form nos. 1 & 2 respectively which should be kept at the place of work.
- The contractor shall maintain both in English and the local Indian language, a list approved by the chief labour commissioner clearly starting the acts and omissions for which penalty or fine may be imposed on a workman and display it in a good condition in a conspicuous place of the work.

15.11.Preservation of registers: the wage book the wage slips, the register of unpaid wages, the register of accidents, the register of fines, deductions required to be maintained under these regulations shall be preserved for 45 days after the date of last entry made in them and shall be made available for inspection by the engineer-in-charge labour welfare officer or any other officer authorized by the chief labour commissioner in this behalf.

15.12.Powers of labour welfare officer to make investigation or enquiry

The labour welfare officer or any other person authorized by the central government on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observance of the fair wage clauses and provisions of these regulations. He shall investigate into any complaint regarding the default made by the contractor or sub-contractor in regard to such provision.

15.13.Report of labour welfare officer

The labour welfare officer or other persons authorized as aforesaid shall submit a report of result

of his investigation or enquiry to the executive engineer concerned indicating the extent, if any, to which the default has been committed, with a note that necessary deduction from the contractor's bill be made and the wages and other dues be paid to the laborers concerned. In case an appeal is made by the contractor under clause 14 of these regulations actual payment to the laborers will be made by the executive engineer after the zonal labour commissioner has given his decision on such appeal. The executive engineer shall arrange payments to the labors concerned within 45 days from the receipt of the report from the labour welfare officer or the zonal labour commissioner as the case may be.

15.14.Appeal against the decision of labour welfare officer:

Any person aggrieved by the decision and recommendations of the labour welfare officer or other person so authorized may appeal against such decision to the zonal labour commissioner concern within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the executive engineer concerned but subject to such appeal, the decision of the officer shall be final and binding upon the contractor.

15.15. Prohibition regarding representation through lawyer:

1. A workman shall be entitled to be represented in any investigation or enquiry under this regulation by:
   (a) An officer of a registered trade union of which he is a member.
   (b) An officer of a federation of trade unions to which the trade union referred to in clause (a) is affiliated.
   (c)Where the employee is not a member of any registered trade union, by any officer, of a registered union, connected with, or by any other workman, employed in the industry in which the worker employed.

2. An employer shall be entitled to be represented in any investigation or enquiry under this regulation by;
   (a) An officer of any association of employers of which he is a member.
   (b) An officer of a federation of association of employers to which the
   Association referred to in clause (a) is affiliated.
   (c) Where the employer is not a member of any association of employers' by an officer of association of employers connected with or by any other employer, engaged in the industry in which the employer is engaged.

No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these regulations.

15.16.Inspection of books and slips:

The contractor shall allow inspection of the wage books and the wage slips the register of unpaid wages, the register of a accident, and the register of fines and deduction to any of his workers or to his agent at a convenient time and place after due notice is received or to the labour welfare officer or any other person authorized by the central government on his behalf.

15.17.Submission of returns:

The contractor shall submit periodical returns as may be specified from time to time.

16.0 Delayed Payments

Any amounts payable by the Employer to the contractor in pursuance of any Certificate given by the SBI/SBIIMSPL hereunder shall, if not paid within the 'Period of honoring of Certificate' no interest will be paid by the Employer.

17.0 SAFETY CODE/SAFETY MEASURES

1. All personnel at site should be provided with Helmets and Safety Boots with some Identification Mark. Visitors also should be provided with Helmets. It should be ensured that these are used properly.

2. First Aid Box should be kept at site with all requisite materials.

3. No one should be allowed to inspect / work at a height without Safety Belt.

4. Suitable scaffolds should be provided for workmen for all Works that cannot safely be done from the ground, or from solid construction except such short period Work as can be done safely from ladders. When a ladder is used an extra Mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well as suitable footholds and handholds shall be provided on the ladder and the ladder shall be given an inclination not steeper than ¼ to 1 (¼ horizontal and 1 vertical).

5. Scaffolding or staging more than 3.5 meters above the ground or floors, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached, bolted, braced and otherwise secured at least 1 Meter high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

6. Working platforms, Gangways, and Stairways should be so constructed that they do not sag unduly or unequally, and if the height of the platform or the Gangway or the Stairway is more than 3-5 Meters above ground level or floor level they should be closely boarded, should have adequate width and should be suitably fenced, as described.

7. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be 1 Meter.

8. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 Meters in length while the width between side rails in rung ladder shall in no case be less than 30cms for ladder up to and including Meters in length. For longer ladders this width should be increased at least 6mm for each additional 30 cm. Uniform step spacing shall not exceed 30 cm.

9. Adequate precautions shall be taken to prevent danger from electrical equipments. For electrical on line works gloves, rubber mats, and rubber shoes shall be used.

10. All trenches 1.2 Meters or more in depth shall at all times be supplied with at least one ladder for each 30 Meters length or fraction thereof. Ladder shall be extended from bottom of the trench to at least 1 Meter above the surface of the ground. The sides of the trenches, which are 1.5 Meters or more in depth shall be stepped back to give suitable slope, or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 Meters of the edge of the trench or half of the depth of the trench whichever is more cuttings shall be done from top to bottom. Under no circumstances undermining or under

cutting shall be done.

11. Before any demolition work is commenced and also during the process of the work :-

a) All roads and open areas adjacent to the Work Site shall either be closed or suitably protected;

b) No electrical cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.

c) All practical steps shall be taken to prevent danger to persons employed from risk or fire or explosion or flooding. No floor, roof or other part of the building shall be so over-loaded with debris or materials as to render it unsafe.

d) All necessary personal safety equipment as considered adequate by the Site Engineer should be kept available for the use of the persons employed on the Site and maintained in a condition suitable for immediate use; and the Contractor should take adequate steps to ensure proper use of equipment by those concerned.

e) Workers employed on mixing Asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.

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

g) Those engaged in welding works shall be provided with Welder’s protective eye-shields.

h) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.

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

12. Use of hoisting machines and tackle including their attachments, anchorage and support shall conform to the following standard or conditions:-

a) These shall be of good mechanical construction, sound material and adequate strength and free from patent defect and shall be kept in good repairs and in good working order.

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

c) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in-charge of any hoisting machine including any scaffold, winch or give signals to the operator.

d) In case of every hoisting machine and of every chain ring hook, shackle swivel and

pulley block used in hoisting or lowering or as means of suspension the safe working load shall be ascertained by adequate means.

e) Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of hoisting machine having a variable safe working load, each safe working load of the conditions under which it is applicable shall be clearly indicated. No part of any machine or of any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

f) Motor, Gearing, Transmission, Electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards, hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load, adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced.

g) When workers are employed on electrical installation, which are already energized, insulating mats, wearing apparel such as gloves,sleeves, and boots as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials, which are good conductors of electricity.

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

18.0 Accidents

The contractor shall immediately on occurrence of any accident at or about the site or in connection with the execution of the work report such accident to the SBI/SBIIMSPL/Architect. The contractor shall also report immediately to the competent authority whenever such report is required to be lodged by the law and take appropriate actions thereof.

ADDITIONAL CONDITIONS FOR AIR CONDITIONING WORKS

Unless otherwise specified in Technical specifications / General Conditions / Special Conditions the additional conditions for Air Conditioning works shall be adopted. The Air Conditioning works and other accessories shall comply with latest IS(Indian Standard Codes).

GENERAL

1. These conditions are meant to amplify the specifications. If any discrepancy is noticed between these conditions, Specifications, Bill of Quantities and Drawings the most stringent of the above shall apply for execution of the work.

2. The materials, design and workmanship shall satisfy the specifications contained herein and Codes referred to. Where the technical specifications stipulate the requirement in addition to those contained in the Standard Codes and specifications those additional requirements shall also be satisfied. In the absence of any Standard/Specifications covering any part of the work covered in this tender document, the instruction/directions of Consultant will be binding on the contractor. The contractor shall quote as per specification and shall not be accepted to deviate from the same. No alternative offer shall be accepted for the works.

3. The scope of this section is to describe materials and systems for Heating, Ventilation & Air Conditioning (HVAC) which form together with the project documents, a complete volume of work and quality description.

4. All HVAC works shall be of high quality, complete and fully operational including all necessary items and accessories whether or not specified herein. All HVAC works shall be completed in accordance with the regulations and standards to the satisfaction of the Consultants. The general provisions, special provisions and general requirements apply to the entire installation.

5. During the progress of work completed portion of the building may be occupied and be put to use by the owner but the contractor shall remain fully responsible for the maintenance of Heating, Ventilation & Air-conditioning works till the entire work covered by this contract is satisfactorily completed by him and handed over to the owner.

6. Contractor shall calculate the capacities for areas and confirm the inside conditions specified in the basis of design. Contractor shall be liable to make do any changes/modifications to the system for achieving the inside conditions without any extra expenditure to the client.

RATING

Rating of all items shall be appropriate for the conditions on the particular site on which the item will be used. All the equipment shall be fit for continuous work under the most severe conditions of site and shall be rated for the following ambient condition.

Outdoor temperature	44º C
Temperature under shade	42º C

INSPECTION AND TESTING

1. The BANK /Consultant reserves the right to request inspection and testing at manufacturer's works at all reasonable times during manufacture of items for this contract. Tests on site of completed works shall demonstrate among other things.

2. That the equipment installed complies with specification in all particulars and is of the correct rating for the duty and site conditions.

3. That all items operate efficiently and quietly to meet the specified requirements.

4. The contractor shall provide all necessary instruments and labour for testing shall make adequate records of test procedures and readings, shall repeat any tests requested by BANK /Consultants and shall provide test certificates signed by a properly authorized person. Such test shall be conducted on all materials and equipment's and on completed work as called for by BANK / Consultants.

5. If it is proved that the installation or part thereof is not satisfactorily carried out then the contractor shall be liable for the rectification and re-testing of the same as called for by BANK /Consultants at the cost of the contractor. The BANK / Consultants decision as to what constitutes a satisfactory test shall be final.

6. The above general requirements as to testing shall be read in conjunction with any particular requirements specified elsewhere. A test house approved by BANK/Consultants shall carry out all tests.

7. In addition to the 'Initial' test the Contractor shall also give two or three continuous running tests of the system, each of (3) three days duration, and each one during the full specified outside conditions (when the ambient conditions are close to the specified ambient conditions). The first running test may be taken on the completion of the initial test, provided the ambient temperature and Humidity are near their peak.

8. The Contractor shall provide all necessary tools, instruments, gauges, flow meter, Anemometer, etc. as may be required for conducting the various tests. He shall also provide necessary lubricant etc and required personnel for the tests.

SAMPLES AND CATALOGUES

Before ordering the necessary material for these installations, the contractor shall submit Technical data sheets for Compressors, Condensers, split units, Ductable units, Motors, Insulation material, Piping, , insulation, grills , dampers & all other instruments & controls to the BANK /Consultants for approval. A sample of every kind of material such as pipe, fittings, insulation of ducts etc., shall be supplied.

Also the contractor shall ensure that the dimensional details of the equipment fit into the allotted space provided in the building.

INSTRUCTION / MAINTENANCE MANUAL

1. The Contractor shall prepare and produce instruction, operation and maintenance manuals in English for the use, operation and the maintenance of the supplied equipment and installations and submit to BANK /Consultants in (6) copies at the time of handing over.

2. The manual shall generally consist of the following:
    1. Description of the project.
    2. Operating instructions.

3. Maintenance instructions including procedures for preventive maintenance.
4. Manufacturers catalogue.
5. Spare parts list with prices.
6. Trouble shooting charts.
7. Schematic & control wiring diagrams.
8. Type and routine test certificates of major items.
9. One (1) set of reproducible 'As Built' tracings on cloth.

COMPLETION CERTIFICATE
On completion of the HVAC installation a certificate shall be furnished by the contractor countersigned by the licensed supervisor, under whose direct supervision the installation was carried out.

GUARANTEE:
At the close of the work and before issuance of final certificate of virtual completion by BANK /Consultants, the contractor shall furnish written guarantee indemnifying the owner against defective materials and workmanship for a period of one year after completion. The contractor shall hold himself fully responsible for re-installation or replacement free of cost to owner, the following:

1. Any defective work or material supplied by the Contractor.

2. Any material or equipment supplied by the owner, which is damaged or destroyed as a result of defective workmanship by the contractor.

3. Any material or equipment damaged or destroyed as a result of defective workmanship by the contractor.

RATE ANALYSIS
At any time and at the request of BANK /Consultants the contractor shall provide details or break-up costs and prices of any part or parts of the works.

WATER AND POWER
The contractor will make his own arrangement for water and electricity. If arranged by the Owner the same shall be supplied at one point only and the contractor shall be required to make his own arrangement for distribution lines required for the work. Recovery for the same shall be made at the prevailing rates based on the meter readings to be installed by the contractor at the source point. In case the Owner does not provide power/water they should make arrangements for themselves for carrying out the works.

PERIOD AND TIME LIMIT FOR VIRTUAL COMPLETION OF WORKS
The period and time limit for Virtual Completion of the Works shall be 8(Eight) calendar months from the date of issue of Work Order to commence works or handing over of site in respect of the award of Contract.

PROFESSIONAL INTEGRITY AND TEAM SPIRIT

It is the intent of BANK / Consultant that this project will be executed in a spirit of team and full professional integrity. Contractor is expected to cooperate with all the agencies involved in the project to fulfill this objective.

NOISE CRITERION

All air conditioning equipment and materials (like indoor units, outdoor units, motors, ducts, grilles, acoustic lining etc.,) will be selected, designed and installed in such a manner that the inside noise criterion for all conditioned spaces will be in the range NC-30 to NC-35. The noise levels in conditioned occupied spaces due to all air conditioning equipment will not exceed 50 dB at 125Hz when measured at any point in the occupied spaces less than 1.5 meter above floor level and not closer than 1.5 meter from any supply air register or 1 meter from any return air grill.

When taking noise level measurements, the background noise level without the equipment operating shall be at least 7 dB below the actual background noise level when the equipment is in operation.

MODE OF MEASUREMENT

Each unit shall be measured as one item of work which shall consist of: Outdoor unit & Indoor unit. Mode of Measurement for payment of items of ducting and piping & their insulation shall be as follows:

1. **PIPING:**

Shall be measured in units of length along the center line of installed pipes including all pipe fittings, flanges (with gaskets and nuts and bolts for jointing), unions, bends, elbows, tees, concentric and/or eccentric reducers, inspection pieces, expansion loops etc. The above accessories shall be measured as part of piping length along the center line of installed pipes and no special rates for these accessories shall be permitted. The quoted unit rates for center line linear measurement of piping shall include all wastage, allowances, pipe supports includes hangers, MS channel, wooden bunches, nuts and check nuts, vibration isolator suspension where specified or required, and cost of excavation, bedding back filling and finishing as required to complete the piping installation as per the specification. None of these items will be separately measured and paid for. However, all valves (gate/globe /butterfly /check -balancing/purge/drain etc.), strainers, orifice plates, temperature gauge, pressure gauges shall be separately measured and paid as per their individual unit rates, which shall also include their insulation as per specifications, piping measurements shall be taken before application of the insulation. The cost shall also include any excavations and making masonry valve chamber with steel cover etc.

- Piping will be measured in running lengths (Meters)
- No special measurement of bends, elbows, reducer, expander, tees, cross etc. will be made. All such fittings / accessories will be treated as normal piping.
- The length of the piping including accessories and fittings will be measured along the enter line of piping.

2. **PIPING INSULATION:**

Shall be measured in units of length along the centerline of the installed pipe, strictly on the same basis as the piping measurements described above. The linear measurements shall be taken before the application of the insulation, it may be noted that for piping measurements, all valves, orifice plates and strainers are separately measurable and their quoted unit rates shall include the insulation cost in the valve required and as specified.

No separate measurement of insulation shall be made for fittings such as bends, elbows , reduces, expander , tees , crosses , flanges , etc, All such insulation shall be linear in meters measurement along the center line of piping.

3. **ELECTRICAL WORK:-**

 All cables shall be measured in running lengths as finally installed at site. No wastage measurement will be allowed.
 Control cable/ wiring for a plant inside the plant room shall be treated as a lump sum item.
 All measuring instruments indicating lamps, etc shall form part of the equipment specified and no separate measurement shall be made for such items.

TESTS AT SITE:

1. GENERAL:

The Contractor must perform all inspection and tests of the system as a whole and of components individually as required, under the supervision of the Engineer, in accordance with the provisions of the applicable 'ASHRAE' standards or approved equal and as per site requirements. All tests shall be recorded in the format approved by BANK / Consultant

2. PIPING SYSTEM:

In general pressure tests shall be applied to piping only before connection of equipment and appliances. In no case shall piping, equipment appliances be subjected to pressures exceeding their test ratings. Tests shall be completed and approved before insulation is applied. After tests have been completed, the system shall be drained and cleared of all dust and foreign material. The prescribed pressure shall be maintained at least three complete days of Twenty Four hours each.

3. ELECTRICAL EQUIPMENT:

All electrical equipment shall be cleaned and adjusted at site before connection of power. The contractor as per relevant IS/IE rules shall carryout the following minimum tests.

Wire and cable continuity tests

Insulation resistance test, phase to phase and phase to earth and phase to neutral on all circuits and equipment, using a 1000 volt Megger. The earth resistance between conduit system and earth must not exceed half (0.5) OHM.

The phase rotation tests Operating tests on all protective relays to prove their correct operation before energizing the main equipment including secondary injection test at site. Operating tests on all starters, circuit breakers, etc.

PERFORMANCE TESTS:

The installation as a whole shall be balanced and tested upon completion and all relevant information including the reports to be handed over to engineer-in-charge.

MAINTENANCE

In case of poor workmanship or system breakdown the contractor shall repair/replace the defective parts without any extra expenses to the client. This clause shall be in vogue till the guarantee period of the system.

PENALTY OTHER THAN LIQUIDATED DAMAGES

In case the units supplied by the manufacturer is not within the specified limits as per tender schedule he shall compensate the for client the expenses incurred by virtue of power or any other means. Over and above he shall compensate for the expenses incurred in running the plant until it is put back to the rating specified and confirmed by BANK / consultants/owner. In case the job is not completed within the stipulated time, the contractor shall be penalized at rate of 0.5% of the total contract value per week of delay up to a maximum of 10% of the total contract value.

TECHNICAL SPECIFICATIONS

AIR COOLED DUCTABLE TYPE AIR CONDITIONERS

1.0 GENERAL:

Air-cooled Ductable type air conditioner shall consist of units.

Evaporator unit (indoor unit)
Condensing Unit (Outdoor Unit)

The evaporator unit comprises evaporator coil, evaporator fan assembly installed together in a single sheet metal casing and with inter-connecting refrigerant piping, refrigerant controls, safety devices, etc., The unit shall be complete with electronic center & control pad incorporating the thermostat & speed control.

The condensing unit comprise compressor-motor unit, condenser coil, condenser fan, fan control, casing supporting stand etc,.

Both the evaporator unit and the condensing units shall be factory manufactured.

The Panel for casing shall be machine pressed and folded. The entire casing shall be factory manufactured, it shall be of robust construction and shall present a neat appearance. The tenderers shall also bring out in their tenders clearly the manufacturing techniques, finishes employed to meet the service conditions involved, etc,.

The units supplied with control panel incorporating switch fuse units, contactors, over load relays, single phase presenters, push buttons, etc., compressor and condenser fans.

2.0 EVAPORATOR UNIT.

All the components of the evaporator units shall be housed in a sturdy MS/GSS casing. In the case of MS casing, it should be dully painted/treated to resist corrosion, rust and other deleterious effects.

Removable panels shall be provided to finish access to the cooling coil, fan motor compartments filter to facilitate servicing and maintenance work.

The fan section shall consist of fan, fan casing (scroll) shaft and driven motor.

The fan shall be centrifugal type and impeller shall incorporate forward curved blades. the fan shaft and impeller shall be both statically and dynamically balanced.

The fan scroll shall be designed and shaped to optimize recovery static pressure and maximize efficiency at rated delivery and static pressure

The fan shall be direct driven by a TEFC squirrel cage induction motor. the tenderers shall confirm electrical characteristics of the motor as required in technical data.

The fan motor drive etc., shall all be design and mounted so as to minimize noise and vibration.

The cooling coil shall be of copper tubes and aluminum fins, the concentration shall be not less than 3/cm (8\in).

3.0 CONDENSING UNIT:

The unit shall be factory manufactured and shall be suitable for out door installation. It shall comprise compressor unit, condenser coil, fan motor, drive casing supporting stands etc,.

The compressor unit shall consist of direct driven reciprocating compressor with compressor and motor housed in a common shell, it shall be either hermetic or semi-hermetic type. in case the compressor motor is semi-hermetic type, the end plate shall be bolted to the shell.

The compressor shall be suitable for use with R-410 A refrigerant.

The tenderers are required to narrate in detail all protective devices, controls and such other features provided for the compressor motor units offered by them, like high temperature protection and over current protection, high and low pressure cut-outs. low oil pressure protection etc,.

The condensing unit shall be installed on a pedestal or on window of the building. the fan shall be propeller type direct-driven by an electrical motor. The unit shall be mounted in such a manner as to minimize transmission of vibration to the
Structure using vibration isolation pads, if necessary to secure satisfactory results.

The casing and structure for the condensing unit shall be of robust construction. The panels shall be of heavy gauge hot dip galvanized steel and they shall be machine-pressed and folded. All joints shall be folded joints. The supporting structure shall use only hot dip galvanized sections, i.e. angels channels etc,.

The tenderers shall bring out in any case clearly, (and in detail) the details of construction of the equipment offered by them, highlighting in particular, the thickness and kind of materials used, manufacturing techniques employed, finish provided for whether protection etc,.

Air cooled condensing unit shall incorporate necessary number of propeller fans of adequate size to obtain the required air flow rate under operating conditions. the fan shall be balanced both statically and dynamically. The fan motor shall be of TEFC squirrel cage
construction.

The fan motor sets shall be complete with protecting guards.

The condenser coil shall be made of copper tubes and aluminum fans. the coils shall be sized so as to optimize performance with respect to air flow rate, pressure drop, condensing temperature, power consumption etc., thus the values furnished for the parameters of the coil in section III, schedule of equipment shall be regarded as
Suggested values rather than specified values.

The coils shall be so positioned with respect to the floor level that, dust pick-up by entering air is minimized.

As noted in clause the condensing units have to be installed out door on suitable pedestals or any other appropriate supporting arrangements. Masonry work, if any required for supporting units shall be

provided by the owner, but the tenders shall furnish all necessary information including drawings. Further any supports made of MS structural sections if required should be designed, supplied and installed by the air conditioning contractor himself. He shall show the details of such supports in appropriate drawings and shall obtain the approval of the owners/consultants before providing them. the charges for such works shall be included in the prices quoted by the tenderers : in any case, no extra sum will be payable on that account.

HIGH WALL MOUNTED UNITS

High Wall mounted units must be compact & stylish design that does not detract from the Décor of theroom. The unit shall be pre charged with first charge of R 32 / R 134A / R 407 / R 410refrigerant. Additional charge shall be added as per refrigerant piping at site. Each indoor unit must have electronic expansion valve operated by microprocessor thermostat based temperature control to deliver cooling/ heating as per the heat load of the room. The unit must have provision of adding drain pump kit if required & specified. The drain pump must be suitable to lift drain up to 1000 mm from the bottom of the unit. Unit must be insulated with sound absorbing thermal insulation material, polystyrene/Polyethylene foam. The noise level of unit at the highest operating level shall not exceed 46 dB(A), at a vertical distance of 1.5 m from the grille of theunit. The unit shall be supplied with Resin Net filter with Mold Resistance. The filter shall be easy to remove, clean & reinstall. The unit grille must be washable with soap solution. It shall be possible to set minimum 5 steps of discharge angle by remote controller. It shall be possible to fit drain pipe from either side of the unit (Left orright) The unit will be connected in series to a suitable outdoor unit & it must be possible to Operate the unit independently, through corded/ cordless remote specified in the bill of quantities. The unit will be further connected to Intelligent Building Management System(To be supplied by other vendors) & it shall be possible to operate the unit through this IBMS system.

The unit shall be supplied with following from the factory with following:

1.OperationManual
2.Installation Manual
3.Installation panel
4.Paper pattern for installation
5.Insulation tape/ Clamps/ Screws.

SPLIT / CASSETTE AIR CONDITIONERS

1.0 SCOPE
The scope of work envisaged for the project is design, manufacture, shop testing, supply, unloading at site, store at site, installation, testing & commissioning of an Air-conditioning System by Air-cooled Split/Cassette Air-conditioners incorporating other ancillary work.

The tender specifies scroll compressors to minimize the mechanical losses and thereby enhancing the equipment efficiency. Tenderer shall quote accordingly indicating the equipment capacity vis-à-vis power consumption.The scope of this section covers the supply, installation, testing & commissioning of cassette/ split air conditioners.

GENERAL

The unit shall be completely factory assembled, wired & tested and shall generally comprise the following :

Weatherproof outside located air-cooled condensing units complete with air-cooled condensers with copper tube and extended aluminium fins, axial flow fan with direct driven motor, hermetic/semi hermetic scroll compressor with refrigerant cooled drive motor, starter, safety control viz. HP/LP/OP cut-outs, single phase preventersetc.
The indoor unit shall comprise of the cooling coil, evaporator blower with motor & drive set, thermostat, thermostatic expansion valve, filtersetc.
Casing shall be made of G.I. sheet finished with polyester powder coating for corrosion resistant and attractive finish.
Air filter shall be synthetic non-woven fabric having large surface area and dust holding capacity as well as easily cleanable and washable. The efficiency of filter shall be 90% down to 10micron.
The inside of the indoor units shall be suitable insulated with acoustic insulation. The drain pan shall be adequately insulated to prevent sweating/condensation at the bottom of thetray. Timer shall be provided to stagger & sequence the operation of evaporator fan and compressor.

COMPRESSOR
The compressor shall be scroll type with maximum energy efficient ration (EFR). The compressor may be hermatictype.
Internal thermostat shall be embedded in the winding of the motor to protect against overheating.
Compressor shall be mounted on suitable vibration isolator preferably spring type.
The unit shall be provided with force fed lubrication with the aid of a positive displacement reversible oil pump.
Tenderer shall furnish compressor performance curve at variousload.
Crankcase heater shall be provided to prevent high solubility of refrigerant in oil during idle periods. The heater shall be automatically energized on tripping ofcompressor.

AIR COOLEDCONDENSER
Selection of condenser shall be based on worst ambient condition and to match with the capacity of the A.C. unit. It shall comprise of copper tube & mechanically bonded aluminum fins. The unit shall be suitable for remote outdoor installation and hence shall be of weatherproof construction. The unit shall also house the direct driven axial flow fans. The condenser fan motor shall have IP 55 protection class. Suitable bird at fan inlet and outlet shall beprovided.

Condenser shall be complete with the following accessories :
Hot gas inlet & liquid outlet with shut offvalve.
Relief & purgevalve.
Sub-coolingcircuit.

COOLING COIL
The cooling coil shall be extended fir and tube type. Velocity of air across coil face shall not be more than 500 FPM. The copper tube minimum OD shall be 16 mm while minimum number of fins per inch shall be 12.

EVAPORATORBLOWER
The blower shall be DIDW (Double Inlet Double Width) type with forward curved impeller blade for noise free operation. The blower shall develop min. Static pressure (external) 40 mm WG at the desired delivery. The blower motor shall have adequate safety over BHP and same shall be of IP44 protection class.

DUCT WORK AND OUTLETS

The scope of this section comprises supply fabrication, installation and testing of all sheet metal ducts, supply, installation, testing and balancing of all grilles, and diffusers. They are required to be in accordance with these specifications and the general arrangement shown on the Drawings.

Raw Materials

Galvanizing shall be nominal 120 gm / sqm surface area and Lock Forming Quality prime material.Gauges of ducting, and transverse connectors shall be as per SMACNA for Pressure Class1" (250Pa).

RECTANGULAR DUCT

Dimenstions of Ducts	Gauge GI	Alluminum	Types of Joints	Types of bracings
Upto 600	24	22	G.I Flange at 2.5 Center	Cross Bracing's
601 to 750			25 X 25 X 3 MM angle frame with 6 mm dia nuts and bolts	25 x 25 x 3 mm MS angles bracing at 1500 mm from joints
751 to 1000	22	20	25 X 25 X 3 MM angle frame with 6 mm dia nuts and bolts	25 x 25 x 3 mm MS angles bracing at 1500 mm from joints
1001 to 1500	22	20	40 X 40 X 5 mm angle frame with 8 mm dia nuts and bolts	40 X 40 X 3 mm MS angle bracing at 1500 mm from joints
1501 to 2250	20	16	50 X 50 X 3 mm angle to be cross braced diagonally with 10 mm dia nuts and bolts at 125 centre	40 X 40 X 3 mm MS angle bracing at 1200 mm from joints or 40 C 40 C 3 mm M S angle diagonal bracing.

In general, above 750mm size ducts, 4 bolt system transverse connectors are mandatory. Equivalent transverse connectors will be approved after necessary submissions.

All small ducts will be with minimum of TDC transverse connectors/ alternately MS angle, and no C/S/SS cleats shall be used. Ducting shall be fully sealed by sealant to minimize leaks.

FABRICATION STANDARDS & EQUIPMENT

All duct construction and installation shall be in accordance with SMACNA standards. In addition ducts shall be factory fabricated utilizing the following machines to provide the requisite quality of ducts.

1) Coil (Sheet metal in Roll Form) lines to facilitate location of longitudinal seams at corners/folded edges only, for required duct rigidity and leakage free characteristics. No longitudinal seams permitted along any face side of the duct.

2) All ducts, transformation pieces and fittings to be made on CNC profile cutter for requisite accuracy of dimensions, location and dimensions of notches at the folding lines.

3) All edges to be machine treated using lock formers, flanges and rollers for turning up edges.

INSTALLATION PRACTICE

All ducts shall be installed generally as per tender drawings, and in strict accordance with approved shop drawings to be prepared by the Contractor.

1) The Contractor shall provide and neatly erect all sheet metal work as may be required to carry out the intent of these Specifications and Drawings. The work shall meet with the approval of Owner's site representative in all its parts and details.

2) All necessary allowances and provisions shall be made by the Contractor for beams, pipes, or other obstructions in the building, whether or not the same are shown on the drawings. Where necessary to avoid beams or other structural work, plumbing or other pipes, and conduits, the ducts shall be transformed, divided or curved to one side(the require area being maintained) all as per the site requirements.

3) If a duct cannot be run as shown on the drawings, the contractor shall install the duct between the required points by any path available in accordance with other services and as per approval of owner's site representative.

4) All ductwork shall be independently supported from building construction. All horizontal ducts shall be rigidly and securely supported, in an approved manner, with trapeze hangers formed of galvanized steel rods and galvanized steel angle/ channel or a pair of brackets, connected by galvanized steel rod under ducts. The spacing between supports should be not greater than 2.5 meter.

5) Ducting over furred ceiling shall be supported from the slab above, In no case shall any duct be supported from false ceiling hangers or be permitted to rest on false ceiling. All metal work in dead or furred down spaces shall be erected in time to occasion no delay to other contractor's work in the building.

6) Where ducts pass through brick or masonry openings, it shall be provided with 25 mm thick Nitrile rubber insulation around the duct. The cost of the INSULATION shall be part of ducting & shall not be covered separately in "BOM". It can also be executed with a layer of neoprene around the ducting.

Grilles/diffusers :

The Supply air diffusers shall be fabricated from MS/AL sections . The grille shall have horizontal extruded section fixed louvers.

The Diffusers shall have opposed blade dampers of MS/AL which shall be key operated from the grille face, wherever required.

The damper blades shall be of 1.25mm (18 Gauge) Al/MS Black sheets and shaped to form air tight joints. The frame work for dampers shall be fabricated from 1.25mm (18 Gauge) Al/MS Black sheet. the grille frame shall be fabricated from extruded aluminum angle. Grilles longer than 450mm, Shall have intermediate supports for the horizontal louvers. the grilles shall generally be to the design of Tuttle & baley grilles and registers.

PAINTING

All grilles and diffusers shall be powder coated in color as approved by the architects/consultants, before installation.

All ducts immediately behind the grilles/diffusers, are to be given two coats of black paint in Matt finish if required.

TESTING :

After completion, all duct system shall be tested for air leakage.

The Entire air distribution system, shall be balanced to supply the air quantity as required in various areas and the final balance of air quantity through each outlet, shall be submitted to the engineer- in charge. for approval. You have to ensure equal temperature and RH through out air conditioned space with a maximum +/- 1 Deg. C.

All Copper refrigerant piping along with indoor units have to be pressure tested with Nitrogen of about 250 psi on lowside and pressure has to be holded for 48 hrs and has to be shown to Engineer – in charge.

Total units have to be vacumised and vacuum has to be kept on hold for 24 hrs and to be certified by Engineer – In charge.

During commissioning, all the parameters i.e., current, voltage, suction pressure, discharge pressure etc., have to be checked and noted and efficiency has to be shown to Engineer – in charge.

After successful commissioning, the unit has to be runtested for two working days and detailed parameters have to be shown to client .

INSULATION

Thermal : Supply / return air duct passing through the non-air conditioned area shall be insulated with 40 Kg. / cub. mt. density 10 mm thk. Class ‘O’ nitrile rubber insulation. Thermal conductivity shall be 0.04 W / m. deg. K. Insulation material shall be fixed to the ducting with adhesive. All angle joints shall be covered with 6 inch wide insulation. All insulation joints shall be sealed with 50 mm wide self adhesive tape recommended by supplier of insulation. Insulation shall be finished properly around the collars etc. Insulation shall be finished properly around the collars etc. Insulation measurements shall be taken over the insulation. No IS measurements are allowed.

Accoustic : Acoustic lining for supply and return air ducts with 13 mm thick of open cell nitrile rubber Class "1" grade of 140-160Kg/Cum density as per the specifications and as shown in the drawings. Material thermalconductivity should be 0.047 W/mK @ 20 deg C & fire performance in accordance with BS476 Part 7 1997 & UL94 1996. manufacture recommended Adhesive should be used to fix the

Acoustic lining in the ducts.TheAcousticinsulation work is normally carried out up to a length of 6 meters from the AHU's plenum / outlet and one meter length of duct from VAV outlet as per the approved shop floor drawing.

ROOF INSULATION

Exposed roof over the conditioned areas shall be insulated with 50mm thick expanded polystyrene. For under deck insulation in the conditioned areas, the insulation of TF Quality shall be used.

Under deck insulation shall be done by fixing the thermocol slabs by wire and mesh method. raw plugs shall be fixed in the grid of 500mm x 500mm, tie wires and fix thermocool slab rigidly using 24G Plate washers through the GI Wires. or

VOLUME CONTROL DAMPERS

Volume control dampers shall be made out of 1.2 mm thickness galvanized steel sheet frame with 1 mm thick blade. Blades should be double skinned aerofoil construction and opposed blades should be at 50mm pitch centres. The blades should be mounted in nylon bushes operated by an interior wheel gear system. The operating lever or knob shall have locking arrangement and markings of various positions including open and closedposition.

FIRE DAMPERS

a. All supply air ducts at air handling unit room shall be provided with approved fire dampers of atleast 1.5 hours fire rating.

b. Fire damper blades shall be one piece folded high strength galvanized steel construction. In normal position these blades shall be gathered and stacked at the frame head providing maximum air passage and preventing passing air currents from creating noise or chatter. The blades shall be held in position through a fusible link to close in case of fire. A potential free contact shall be provided in the fire panel of each floor by the fire alarm vendor. The AC contractor shall wire this to the AHU motor starter to trip the same in case of fire.

c. Each fire damper shall be tested after installation to ensure closing on actuation of the connected fire alarm system.

d. The fire damper frames shall be of 18 gauge GI and the blades of 22 gauge GI.

REFRIGERANT PIPING

The specifications that follow cover the requirements of piping.

Only copper piping/tubing of refrigeration quality shall be used. Soft copper tubing can be employed for sizes up to and including 22mm (7/8") OD and 9.5mm (3/8") OD shall have a minimum nominal thickness of 0.76mm (0.030") and 0.81mm (0.032") respectively.

All piping / tubing shall be new fresh, clean and dry.

Fittings like bends, tees, sockets, etc. shall be of copper or forged brass. Flare type fittings may used for copper tubing while hard drawn tubes upto and including 15mm size may be bent to from 90 Deg bends with throat radius being not less than 3 times the tube diameter. for bigger sizes, bends should be used as noted already.

Valves for pipe sizes up to 15mm OD shall be all brass, hand wheel operated, Diaphragm pack less type, globe or angle valves, for sizes over 15mm OD Valves shall be of bronze, globe or angle type, packed back sealed.

Liquid line strainers shall be made of brass shall incorporate bronze screen and permanent management. Strainers shall be provided with shut valves on either side.

Thermostatic expansion valve shall be complete with remote bulb and external equalizer and external super head adjustment. Solenoid valves shall have manual opening system to serve as by - pass in case of failure of solenoid valve. Liquid-moisture indicator shall be provided in the liquid line.

Flare type joints may be used for copper tubing while for a hard drawn pipe only brazed joints shall be used. For Small lines also such as equalizer lines, expansion valves connections, gauge connections, connecting pressure switches etc., Flared fittings and joints shall be used.

Piping shall be insulated sufficient number of bends and turns to ensure sufficient fleetly and minimize vibration. Supports, Clamps, Saddles, hangers etc., of adequate strength should be provided as required to support the piping adequately and minimize vibration.
Necessary isolating material like rubber, felt, spring, etc,. should also be provided as an additional measure to limit transmission of noise and vibration.

Refrigerant piping shall be carried out giving due consideration to the need to ensure oil return and avoid liquid slope-over into the compressor, Accordingly, the piping shall include necessary loops, traps, slopes, etc,. to achieve these objectives.

While installing the piping, adequate clearance between pipes should be provided for insulation is called for

On completing the erection, the system shall be pressure tested with dry nitrogen or carbon de-oxide. The test pressure shall be a sunder for R-22.

High Pressure side - kg /sqcm(psi) : 25 (365)

Low Pressure side - kg /sqcm(psi) : 110 (150)

The system shall hold the pressure for a minimum period of 24 hours without revealing leaks.

After the leak test has been completed successfully, the pressure due to Nitrogen or Carbon-de-oxide in the system.

The System shall then be dehydrated by drawing a vacuum. The vacuum achieved shall be achieved shall be atleast as deep as 500 microns and shall be maintained for a period of atleast 24 Hours after the vacuum pump has been shut off.

INSULATION FOR REFRIGERANT PIPING:

All suction lines (insulated both indoors & outdoors) and liquid lines laid outdoors shall be applied over a coat of bituminous primer applied on the pipe surface.

CONDENSATE DRAIN PIPING:

PVC Pipes (Medium) shall be used for condensate drain piping.

Piping shall be supported suitably on walls/floor and all charges involved there to shall be applied in the prices quoted by the tenderers.

While Installing the piping the contractor shall keep in mind the requirement that it should not foul with the structural or architectural features of the building. Further, all piping must be installed in a neat and workman - like - manner.

MODE OF MEASUREMENTS

Unit prices in the schedule of quantities.

The item description in the schedule of quantities is in the form of a condensed resume. The Unit price shall be held to include everything necessary to complete the work covered by this item in accordance with the specifications and drawings. The sum total of all the individual item prices shall represent the total price of the installation ready to be handed over.

The Unit price of the various items shall include the following.

All equipment, machinery, apparatus and materials required as well as the cost of any tests which, the consultant may request in addition to the tests generally required to prove the quality & performance of equipment.

All the labour required to supply and install the complete installation accordance with the specifications.

Use of any tools, equipment's, machinery, lifting tackle, scaffolding, ladders, etc., required by the contractor to carry out his work.

All the necessary measures to prevent the transmission of vibration.

The necessary material to isolate equipment foundations from the building structure, wherever necessary.

Storage and insurance of all equipment, apparatus and materials.

The contractor's unit price shall include all equipment, apparatus material and labour indicated in the drawings and/or specifications in conjunction with the item in question on its own (and with in the system as a whole) complete, even though not specifically shown described or other wise referred to.

Measurements of sheet metal ducts, grilles/diffusers etc.,

Sheet metal Ducts:

All measurements shall be taken as per actual outer duct surface area including bends, tees, reducers, collars, vanes and other fittings. gaskets, nuts, bolts, vibration/rotation pads are included in the basic duct items of item of the B.O.Q.

The Unit of Measurements shall be the finished sheet metal surface area in square meters. No extra shall be allowed for laps and wastage's.

All the guide vanes, deflectors in duct elbows, branches, grille, collars, quadrant dampers, etc., shall be measured for actual sheet metal surface and paid for at the same rate as a duct of the same thickness.

The unit duct price shall include all the duct hangers and supports, exposing of concrete reinforcement for supports and making good of the same, as well as any materials and labour required to complete the duct frame.

GRILLE / DIFFUSERS:

All grilles/diffusers as per tender requirements, shall be treated actual inner size, excluding the outer flange.

The square or rectangular grilles/diffusers shall be measured in plain square meters.

All round diffusers shall be measured by their diameter in cm.

All linear diffusers shall be measured as per actual length in meters.

ACOUSTIC DUCT LINING:

In the case of acoustic lining of air ducts, measurements of the bare inside duct surface in square meters, shall be final for billing purpose.
The insulation/acoustic panels shall include cost of batteries, supports, adhesives, vapour proofing, finished tiles/boards/sheets as well as additional labour and materials required for completing the work.

IS CODES PERTAINING TO AIR CONDITIONING WORKS

I.S.3696 Safety code for scaffolds and ladders

I.S.660 Safety Code for Mechanical Refrigeration

I.S.659 Safety Code for airconditioning

I.S.3016 Code of Practice for Fire precautions in welding and cutting operations

I.S.818 Code of practice for safety and health requirements in electrical and gas welding and cutting operations.

I.S.5216 Code for safety procedure and practice in electrical works

SHOP DRAWINGS

Within one week after the award of the contract, the contractor shall furnish, for the approval of the purchaser, two sets of detailed shop drawings of all equipment and materials including plant room layout, ducting, piping and control wiring layouts required to complete the project as per specification and as required by the purchaser. These drawings shall contain details of construction, size, arrangement, operating clearance, performance characteristics and capacity of all items of equipment, also the details of all related items of work by other contractors. Each item of equipment proposed shall be a standard catalog product of an established manufacturer as per specifications.

After final approval has been obtained from the purchaser, the contractor shall submit a further ten sets of shop drawings. No material or equipment shall be supplied for installation at the site until the contractor has in his possession, the approved shop drawings for the particular material or equipment.

The shop drawings shall be submitted for approval sufficiently in advance of planned delivery and installation of any materials, to allow the purchaser ample time for scrutiny. No claims for extension of time shall be entertained because of any delay in the work due to his failure to produce shop drawings at the right time, in accordance with the approved programmer.

Approval of shop drawings shall not be considered as a guarantee of measurements or of building dimension. Where drawings are approved, said approval does not mean that drawings have been checked in detail nor does it in any way relieve the contractor of the responsibility or requirement to furnish material or perform work as required by the contract.

Where the work of the contractor has to be installed will interfere with work of other agencies, he shall assist in working out space conditions to make a satisfactory adjustment. If so directed by the purchaser, the contractor shall prepare composite working drawings and sections at a suitable scale clearly showing how his work is to be installed in relation to the work of other agencies. If the contractor installs his work before coordinating with other trades, he shall make all the necessary changes without extra cost to the purchaser.

TECHNICAL DATA SHEET

Tenderer shall furnish the following technical data of the equipment and accessories offered by them as per the scheme and bill of quantities.

TECHINACAL DATA TO BE FILLED BY THE VENDOR

Description	Tons	5.5 TR	11 TR
Cooling Capacity	Btu / Hr		
Power Input	W		
Running Current	Amps		
Power Supply	V,Ph,Hz		
Air Circulation	CFM		
EER	Btu/hr W		
C.O.P	W/W		
Setting Temp range	°C		
External Static Pressure	mm of Aq		
Refergerant Charge	kg		

Indoor Coil	Type			
	Tube size (O.D)	inch		
		mm		
	Row/Column/FPI			
	Face area	Sqft.		
		m^2		
Indoor Fan	Type			
	No. Used			
	Diameter (width)	mm		
	Drive Type/Motor step			
Indoor Fan Motor	No. motors	No		
	Motor output	W		
	type			
	Model			
	No Of Poles			
	Input			
	Running Current	Amps		
	Capacitor(mfd)			
	Motor rpm(H/M/L)	rpm		
Air Circulation	Indoor(H/M/L)	CFM		
Noise Level (sound Press,1.5m)	Indoor(H/M/L)	dBA±3		
Temperature Controller				
No of Outdoor Units	Quantity	No		
Compressor	Type			
	LRA	Amps		
	Quantity			
	Model			
	Maker			
	Capacity	Kcal/hr (Btu/hr)		
	Motor type			
	Motor input	W		
	Oil type			
	Oil Charge	cc		
	OLP Type			
Outdoor Coil	Type			
	Tube size (O.D)	inch		
		mm		
	Row/Column/FPI			
	Length	inch		
		mm		

	Face area	Sqft.		
		m2		
Outdoor Fan	Type			
	No. used (Diameter in inch)			
	Drive type			
	Discharge	Side/Top		
	No. Motor / Motor output (W)			
	Motor rpm			
Air Circulation	Outdoor	CFM		
Noise Level (sound Press,1.5m)		dBA±3		
Service Valve	Liquid	inch		
	Gas	inch		
Power Supply cable		Core/ mm²		
Connecting Cable		Core/ mm²		
Connecting Tube	Liquid	inch		
	Gas	inch		
	Length (Standard)	m		
	Max Length/ Elevation	m		
Drain Connection Size (inch)	Inner Diameter	inch		
	Outer Diameter	inch		
Dimensions	Indoor unit (W*H*D)	mm		
	Outdoor unit (W*H*D)	mm		
Net Weight	Indoor unit	Kg		
	Outdoor unit	Kg		

FORM OF AGREEMENT

ARTICLES of AGREEMENT made this _____ day of _____ year 2018 between the **State Bank of India, RBO5, Tadepalligudem** (Hereinafter referred to as the "Employer/Owner/client" which expression shall, unless excluded by or repugnant to the context, includes its successors and assigns) of the ONE PART and _____ of _____(Hereinafter referred to as "Contractor" unless excluded by or repugnant to the context, includes its successors and assigns) of the OTHER PART.

WHEREAS the Employer intends to carry out **AIR CONDITIONING WORKS AT RAJAMAHEDRAVARAM TILAK ROAD BRANCH (CODE:20889) and shall herein after referred to as "Project".**

AND WHEREAS for the purpose of the above said project, the Employer invited sealed tenders from experienced, resourceful and bonafied contractors vide his Notice Inviting Tender (NO._____dated._____).

WHEREAS the contractor submitted his Tender Documents containing Notice Inviting Tender, General notes, General Conditions of Contract, Special conditions, Schedule of approximate quantities and rates , Form of Agreement, General Specification, Approved manufacturers/ natural source of materials, Declaration, Technical Specifications as in Schedule of Quantities etc. for the above said project, (Hereinafter collectively referred to as the "said conditions"), duly signed on each page as a token of his acceptance of the same, along with requisite Earnest Money Deposit

AND WHEREAS out of the Tenders received, the Tender of the contractor was found to be most suitable for the project.

AND WHEREAS the Employer has accordingly issued the work order (NO._____dt._____) to the contractor subject to his furnishing the requisite Security Deposit.

AND WHEREAS the Contractor has accepted the aforesaid Work Order vide his letter of acceptance NO._____ dt._____ and has also deposited with the Employer a sum of Rs._____ which with the Earnest Money of RS._____ forms the requisite Security Deposit @ 2 % of the accepted Tender Value of Rs._____.

NOW, therefore, it is hereby agreed to and between the parties as follows:

1) Contract documents
The following documents shall constitute the Contract Documents.

I. This Article of Agreement.
II. Tender Document submitted by the Contractor including the "said conditions", N.I.T and Schedule of quantity.
III. All correspondence between the Employer and the Contractor from the date of issue of N.I.T and the date of issue of work order.
IV. Work order No. _____dt._____

2) In consideration of the payments to be made to the Contractor as hereinafter provided the Contractor shall upon and subject to the said conditions, execute and complete the contracted project works shown upon the said drawings etc. and such further detailed drawings as may be furnished to the contractor by the said Employer and described in the said Specifications and the said Schedule of

Quantities.

3) Notwithstanding what are stated in the **N.I.T conditions of Tendering, Conditions of Contract** of herein stated before, the Employer reserves itself the right of altering the drawings and the nature of the work and addition to or omitting any items of work or of having portions of same carried out departmentally or otherwise and such alterations or variations shall be carried out without prejudice to this contract.

4) As mentioned in Article 1 above, the "**said conditions**" shall be read and be treated as forming part of this agreement and parties hereto will respectively be bound thereby and to abide by and submit themselves to the conditions and stipulations and perform the same on their parts to be respectively observed and preferred.

5) Any dispute arising under this agreement shall be referred to the Arbitration in a manner specified in the General Conditions of the Contract and all legal disputes shall be limited within the territorial jurisdiction of the Hyderabad thereto. The decision of the arbitration shall be final and binding on both the parties.

IN WITNESS WHEREOF THE PARTIES to their present have here under set and subscribed their hands, the day, month and year first above written.

Signed and delivered for and on behalf of

State Bank of India, Shri._____ its duly authorized official, In the presence of –
1. (Name and Address)

2. (Name and Address)

Signed and delivered for and on behalf of

The Contractor _____by Shri_____ his duly authorized official, in the presence of –
1. (Name and Address)

2. (Name and Address)

READ, UNDERSTOOD AND ACCEPTED

SIGNATURE OF THE CONTRACTOR WITH SEAL
DATE

DECLARATION

The Vice president,
SBI Infra Management Solutions Pvt. Ltd.,
Amaravati Circle Office,2nd Floor,
SBI Amaravati LHO Building,
Gun foundry,Abids,
Hyderabad – 500 001.

I/We have inspected the site **RAJAMAHEDRAVARAM TILAK ROAD BRANCH (CODE:20889)** and I/We have made me/ us fully acquainted with the local conditions in and around the sites of works and Lay out drawings of works, drawings of each items etc. complete.

I/We hereby declare that I/ We have carefully gone through the conditions laid down in the Notice Inviting Tender, General notes, General Conditions of Contract, Special conditions, Schedule of approximate quantities and rates , Form of Agreement, General Specification, Approved manufacturers/ natural source of materials (i.e. all parts of Technical bid), Technical Specifications of schedule of quantities (i.e. all parts of Price bid), and clearly understood all the same and on the basis of the same I/ We have quoted our rates in the Schedule of Quantities/BOQ attached with the tender documents.

We accept all the terms and conditions of tender documents. We will abide by the technical specification mentioned in the tender. We here by undertake to use only specified material/ make as per the tender schedule. I/ We hereby declare that, in particular during execution of all works at site; it will be my/ our sole responsibility to strictly adhere to/ meticulously follow the General Specification, Approved manufacturers/ natural source of materials, Technical Specifications of schedule of quantities, all drawings of layout and items.

For any type of deviation (to any of above or subsequent instructions), it will be my/ our responsibility to obtain the written instruction of the Engineer-in-charge for the same failing which it shall be deemed that I have carried out any such deviations at my own and I shall be duty bound to replace the all deviated material/ works from the site at my/ our cost as well as I shall be liable to penalized by the employer as deemed fit and for all such loses made thereof, I/ we shall not have any right to arbitrate in any manner.

I/ We hereby declare that I/ We shall obtain necessary drawings of items from employer in time and also shall uniformly maintain such progress as may be directed by the employer to ensure completion of same within the target date/ time as mentioned in the tender document.

Date: **Signature and seal of Contractor/ Tenderer**

Witness:

1.

2.

PROFORMA FOR
RUNNING A/C BILL

i. Name of Contractor/ Agency :

ii. Name of Work :

iii. Sr. No. of this Bill:

- No. & Date of previous Bill :

v. Reference to Agreement No. :

vi. Date of Written order to commence :

vii. Date of Completion as per Agreement :

S.No	Item description	Unit	Rate(Rs.	As per Tender		Up to Previous R.A. Bill		Up to date (Gross)		Present Bill		Remarks
				Qty	Amount	Qty	Amount	Qty	Amount	Qty	Amount	
1	2	3	4	5	6	7	8	9	10	11	12	13

Note:

1. If part rate is allowed for any items, it should be indicated with reasons for allowing such a rate. Net Value since previous bill.

2. If ad-hoc payment is made, it should be mentioned specifically.

MEMORANDUM FOR PAYMENT

**BILL OF M/S._ _ _ _

The bill amount to Rs. ---------- (both figures and words) has been scrutinized by us after due checking of the measurements of work as required and is recommended for payment.

Date:----------

Signature of Architects
with Seal

The bill amount to Rs.----------certified by Architects has been scrutinized by me after due test checking of measurements of works as required and is recommended for payment for an amount of Rs.....

Date : ----------

Signature of Banks/ SBIIMS Engineer

STATUTORY DEDUCTION:

i) Total Amount due (E)	Rs. ----------
ii) Less I.T. Payable	Rs. ----------
iii) Less S.T. Payable	Rs. ----------
iv) Net Payable	Rs. ----------

This figures given in the Memorandum for payable has been verified and bill passed for payment ---------- (in words and figures)

Date:----------

Signature of the Circle Head & VP

LIST OF APPROVED MAKES

S.NO.	ITEM	ACCEPTABLE MAKES
1.0	**MACHINES**	
1.1	Air Cooled Ductable Units	Blue Star, Voltas, LG, Daikin, Carrier or Hitachi
2.0	**DUCTING & ACCESORIES**	
2.1	G.I Sheets	Tata/HSL/SAIL
2.2	Aluminium Grilles, Diffusers, Linear Grilles	Ravi Star, Caryaire, Mapro, or equivalent
3.0	**INSULATION**	
3.1	Nitrile Rubber	Armaflex/K Flex/ or equivalent
3.2	Expanded Polystyrene (TF Quality)	Beardsell, Lloyd Insualation or equivalent
4.0	Hard PVC Pipes	Supreme / Prince / Dutron / Astral
5.0	**COPPER PIPING**	Mandev, Raj & co , Totaline
6.0	Flexible cable	Finolex / Universal / Polycab / RR Kabel / Polycab
7.0	Electric Cable	Finolex / Universal / Polycab / RR Kabel / Polycab

Note: ***Contractors has to submit samples as advised by the Architect / Bank and shall execute / use Article as approved by the Architect / Bank engineer.***

IS CODES PERTAINING TO AIR CONDITIONING WORKS

I.S. 3696 Safety code for scaffolds and ladders

I.S. 660 Safety Code for Mechanical Refrigeration

I.S. 659 Safety Code for air conditioning

I.S. 3016 Code of Practice for Fire precautions in welding and cutting operations

I.S. 818 Code of practice for safety and health requirements in electrical and gas welding and cutting operations.

I.S. 5216 Code for safety procedure and practice in electrical work.