

BID DOCUMENT

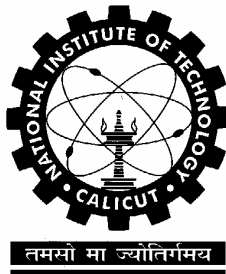
NATIONAL COMPETITIVE BIDDING *for* CIVIL WORKS

CONSTRUCTION OF COMPUTER CENTRE

Under

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME

Ref: Engg/TEQIP/NCB2/2005



NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

NIT CAMPUS (P.O), CALICUT – 673 601, KERALA

CONFIDENTIAL

NOT TRANSFERABLE

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NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

IDA CREDIT NO: 3718 CR-IN

NATIONAL COMPETITIVE BIDDING

(PROCUREMENT OF CIVIL WORKS)

NAME OF WORK CENTRE : CONSTRUCTION OF COMPUTER CENTRE

PERIOD OF SALE OF BIDDING DOCUMENT : FROM 01.02.2005 10.30 Hrs.
TO 02.03.2005 13.00 Hrs.

TIME AND DATE OF PRE-BID CONFERENCE : 22.02.2005 14.30 Hrs.

LAST DATE AND TIME FOR RECEIPT OF BIDS : 03.03.2005 14.30 Hrs.

TIME AND DATE OF OPENING OF BIDS : 03.03.2005 14.40 Hrs.

PLACE OF OPENING OF BIDS : OFFICE OF THE EXECUTIVE ENGINEER
ENGINEERING UNIT
NATIONAL INSTITUTE OF TECHNOLOGY CALICUT
NIT CAMPUS (P.O), CALICUT – 673 601

OFFICER INVITING BIDS : EXECUTIVE ENGINEER
FOR AND ON BEHALF OF
DIRECTOR,
NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

INVITATION FOR BID (IFB)

NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

NATIONAL COMPETITIVE BIDDING FOR CONSTRUCTION OF COMPUTER CENTRE UNDER TEQIP

INVITATION FOR BIDS

Date: 31.01.2005

IFB No.: Engg./TEQIP/NCB2/2005

1. The Government of India has received a credit from the International Development Association towards the cost of Technical Education Quality Improvement Programme[TEQIP], Government of India Project [3718 CR-IN]and intends a part of the funds to cover eligible payments under the contracts for construction of works as detailed below. Bidding is open to all bidders from eligible source countries as defined in the *IBRD Guidelines for Procurement*. Bidders from India should be Registered A Class Contractors registered with the Government of India or Government of Kerala/Central Public Works Department, Kerala State Public Works Department, or State/Central Government Undertakings. **Bidders are advised to note the minimum qualification criteria specified in Clause 4 of the Instructions to Bidders to qualify for the award of the contract.**
2. The Director, National Institute of Technology Calicut, invites bids for the construction of works detailed in the table below. The bidders may submit bid for the complete work.
3. A set of bidding documents [and additional copies] may be purchased from the office of the Executive Engineer, National Institute of Technology Calicut from 01.02.2005 10.30 Hrs. to 02.03.2005 13.00 Hrs., for a non-refundable fee cost per set as indicated, in the form of cash or Demand Draft on any scheduled bank payable at Calicut in favour of Director, National Institute of Technology Calicut. Interested bidders may obtain further information at the same address. Bidding documents requested by mail will be dispatched by post on payment of an extra amount of Rs.500/-. The NITC will not be held responsible for the postal delay if any, in the delivery of the documents or non-receipt of the same, whenever dispatched by post.
4. Bids must be accompanied by bid security of the amount specified for the work in the table below, drawn in favour of Director, National Institute of Technology Calicut. Bid security will have to be in any one of the forms as specified in the bidding document and shall have to be valid for 45 days beyond the validity of the bid.
5. The bids must be delivered to the Executive Engineer, National Institute of Technology Calicut on or before 14.30 hours on 03.03.2005 and will be opened on the same day at 14.40 hours, in the presence of the bidders who wish to attend. If the office happens to be closed on the date of receipt of the bids as specified, the bids will be received and opened on the next working day at the same time and venue.
6. A pre-bid meeting will be held on 22.02.2005 at 14.30 hrs. at the office of the Executive Engineer to clarify the issues and to answer questions on any matter that may be raised at that stage as stated in Clause 9.2 of 'Instructions to Bidders' of the bidding document.
7. Other details can be seen in the bidding documents.
8. Address for correspondence: **The Executive Engineer, Engineering Unit, National Institute of Technology Calicut, NIT Campus (P.O), Kozhikode, PIN – 673 601, Kerala, India.**
Fax: 0495 – 2287250

TABLE

Package No.	Name of work	Approximate value of work [Rs.]	Bid security [Rs.]	Cost per set of document [Rs.]	Period of completion
1	2	3	4	5	6
1	Construction of Computer Centre	Rs.102,00,000/-	Rs.2,04,000/-	Rs.3,300/-	14 months

Place: NIT Calicut
Date: 31.01.2005

For Director
Executive Engineer
NIT Calicut

Seal of office

PART - I

SECTION 1: INSTRUCTIONS TO BIDDERS **(ITB)**

Section 1: Instructions to Bidders

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A. General

1. Scope of Bid

- 1.1 The Director, National Institute of Technology Calicut (referred to as Employer in these documents) invites bids for the construction of works (as defined in these documents and referred to as "the works") detailed in the table given in IFB and as per the schedule given in Part II. The bidders may submit bids for the complete work as indicated in IFB, which is detailed in the schedule given in Part II. The drawings are given in part III.
- 1.2 The successful bidder will be expected to complete the works by the intended completion date specified in the Contract data and as indicated in the Table in the Invitation for Bids.

2. Source of Funds

- 2.1 The Government of India has received a credit from the International Development Association (hereinafter interchangeably called "the Bank") towards the cost of Technical Education Quality Improvement Programme[TEQIP], Government of India Project (Cr. No.3718-IN)and intends to apply a part of the funds to cover eligible payments under the contract for the Works. Payments by the Bank will be made only at the request of the borrower and upon approval of the Bank in accordance with the *Loan/Credit Agreement*, and will be subject in all respects to the terms and conditions of that Agreement. Except as the Bank may specifically otherwise agree, no party other than the borrower shall derive any rights from the *Loan/Credit Agreement* or have any rights to the loan/credit proceeds.
- 2.2 The loan agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by a decision of the United Nations Security Council, taken under Chapter VII of the Charter of the United Nations.

3. Eligible Bidders

- 3.1 This *Invitation for Bids* is open to all bidders from the eligible countries as defined under the *IBRD Guidelines for Procurement*. Any materials, equipment, and services to be used in the performance of the Contract shall have their origin in the eligible source countries.
- 3.2 All bidders shall provide in Section 2 (Forms of Bid and Qualification Information) a statement that the Bidder is not associated, nor has been associated in the past, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the TEQIP or being proposed as Project Manager for the Contract. A firm that has been engaged by the Borrower to provide consulting services for the preparation or supervision of the works, and any of its affiliates, shall not be eligible to bid.
- 3.3 Government-owned enterprises in India may only participate if they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the Employer.
- 3.4 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Bank in accordance with sub-clause 37.1.

4. Qualification of the Bidder

- 4.1 All bidders shall provide in Section 2 of Part I, the Qualification Information, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.
- 4.2 Deleted
- 4.3 If the Employer has not undertaken pre-qualification of potential bidders, all bidders shall include the following information and documents with their bids in Section 2:
 - (a) copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;

- (b) total monetary value of construction work performed for each of the last five years;
- (c) experience in works of a similar nature and size for each of the last five years, and details of works under way or contractually committed; and clients who may be contacted for further information on those contracts;
- (d) major items of construction equipment proposed to carry out the Contract;
- (e) qualifications and experience of key site management and technical personnel proposed for the Contract;
- (f) reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five years;
- (g) evidence of adequacy of working capital for this contract (access to line(s) of credit and availability of other financial resources);
- (h) authority to seek references from the Bidder's bankers;
- (i) information regarding any litigation or arbitration resulting from contracts executed by the Bidder in the last five years or currently under execution. The information shall include the names of the parties concerned, the disputed amount, cause of litigation, and matter in dispute;
- (j) proposals for subcontracting components of the Works which in aggregate add to more than 20 percent of the Bid Price (for each, the qualifications and experience of the identified sub-contractor in the relevant field should be annexed); and
- (k) the proposed methodology and program of construction including Environmental Management Plan, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.

4.4 *Joint Venture participation is not allowed.*

4.5 A. To qualify for award of the contract, each bidder in its name should have in the last five years i.e. FY 1999/2000- 2003/2004

- (a) achieved, in at least two financial years, a minimum annual financial turnover (in all classes of civil engineering construction works only) of Rs.175/- Lakhs
- (b) satisfactorily completed, as a prime contractor, at least **one similar work** of value not less than Rs.80/- Lakhs
- (c) executed in any one year, the following minimum quantities of work:

- Cement concrete (including RCC and PSC)	320 cum
- Earthwork in both excavation and embankment (combined quantities)	880 cum
- Reinforcement work	400 Qtl
- Random rubble masonry	195 cum
- Laterite masonry	110 cum
- M.S. Grill work	75 Qtl
- Marble flooring	510 m ²
- Flooring Ceramic tiles	520 m ²
- Dadoing with Ceramic tiles	230 m ²
- Aluminum Fabrication work	345 m ²
- (d) The contractor or his identified sub-contractor should possess required valid electrical license for executing the building electrification works and should have executed similar electrical works totalling Rupees 4.0/- Lakhs @ in any one year. (The name and details of Electrical Contractor may be given).

- (e) The contractor or his identified sub-contractor should possess required valid license for executing the water supply/sanitary engineering works and should have executed similar water supply/sanitary engineering works totalling Rupees 1.0 Lakh in any one year.

4.5 B. Each bidder should further demonstrate:

- (a) availability (either owned or leased or by procurement against mobilization advances) of the following key and critical equipment for this work:

- Concrete Mixer	-	2 Nos.
- Vibrator	-	2 No.
- Lift (with light)	-	1 No.
- Truck	-	1 No.
- Excavator	-	1 No.
- Jeep/Car/Pickup	-	2 No.
- Welding set	-	1 No.

Based on the studies, carried out by the Engineer the minimum suggested major equipment to attain the completion of works in accordance with the prescribed construction schedule are shown in the above list.

The bidders should, however, undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with layout and necessary drawings and calculations (detailed) as stated in clause 4.3 (k) above to allow the employer to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.

- (b) availability for this work of a Project Manager with no less than five years' experience in construction of similar civil engineering works and other key personnel with adequate experience as required; and
- (c) liquid assets and/or availability of credit facilities of no less than Rs.25 Lakhs
(Credit lines/letter of credit/certificates from Banks for meeting the funds requirement etc.)

4.5 C. To qualify for a package of contracts made up of this and other contracts for which bids are invited in the IFB, the bidder must demonstrate having experience and resources sufficient to meet the aggregate of the qualifying criteria for the individual contracts.

4.6 Sub-contractors' experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria except to the extent stated in 4.5 (A) above.

4.7 Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. The available bid capacity will be calculated as under:

$$\text{Assessed Available Bid capacity} = (A * N * 1.5 - B)$$

where

A = Maximum value of civil engineering works executed in any one year during the last five years (updated to _____* price level) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the works for which bids are invited.

B = Value, at _____* price level, of existing commitments and on-going works to be completed during the next 16 months.

Note: *The statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer in charge, not below the rank of an Executive Engineer or equivalent.*

4.8 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
- participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.

5. One Bid per Bidder

5.1 Each bidder shall submit only one bid for the work. A bidder who submits or participates in more than one Bid (other than as a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

6. Cost of Bidding

6.1 The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

7. Site visit

7.1 The Bidder, at the Bidder's own responsibility, and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

B. Bidding Documents

8. Content of Bidding Documents

8.1 The set of bidding documents comprises the documents listed in the table below and addenda issued in accordance with Clause 10:

Sl. No. 1 Invitation for Bids

Sl. No. 2 Part I of Bidding Document
Section

1	Instructions to Bidders	- Page 6
2	Qualification Information	- Page 19
3	Conditions of Contract	- Page 31
4	Contract Data	- Page 52
5	Specifications	- Page 60
6	Forms of Securities	- Page 60

Sl. No. 3 Part II of Bidding Document Bill of Quantities

Sl. No. 4 Part III of Bidding Document Drawings

8.2 Three sets of bidding documents will be supplied, and the two sets should be completed and returned with the bid (one original and one copy). Both sets should be identical in all respects containing the full signature of the authorized signatories.

9. Clarification of Bidding Documents

9.1 A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing, by post or by cable (hereinafter "cable" includes telex and facsimile) at the Employer's address indicated in the invitation to bid. The Employer will respond to any request for clarification which he received earlier than 15 days prior to the deadline for submission of bids. Copies of the Employer's

response will be forwarded to all purchasers of the bidding documents, including a description of the enquiry but without identifying its source.

9.2 Pre-bid meeting

- 9.2.1** The bidder or his official representative is invited to attend a pre-bid meeting on their cost which will take place at the office of the Executive Engineer, on 22.02.2004 at 14.30 Hrs.
- 9.2.2** The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 9.2.3** The bidder is requested to submit any questions in writing or by cable to reach the Employer not later than one week before the meeting.
- 9.2.4** Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted without delay to all purchasers of the bidding documents. Any modification of the bidding documents listed in Sub-Clause 8.1 which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 10 and not through the minutes of the pre-bid meeting.
- 9.2.5** Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

10. Amendment of Bidding Documents

- 10.1** Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda.
- 10.2** Any addendum thus issued shall be part of the bidding documents and shall be communicated in writing or by cable to all the purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum by post/cable to the Employer.
- 10.3** To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer shall extend as necessary the deadline for submission of bids, in accordance with Sub-Clause 20.2 below.

C. Preparation of Bids

11. Language of the Bid

- 11.1** All documents relating to the bid shall be in the English language.

12. Documents comprising the Bid

- 12.1** The bid submitted by the bidder shall comprise the following:

- (a) The Bid (in the format indicated in Section 2)
- (b) Bid Security;
- (c) Qualification Information Form and Documents;
- (d) Priced Bill of Quantities;

and any other materials required to be completed and submitted by bidders in accordance with these instructions. The documents listed under Sections 2, 4 and 7 of Sub-Clause 8.1 shall be filled in without exception.

- 12.2** Bidders bidding for this contract (together with other contracts stated in the IFB to form a package) will so indicate in the bid together with any discounts offered for any reason.

13. Bid Prices

13.1 The contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced Bill Quantities submitted by the Bidder, as per Part II.

13.2 The bidder shall fill in rates and prices and line item total (both in figures and words) for all items of the Works described in the **Bill of Quantities** (Part II) along with total bid price (both in figures and words). *Items for which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities.* Corrections, if any, shall be made by crossing out, initialing, dating and rewriting, and all such corrections must be legible and unambiguous.

13.3 All duties, taxes, and other levies payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.

Note: *"Bidders may like to ascertain availability of excise/custom duty exemption benefits available in India to the contracts financed under World Bank loan/credits. They are solely responsible for obtaining such benefits which they have considered in their bid and in case of failure to receive such benefits for reasons whatsoever, the employer will not compensate the bidder (contractor). Where the bidder has quoted taking into account such benefits, he must give all information required for issue of certificates in terms of such notifications as per form attached to the Qualification Information in the bid. To the extent the employer determines the quantity indicated therein are reasonable keeping in view the bill of quantities, construction programme and methodology, the certificates will be issued and no subsequent changes will be permitted. No certificate will be issued for items where no quantity/capacity of equipment is indicated in the statement. The bids which do not conform to the above provisions will be treated as non responsive and rejected. Any delay in procurement of the construction equipment /machinery/goods as a result of the above shall not be a cause for granting any extension of time."*

13.4 The rates and prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.

14. Currencies of Bid and Payment

14.1 The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees.

15. Bid Validity

15.1 Bids shall remain valid for a period not less than 120 days after the deadline date for bid submission specified in Clause 20. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.

15.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid except as provided in 15.3 hereinafter, but will be required to extend the validity of his bid security for a period of the extension, and in compliance with Clause 16 in all respects.

15.3 In the case of contracts in which the Contract Price is fixed (not subject to price adjustment), in the event that the purchaser requests and the Bidder agrees to an extension of the validity period, the contract price, if the Bidder is selected for award shall be the bid price corrected as follows :
The price shall be increased by the factor (value of factor B)¹ for each week or part of a week that has elapsed from the expiration of the initial bid validity to the date of issue of letter of acceptance to the successful Bidder.

15.4 Bid evaluation will be based on the bid prices without taking into consideration the above correction.

16. Bid Security

16.1 The Bidder shall furnish, as part of his Bid, a Bid security in the amount as shown in column 4 of the table of IFB for this particular work. This bid security shall be in favour of the Director, National Institute of Technology Calicut and may be in one of the following forms:

- a bank guarantee issued by a nationalized / scheduled bank located in India or a reputable bank located abroad in the form given in Section 8; or
 - Certified cheque, Bank draft or Letter of Credit in favour of Director, National Institute of Technology Calicut payable at State Bank of India, CREC Branch (Code 2207).
- 16.2** Bank guarantees issued as surety for the bid shall be valid for 45 days beyond the validity of the bid.
- 16.3** Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub-Clauses 16.1 and 16.2 above shall be rejected by the Employer as non-responsive.
- 16.4** The Bid Security of unsuccessful bidders will be returned within 28 days of the end of the bid validity period specified in Sub-Clause 15.1. No interest shall be paid, for Bid security paid under any circumstances.
- 16.5** The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.
- 16.6** The Bid Security may be forfeited:
- (a) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity;
 - (b) if the Bidder does not accept the correction of the Bid Price, pursuant to Clause 27; or
 - (c) in the case of a successful Bidder, if the Bidder fails within the specified time limit to
 - (i) sign the Agreement; or
 - (ii) furnish the required Performance Security.
- 17. Alternative Proposals by Bidders**
- 17.1** Bidders shall submit offers that comply with the requirements of the bidding documents, including the basic technical design as indicated in the drawing and specifications. Alternatives will not be considered.
- 18. Format and Signing of Bid**
- 18.1** The Bidder shall prepare one original and one copy of the documents comprising the bid as described in Clause 12 of these *Instructions to Bidders*, bound with the volume containing the Form of Bid, and clearly marked "**ORIGINAL**" and "**COPY**" as appropriate. In the event of discrepancy between them, the original shall prevail.
- 18.2** The ORIGINAL and COPY of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder, pursuant to Sub-Clauses 4.3. All pages of the bid where entries or amendments have been made shall be initialed by the person or persons signing the bid.
- 18.3** The Bid shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.
- 18.4** The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

D. Submission of Bids

19. Sealing and Marking of Bids

19.1 The Bidder shall seal the original and copy of the Bid in separate envelopes, duly marking the envelopes as "**ORIGINAL**" and "**COPY**". These envelopes (called as inner envelopes) shall then be put inside one outer envelope.

19.2 The **inner and outer** envelopes shall be addressed to

(a) The Executive Engineer
Engineering Unit
National Institute of Technology Calicut
NIT Campus (P.O), Kozhikode – 673 601, Kerala, Fax: 0495 – 2287250

(b) bear the following identification:

- Bid for[name of contract]
- Bid Reference No.....[insert number]
- DO NOT OPEN BEFORE.....[time and date for bid opening, per Clause 23]

19.3 In addition to the identification required in Sub-Clause 19.2, the inner envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared late, pursuant to Clause 21.

19.4 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the bid.

20. Deadline for Submission of the Bids

20.1 Bids must be received by the Employer at the address specified in Clause 19 not later than 03.03.2005 14.30 Hrs. In the event of the specified date for the submission of bids declared a holiday for the Employer, the Bids will be received up to the appointed time on the next working day. No amendments will be issued in this regard.

20.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

21. Late Bids

21.1 Any Bid received by the Employer after the deadline prescribed in Clause 20 will be returned unopened to the bidder.

22. Modification and Withdrawal of Bids

22.1 Bidders may modify or withdraw their bids by giving notice in writing before the deadline prescribed in Clause 20.

22.2 Each Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 18 & 19, with the outer and inner envelopes additionally marked "**MODIFICATION**" or "**WITHDRAWAL**", as appropriate.

22.3 No bid may be modified after the deadline for submission of Bids.

22.4 Withdrawal or modification of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity specified in Clause 15.1 above or as extended pursuant to Clause 15.2 may result in the forfeiture of the Bid security pursuant to Clause 16.

- 22.5 Bidders may only offer discounts to, or otherwise modify the prices of their Bids by submitting Bid modifications in accordance with this clause, or included in the original Bid submission.

E. Bid Opening and Evaluation

23. Bid Opening

- 23.1 The Employer will open all the Bids received (except those received late), including modifications made pursuant to Clause 22, in the presence of the Bidders or their representatives who choose to attend at 14.40 hours on the date and the place specified in Clause 20. In the event of the specified date of Bid opening being declared a holiday for the Employer, the Bids will be opened at the appointed time and location on the next working day.
- 23.2 Envelopes marked "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause 22 shall not be opened. Subsequently all envelopes marked "Modification" shall be opened and the submissions therein read out in appropriate detail.
- 23.3 The Bidders' names, the Bid prices, the total amount of each Bid and of any alternative Bid (if alternatives have been requested or permitted), any discounts, Bid modifications and withdrawals, the presence or absence of Bid security, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening. No bid shall be rejected at bid opening except for the late bids pursuant to Clause 21. Bids [and modifications] sent pursuant to Clause 22 that are not opened and read out at bid opening will not be considered for further evaluation regardless of the circumstances. Late and withdrawn bids will be returned un-opened to bidders.
- 23.4 The Employer shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Sub-Clause 23.3.

24. Process to Be Confidential

- 24.1 Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

25. Clarification of Bids

- 25.1 To assist in the examination, evaluation, and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of the unit rates. The request for clarification and the response shall be in writing or by facsimile, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 27.
- 25.2 Subject to sub-clause 25.1, no Bidder shall contact the Employer on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.
- 25.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

26. Examination of Bids and Determination of Responsiveness

- 26.1 Prior to the detailed evaluation of Bids, the Employer will determine whether each Bid (a) meets the eligibility criteria defined in Clause 3; (b) has been properly signed; (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Bidding documents, pursuant to Clause 4.

- 26.2** A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.
- 26.3** If a Bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.
- 27. Correction of Errors**
- 27.1** Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:
- (a) where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and
 - (b) where there is a discrepancy between the unit and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
- 27.2** The amount stated in the Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security may be forfeited in accordance with Sub-Clause 16.6 (b).
- 28. Deleted**
- 29. Evaluation and Comparison of Bids**
- 29.1** The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause 26.
- 29.2** In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
- (a) making any correction for errors pursuant to Clause 27; or
 - (b) making an appropriate adjustments for any other acceptable variations, deviations; and
 - (c) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub Clause 22.5.
- 29.3** The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.
- 29.4** The estimated effect of the price adjustment conditions under Clause 47 of the *Conditions of Contract*, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.
- 29.5** If the Bid of the successful Bidder is seriously unbalanced in relation to the Employer's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause 34 be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

30. Deleted

F. Award of Contract

31. Award Criteria

31.1 Subject to Clause 32, the Employer will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid Price, provided that such Bidder has been determined to be (a) eligible in accordance with the provisions of Clause 3, and (b) qualified in accordance with the provisions of Clause 4.

31.2 If, pursuant to Clause 12.2 this contract is being let on a "slice and package" basis, the lowest evaluated Bid Price will be determined when evaluating this contract in conjunction with other contracts to be awarded concurrently, taking into account any discounts offered by the bidders for the award of more than one contract.

32. Employer's Right to Accept any Bid and to Reject any or all Bids

32.1 Notwithstanding Clause 31 or any other Clause in this document, the Employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

33. Notification of Award and Signing of Agreement

33.1 The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the *Conditions of Contract* called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").

33.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 34.

33.3 The Agreement will incorporate all agreements between the Employer and the successful Bidder. It will be kept ready for signature of the successful bidder in the office of employer within 28 days following the notification of award along with the Letter of Acceptance. Within 21 days of receipt, the successful Bidder will sign the Agreement and deliver it to the Employer who will sign it there upon.

33.4 Upon the furnishing by the successful Bidder of the Performance Security pursuant to Clause 34, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful.

34. Performance Security

34.1 Within 21 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 5% of the Contract price plus additional security for unbalanced Bids in accordance with Clause 29.5 of ITB and Clause 52 of Conditions of Contract:

- a bank guarantee in the form given in Section 8; or
- Certified Cheque/Bank draft, in favour of Director, National Institute of Technology Calicut payable at Calicut.

34.2 If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued either (a) at the Bidder's option, by a Nationalized/Scheduled Indian bank or (b) by a foreign bank located in India and acceptable to the Employer .

34.3 Failure of the successful bidder to comply with the requirements of sub-clause 34.1 shall constitute a breach of contract, cause for annulment of the award, forfeiture of the bid security, and any such other

remedy the Employer may take under the contract, and the Employer may resort to awarding the contract to the next ranked bidder.

35 Advance Payment and Security

35.1 The Employer may provide a Secured Advance Payment upto 11% of the Contract Price as stipulated in the Conditions of Contract.

36. Adjudicator

36.1 The Employer proposes that the Adjudicator be the Chairman, Institution of Engineers, Calicut Local Chapter or a person nominated by him, at a daily fee of Rs.1,000/- plus reimbursable expenses of TA/DA and contingency.

37. Corrupt or Fraudulent Practices

37.1 The Bank requires that Borrowers (including beneficiaries of Bank loans), as well as Bidders/Suppliers/Contractors under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Bank :

- (a) defines, for the purposes of this provision, the terms set forth below as follows :
 - (i) “corrupt practice” means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
 - (ii) “fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
 - (iii) “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of the borrower, designed to establish bid prices at artificial, non competitive levels; and
 - (iv) “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question;
- (c) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive or coercive practices during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to remedy the situation;
- (d) will sanction a firm or individual, including declaring them ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at anytime determines that they have, directly or through an agent, engaged, in corrupt, fraudulent, collusive or coercive practices in competing for, or in executing, a Bank-financed contract; and
- (e) will have the right to require that a provision be included in Bidding Documents and in contracts financed by a Bank loan, requiring Bidders, Suppliers, Contractors and Consultants to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.

37.2 Furthermore, Bidders shall be aware of the provision stated in sub-clause 59.2 of the Conditions of Contract.

SECTION 2: FORMS OF BID, QUALIFICATION INFORMATION AND LETTER OF ACCEPTANCE

PART – I OF THE BIDDING DOCUMENT

Table of Forms:

- **CONTRACTOR’S BID**
- **QUALIFICATION INFORMATION**
- **LETTER OF ACCEPTANCE**
- **NOTICE TO PROCEED WITH THE WORK**
- **AGREEMENT FORM**

Contractor's Bid

Description of the Works: **Construction of Computer Centre**

BID

To : The Director

Address : National Institute of Technology Calicut

GENTLEMEN,

Having examined the bidding documents including addendum, we offer to execute the Works described above in accordance with the Conditions of Contract, Specifications, Drawings and Bill of Quantities accompanying this Bid for the Contract Price of _____ [in figures] (_____) [in letters].¹

We accept the appointment of _____ as the Adjudicator.

(OR)

We do not accept the appointment of _____ as the Adjudicator and propose instead that _____ be appointed as Adjudicator whose daily fees and biographical data are attached.

This Bid and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any Bid you receive.

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below :

<u>Name and address of agent</u>	<u>Amount</u>	<u>Purpose of Commission or gratuity</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

(if none, state "none")

We hereby confirm that this Bid complies with the Bid Validity and Bid Security required by the Bidding documents.

We attach herewith our current income-tax clearance certificate.

Yours faithfully,

Authorized Signature:

¹ To be filled in by the Bidder, together with his particulars and date of submission at the bottom of the Form of Bid.

Name & Title of Signatory: _____

Name of Bidder : _____

Address : _____

Format for Qualification Information

The information to be filled in by the Bidder in the following pages will be used for purposes of post qualification as provided for in Clause 4 of the Instructions to Bidders. This information will not be incorporated in the Contract.

1. For Individual Bidders

1.1 Constitution or legal status of Bidder
[Attach copy]

Place of registration: _____

Principal place of business: _____

Power of attorney of signatory of Bid
[Attach]

1.2 Total value of Civil Engineering construction 1999-2000# _____ β
work executed and payments received in the last five years** 2000-2001 _____
(in Rs. Million) 2001-2002 _____
2002-2003 _____
2003-2004 _____

Please write the actual year in which the payments were received for the work in the last five years

1.3.1 Work performed as prime contractor (in the same name) on works of a similar nature over the last five years. **

<u>Project Name</u>	<u>Name of the Employer*</u>	<u>Description of work</u>	<u>Contract No.</u>	<u>Value of contract (Rs. Million)</u>	<u>Date of issue of work order</u>	<u>Stipulated period of completion</u>	<u>Actual date of completion*</u>	<u>Remarks explaining reasons for delay and work completed</u>
---------------------	------------------------------	----------------------------	---------------------	--	------------------------------------	--	-----------------------------------	--

1.3.2 Quantities of work executed as prime contractor (in the same name and style) in the last five years: **

<u>Year</u>	<u>Name of the Work</u>	<u>Name of the Employer*</u>	<u>Quantity of work performed (cum) @</u>			<u>Remarks * (indicate contract Ref)</u>
			<u>Cement concrete (including RCC&PCC)</u>	<u>Masonry</u>	<u>E/works</u>	
1999-2000						
2000-2001						
2001-2002						
2002-2003						
2003-2004						

* *Attach certificate(s) from the Engineer(s)-in-Charge*

@ *The item of work for which data is requested should tally with that specified in ITB clause 4.5A(c).*

** *immediately preceding the financial year in which bids are received.*

β *Attach certificate from Chartered Accountant.*

1.4 Information on Bid Capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.

(A) Existing commitments and on-going works:

Description of Work	Place & State	Contract No. & Date	Name and Address of Employer	Value of Contract (Rs. million)	Stipulated period of completion	Value of works* remaining to be completed (Rs. million)	Anticipated date of completion
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

(B) Works for which bids already submitted:

Description of Work	Place & State	Name and Address of Employer	Estimated value of works (Rs. million)	Stipulated period of completion	Date when decision is expected	Remarks if any
(1)	(2)	(3)	(4)	(5)	(6)	(7)

* *Attach certificate(s) from the Engineer(s)-in-Charge.*

1.5 The following items of Contractor's Equipment are essential for carrying out the Works. The Bidder should list all the information requested below. Refer also to Sub Clause 4.3 (d) of the Instructions to Bidders.

<u>Item of equipment</u>	<u>Requirement</u>		<u>Availability proposals</u>			<u>Remarks (From whom to be purchased)</u>
	<u>No.</u>	<u>Capacity</u>	<u>Owned/leased/ to be procured</u>	<u>Nos/ capacity</u>	<u>Age/ condition</u>	
*	*	*	*	*	*	*
*	*	*	*	*	*	*

- 1.6 Qualifications and experience of key personnel proposed for administration and execution of the Contract. Attach biographical data. Refer also to Sub Clause 4.3 (e) and 4.5 (B) (b) of instructions to Bidders and Sub Clause 9.1 of the Conditions of Contract.

<u>Position</u>	<u>Name</u>	<u>Qualifications</u>	<u>Years of experience (general)</u>	<u>Years of experience in the proposed position</u>
Project Manager	*	*	*	*
*	*	*	*	*
*	*	*	*	*
*	*	*	*	*
etc.				

- 1.7 Proposed subcontracts and firms involved. [Refer ITB Clause 4.3 (j)]

<u>Sections of the works</u>	<u>Value of Sub-contract</u>	<u>Sub-contractor (name and address)</u>	<u>Experience in similar work</u>
*	*	*	*
*	*	*	*
*	*	*	*
	*	*	

- 1.8 Financial reports for the last five years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporation), etc. List them below and attach copies.
- 1.9 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List them below and attach copies of support documents *[sample format attached]*.
- 1.10 Name, address, and telephone, telex, and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.
- 1.11 Information on litigation history in which the Bidder is involved.

<u>Other party(ies)</u>	<u>Employer</u>	<u>Cause of dispute</u>	<u>Amount involved</u>	<u>Remarks showing Present status</u>

1.12 Statement of compliance under the requirements of Sub Clause 3.2 of the instructions to Bidders.

1.13 Proposed work method and schedule. The Bidder should attach descriptions, drawings and charts as necessary to comply with the requirements of the Bidding documents. [Refer ITB Clause 4.1 and 4.3 (k)].

2. Joint Ventures - Deleted

3. Additional Requirements

3.1 Bidders should provide any additional information required to fulfill the requirements of Clause 4 of the Instructions to the Bidders, if applicable.

**SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT
FACILITIES –* CLAUSE 4.5 [B] [c] OF ITB**

BANK CERTIFICATE

This is to certify that M/s. is a reputed company with a good financial standing.

If the contract for the work, namely [funded by the World Bank] is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs. to meet their working capital requirements for executing the above contract.

__ Sd. __

Name of Bank

Senior Bank Manager

Address of the Bank

(Name of the Project)

(Declaration regarding customs/excise duty exemption for materials/
construction equipment bought for the work)

(Bidder's Name and Address)

To
The Director
National Institute of Technology

Calicut

Dear Sir:

Re: *[Name of Work]* -
Certificate for Import/Procurement of Goods/Construction Equipment

1. We confirm that we are solely responsible for obtaining customs/excise duty waivers which we have considered in our bid and in case of failure to receive such waivers for reasons whatsoever, the Employer will not compensate us.
2. We are furnishing below the information required by the Employer for issue of the necessary certificates in terms of the Government of India Central Excise Notification No. 108/95 and Customs Notification No. 85/99.
3. The goods/construction equipment for which certificates are required are as under:

Items	Make/ Brand Name	Capacity [where applicable]	Quantity	Value	State whether it will be procured locally or imported [if so from which country]	Remarks regarding justification for the quantity and their usage in works
Goods						
[a] Bitumen						
[b] Others						
Construction Equipment						
[a]						
[b]						
[c]						
[d]						

4. We agree that the certificate will be issued only to the extent considered reasonable by the Employer for the work, based on the Bill of Quantities of Part II and the construction programme and methodology as furnished by us along with the bid.
5. We agree that no modification to the above list are permitted after bids are opened.
6. We confirm that the above goods will be exclusively used for the construction of the above work and construction equipment will not be sold or otherwise disposed of in any manner for a period of five years from the date of acquisition.

Date: _____

Place: _____

(Signature) _____

(Printed Name) _____

(Designation) _____

(Common Seal) _____

Letter of Acceptance
(letterhead paper of the Employer)

_____ [date]

To: _____ [name and
address of the Contractor]

Dear Sirs,

This is to notify you that your Bid dated _____ for execution of the _____ [name of the contract and identification number, as given in the Instructions to Bidders] for the Contract Price of Rupees _____ (_____) [amount in words and figures], as corrected and modified in accordance with the Instructions to Bidders¹ is hereby accepted by our Agency.

We accept/do not accept that _____ be appointed as the Adjudicator².

We note that as per bid, you do not intend to subcontract any component of work.

[OR]

We note that as per bid, you propose to employ M/s. as sub-contractor for executing

[Delete whichever is not applicable]

You are hereby requested to furnish Performance Security, plus additional security for unbalanced bids in terms of ITB clause 29.5, in the form detailed in Para 34.1 of ITB for an amount of Rs. _____ within 21 days of the receipt of this letter of acceptance valid up to 28 days from the date of expiry of Defects Liability Period i.e. up to and sign the contract, failing which action as stated in Para 34.3 of ITB will be taken.

We have reviewed the construction methodology submitted by you along with the bid in response to ITB Clause 4.3[k] and our comments are given in the attachment. You are requested to submit a revised Program including environmental management plan as per Clause 27 of General Conditions of Contract within 14 days of receipt of this letter.

Yours faithfully,

Authorized Signature

Name and Title of Signatory

Name of Agency

¹ Delete "corrected and" or "and modified" if only one of these actions applies. Delete "as corrected and modified in accordance with the Instructions to Bidders" if corrections or modifications have not been effected.

² To be used only if the Contractor disagrees in his Bid with the Adjudicator proposed by the Employer in the "Instructions to Bidders."

Issue of Notice to proceed with the work

(letterhead of the Employer)

_____ (date)

To

_____ (name and address of the Contractor)

Dear Sirs:

Pursuant to your furnishing the requisite security as stipulated in ITB clause 34.1 and signing of the contract agreement for the construction of _____ @ a Bid Price of Rs. _____, you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

(Signature, name and title
of signatory authorized to
sign on behalf of
Employer)

Agreement Form

(For Firms in India this is to be made on Government of India/Government of Kerala Stamp Paper worth Rs.50/-)

(To be supplied by the Employer)

Agreement

This agreement, made the _____ day of _____ 20_____, between The Director, National Institute of Technology Calicut (hereinafter called “the Employer”) of the one part and

_____ [name and address of contractor] (hereinafter called “the Contractor”) of the other part.

Whereas the Employer is desirous that the Contractor execute _____

_____ [name and identification number of Contract] (hereinafter called “the Works”) and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a contract price of Rs.....

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - i) Letter of Acceptance;
 - ii) Notice to proceed with the works;
 - iii) Contractor’s Bid;
 - iv) Contract Data;
 - v) Conditions of contract (including Special Conditions of Contract);
 - vi) Specifications;
 - vii) Drawings;
 - viii) Bill of Quantities; and
 - ix) Any other document listed in the Contract Data as forming part of the contract.

In witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of _____

was hereunto affixed in the presence of:

Signed, Sealed and Delivered by the said _____

in the presence of:

Binding Signature of Employer _____

Binding Signature of Contractor _____

SECTION 3: CONDITIONS OF CONTRACT

Conditions of Contract

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Conditions of Contract

A. General

1. Definitions

- 1.1** Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

The **Adjudicator** is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in Clauses 24 and 25. The name of the Adjudicator is defined in the Contract Data.

Bill of Quantities means the priced and completed **Bill of Quantities** forming part of the Bid.

Compensation Events are those defined in Clause 44 hereunder.

The **Completion Date** is the date of completion of the Works as certified by the Engineer in accordance with Sub Clause 55.1.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.3 below.

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body whose Bid to carry out the Works has been accepted by the Employer.

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer.

The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; **months** are calendar months.

A **Defect** is any part of the Works not completed in accordance with the Contract.

The **Defects Liability Period** is the period named in the Contract Data and calculated from the Completion Date.

The **Employer** is the party who will employ the Contractor to carry out the Works.

The **Engineer** is the person named in the Contract Data (or any other competent person appointed and notified to the contractor to act in replacement of the Engineer) who is responsible for supervising the execution of the works and administering the Contract.

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Engineer by issuing an extension of time.

Materials are all supplies, including consumables, used by the contractor for incorporation in the Works.

Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

Site Investigation Reports are those which were included in the Bidding documents and are factual interpretative reports about the surface and sub-surface conditions at the site.

Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Engineer.

The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.

Temporary Works are works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.

A **Variation** is an instruction given by the Engineer which varies the Works.

The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data.

2. Interpretation

- 2.1** In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about the Conditions of Contract.
- 2.2** If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works).
- 2.3** The documents forming the Contract shall be interpreted in the following order of priority:
- (1) Agreement
 - (2) Letter of Acceptance, notice to proceed with the works
 - (3) Contractor's Bid
 - (4) Contract Data

- (5) Conditions of Contract including Special Conditions of Contract
- (6) Specifications
- (7) Drawings
- (8) **Bill of Quantities** and
- (9) any other document listed in the Contract Data as forming part of the Contract.

3. Language and Law

3.1 The language of the Contract and the law governing the Contract are stated in the Contract Data.

4. Engineer's Decisions

4.1 Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

5. Delegation

5.1 The Engineer may delegate any of his duties and responsibilities to other people except to the Adjudicator after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

6.1 Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

7. Subcontracting

7.1 The Contractor may subcontract with the approval of the Engineer but may not assign the Contract without the approval of the Employer in writing. Subcontracting does not alter the Contractor's obligations.

8. Other Contractors

8.1 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors. The Contractor shall as referred to in the Contract Data, also provide facilities and services for them as described in the Schedule. The employer may modify the schedule of other contractors and shall notify the contractor of any such modification.

9. Personnel

9.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Contract Data to carry out the functions stated in the Schedule or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.

9.2 If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's Risks

- 10.1** The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

- 11.1** The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Contractor's employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

12. Contractor's Risks

- 12.1** All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Contractor.

13. Insurance

- 13.1** The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:

- (a) loss of or damage to the Works, Plant and Materials;
- (b) loss of or damage to Equipment;
- (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
- (d) personal injury or death.

- 13.2** Policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

- 13.3** If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

- 13.4** Alterations to the terms of an insurance shall not be made without the approval of the Engineer.

- 13.5** Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports

- 14.1** The Contractor, in preparing the Bid, shall rely on any site Investigation Reports referred to in the Contract Data, supplemented by any information available to the Bidder.

15. Queries about the Contract Data

- 15.1** The Engineer will clarify queries on the Contract Data.

16. Contractor to Construct the Works

16.1 The Contractor shall construct and install the Works in accordance with the Specification and Drawings, and as per instructions of Engineer.

17. The Works to Be Completed by the Intended Completion Date

17.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

18. Approval by the Engineer

18.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for design of Temporary Works.

18.3 The Engineer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

19. Safety

19.1 The Contractor shall be responsible for the safety of all activities on the Site and the reduction of the environmental impact.

20. Discoveries

20.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

21. Possession of the Site

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

22. Access to the Site

22.1 The Contractor shall allow the Engineer and any person authorized by the Engineer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

23. Instructions

23.1 The Contractor shall carry out all instructions of the Engineer which comply with the applicable laws where the Site is located.

23.2 The Contractor shall permit the World Bank to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Bank, if so required by the Bank.

24. Disputes

- 24.1** If the Contractor believes that a decision taken by the Engineer was either outside the authority given to the Engineer by the Contract or that the decision was wrongly taken, the decision shall be referred to the Adjudicator within 14 days of the notification of the Engineer's decision.

25. Procedure for Disputes

- 25.1** The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
- 25.2** The Adjudicator shall be paid daily at the rate specified in the Contract Data together with reimbursable expenses of the types specified in the Contract Data and the cost shall be divided equally between the Employer and the Contractor, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision will be final and binding.
- 25.3** The arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

26. Replacement of Adjudicator

- 26.1** Should the Adjudicator resign or die, or should the Employer and the Contractor agree that the Adjudicator is not fulfilling his functions in accordance with the provisions of the Contract, a new Adjudicator will be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the Contract Data at the request of either party, within 14 days of receipt of such request.

B. Time Control

27. Program

- 27.1** Within the time stated in the Contract Data the Contractor shall submit to the Engineer for approval a Program including Environmental Management Plan showing the general methods, arrangements, order, and timing for all the activities in the Works along with monthly cash flow forecast.
- 27.2** An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- 27.3** The Contractor shall submit to the Engineer, for approval, an updated Program at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Program within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted.
- 27.4** The Engineer's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Engineer again at any time. A revised Program is to show the effect of Variations and Compensation Events.

28. Extension of the Intended Completion Date

- 28.1** The Engineer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost.

28.2 The Engineer shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Engineer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

29. Deleted

30. Delays Ordered by the Engineer

30.1 The Engineer may instruct the Contractor to delay the start or progress of any activity within the Works.

31. Management Meetings

31.1 Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

31.2 The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

32. Early Warning

32.1 The Contractor is to warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of works. The Engineer may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.

32.2 The Contractor shall cooperate with the Engineer in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Engineer.

C. Quality Control

33. Identifying Defects

33.1 The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.

33.2 The contractor shall permit the Employer's Technical auditor to check the contractor's work and notify the Engineer and Contractor of any defects that are found. Such a check shall not affect the Contractor's or the Engineer's responsibility as defined in the Contract Agreement.

34. Tests

34.1 If the Engineer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

35. Correction of Defects

- 35.1** The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 35.2** Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Engineer's notice.

36. Uncorrected Defects

- 36.1** If the Contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

D. Cost Control

37. Bill of Quantities

- 37.1** The Bill of Quantities shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.
- 37.2** The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

38. Changes in the Quantities

- 38.1** If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1% of Initial Contract Price, the Engineer shall adjust the rate to allow for the change.
- 38.2** The Engineer shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the Prior approval of the Employer.
- 38.3** If requested by the Engineer, the Contractor shall provide the Engineer with a detailed cost breakdown of any rate in the Bill of Quantities.

39. Variations

- 39.1** All Variations shall be included in updated Programs produced by the Contractor.

40. Payments for Variations

- 40.1** The Contractor shall provide the Engineer with a quotation (with breakdown of unit rates) for carrying out the Variation when requested to do so by the Engineer. The Engineer shall assess the quotation, which shall be given within seven days of the request or within any longer period stated by the Engineer and before the Variation is ordered.
- 40.2** If the work in the Variation corresponds with an item description in the Bill of Quantities and if, in the opinion of the Engineer, the quantity of work above the limit stated in Sub Clause 38.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in form of new rates for the relevant items of work.
- 40.3** If the Contractor's quotation is unreasonable (or if the contractor fails to provide the Engineer with a quotation within a reasonable time specified by the engineer in accordance with Clause 40.1), the Engineer may order the Variation and make a change to the Contract Price which shall be based on Engineer's own forecast of the effects of the Variation on the Contractor's costs.

40.4 If the Engineer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

40.5 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning.

41. Cash flow forecasts

41.1 When the Program is updated, the Contractor is to provide the Engineer with an updated cash flow forecast.

42. Payment Certificates

42.1 The Contractor shall submit to the Engineer monthly statements of the estimated value of the work completed less the cumulative amount certified previously.

42.2 The Engineer shall check the Contractor's monthly statement and within 14 days certify the amount to be paid to the Contractor after taking into account any credit or debit for the month in question in respect of materials for the works in the relevant amounts and under conditions set forth in sub-clause 51(3) of the Contract Data (Secured Advance).

42.3 The value of work executed shall be determined by the Engineer.

42.4 The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed..

42.5 The value of work executed shall include the valuation of Variations and Compensation Events.

42.6 The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

43. Payments

43.1 Payments shall be adjusted for deductions for advance payments, retention, other recoveries in terms of the contract and taxes, at source, as applicable under the law. The Employer shall pay the Contractor the amounts certified by the Engineer within 28 days of the date of each certificate. If the Employer makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made upto the date when the late payment is made at 12% per annum.

43.2 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.

43.3 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

44. Compensation Events

44.1 The following are Compensation Events unless they are caused by the Contractor:

- (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
- (b) The Employer modifies the schedule of other contractors in a way which affects the work of the contractor under the contract.
- (c) The Engineer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.

- (d) The Engineer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
- (e) The Engineer unreasonably does not approve for a subcontract to be let.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of Letter of Acceptance from the information issued to Bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- (g) The Engineer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (j) The effect on the Contractor of any of the Employer's Risks.
- (k) The Engineer unreasonably delays issuing a Certificate of Completion.
- (l) Other Compensation Events listed in the Contract Data or mentioned in the Contract.

44.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Engineer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

44.3 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Engineer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Engineer shall adjust the Contract Price based on Engineer's own forecast. The Engineer will assume that the Contractor will react competently and promptly to the event.

44.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Engineer.

45. Tax

45.1 The rates quoted by the Contractor shall be deemed to be inclusive of the sales and other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

46. Currencies

46.1 All payments shall be made in Indian Rupees.

47. Price Adjustment

47.1 Deleted

47.2 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

48. Retention

48.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the Contract Data until Completion of the whole of the Works.

- 48.2** On Completion of the whole of the Works half the total amount retained is repaid to the Contractor and half when the Defects Liability Period has passed and the Engineer has certified that all Defects notified by the Engineer to the Contractor before the end of this period have been corrected.
- 48.3** On completion of the whole works, the contractor may substitute retention money with an “on demand” Bank guarantee.

49. Liquidated Damages

- 49.1** The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the contract data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.
- 49.2** If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the over payment calculated from the date of payment to the date of repayment at the rates specified in Sub Clause 43.1.

50. Deleted

51. Advance Payment

- 51.1** The Employer shall make advance payment to the Contractor of the amounts stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Employer in amounts and currencies equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest will not be charged on the advance payment.
- 51.2** The Contractor is to use the advance payment only to pay for Equipment, Plant and Mobilization expenses required specifically for execution of the Works. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Engineer.
- 51.3** The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance (mobilization and equipment only) payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, or Liquidated Damages.

51.4 Secured Advance:

The Engineer shall make advance payment in respect of materials intended for but not yet incorporated in the Works in accordance with conditions stipulated in the Contract Data.

52. Securities

- 52.1** The Performance Security (including additional security for unbalanced bids) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until a date 28 days from the date of expiry of Defects Liability Period and the additional security for unbalanced bids shall be valid until a date 28 days from the date of issue of the certificate of completion.

53. Deleted

54. Cost of Repairs

- 54.1** Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

55. Completion

- 55.1** The Contractor shall request the Engineer to issue a Certificate of Completion of the Works and the Engineer will do so upon deciding that the Work is completed.

56. Taking Over

- 56.1** The Employer shall take over the Site and the Works within seven days of the Engineer issuing a certificate of Completion.

57. Final Account

- 57.1** The Contractor shall supply to the Engineer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Engineer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Engineer shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Engineer shall decide on the amount payable to the Contractor and issue a payment certificate, within 56 days of receiving the Contractor's revised account.

58. Operating and Maintenance Manuals

- 58.1** If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.
- 58.2** If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Engineer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

59. Termination

- 59.1** The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 59.2** Fundamental breaches of Contract include, but shall not be limited to the following:
- (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current program and the stoppage has not been authorized by the Engineer;
 - (b) the Engineer instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 28 days;
 - (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (d) a payment certified by the Engineer is not paid by the Employer to the Contractor within 56 days of the date of the Engineer's certificate;

- (e) the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
- (f) the Contractor does not maintain a security which is required;
- (g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
- (h) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.

For the purpose of this paragraph : “corrupt practice” means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution. “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.”

- 59.3** When either party to the Contract gives notice of a breach of contract to the Engineer for a cause other than those listed under Sub Clause 59.2 above, the Engineer shall decide whether the breach is fundamental or not.
- 59.4** Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 59.5** If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

60. Payment upon Termination

- 60.1** If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply . If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.
- 60.2** If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

61. Property

- 61.1** All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

62. Release from Performance

- 62.1** If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.

63. Suspension of World Bank Loan or Credit

63.1 In the event that the World Bank suspends the Loan or Credit to the Employer, from which part of the payments to the Contractor are being made:

- (a) The Employer is obligated to notify the Contractor of such suspension within 7 days of having received the World Bank's suspension notice.
- (b) If the Contractor has not received sums due to it upon the expiration of the 28 days for payment provided for in Sub-Clause 43.1, the Contractor may immediately issue a 14-day termination notice.

F. Special Conditions of Contract

1. **LABOUR :**

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

2. **COMPLIANCE WITH LABOUR REGULATIONS :**

During continuance of the contract, the Contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the Kerala State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK.

- a) Workmen Compensation Act 1923: The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) Payment of Gratuity Act 1972: Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more or on death the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- c) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are :
 - (i) Pension or family pension on retirement or death, as the case may be.
 - (ii) Deposit linked insurance on the death in harness of the worker.
 - (iii) payment of P.F. accumulation on retirement/death etc.
- d) Maternity Benefit Act 1951: The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- e) Contract Labour (Regulation & Abolition) Act 1970: The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are

required to be provided, by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labour.

- f) Minimum Wages Act 1948: The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, Runways are scheduled employments.
- g) Payment of Wages Act 1936: It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) Equal Remuneration Act 1979: The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.
- i) Payment of Bonus Act 1965: The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/-per month or less. The bonus to be paid to employees getting Rs.2500/- per month or above upto Rs.3500/- per month shall be worked out by taking wages as Rs.2500/-per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.
- j) Industrial Disputes Act 1947: The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) Industrial Employment (Standing Orders) Act 1946: It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.
- l) Trade Unions Act 1926: The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- m) Child Labour (Prohibition & Regulation) Act 1986: The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.
- n) Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979: The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home upto the establishment and back, etc.
- o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996: All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- p) Factories Act 1948: The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to

premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

3. SUB-CONTRACTING (GCC Clause 7)

Please add the following as Clause 7.2:

The contractor shall not be required to obtain any consent from the employer for:

- a) the sub-contracting of any part of the Works for which the Sub-contractor is named in the contract;
- b) the provision of labour; and
- c) the purchase of materials which are in accordance with the standards specified in the Contract.

Beyond this if the contractor proposes sub-contracting any part of the work during execution of works, because of some unforeseen circumstances to enable him to complete the work as per terms of the contract, the Engineer will consider the following before according approval:

- The contractor shall not sub-contract the whole of the Works.
- The contractor shall not sub-contract any part of the Work without prior consent of the Engineer. Any such consent shall not relieve the contractor from any liability or obligations under the contract and he shall be responsible for the acts, defaults and neglects of any sub-contractor, his agents or workmen as fully as if they were the acts, defaults or neglects of the contractor, his agents or workmen.
- The Engineer should satisfy whether (a) the circumstances warrant such sub-contracting; and (b) the sub-contractors so proposed for the Work possess the experience, qualifications and equipment necessary for the job proposed to be entrusted to them in proportion to the quantum of work to be sub-contracted.
- If payments are proposed to be made directly to that sub-contractor, this should be subject to specific authorization by the prime contractor so that this arrangement does not alter the contractor's liability or obligations under the contract.

4. ARBITRATION (GCC Clause 25.3)

The procedure for arbitration will be as follows :

- 25.3 (a) In case of Dispute or difference arising between the Employer and a domestic contractor relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The arbitral tribunal shall consist of 3 arbitrators one each to be appointed by the Employer and the Contractor. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as Presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the * Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Dispute Resolution (India).

(Note: All bidders are expected to indicate clearly in the bid, if they proposed sub-contracting elements of the works amounting to more than 20 percent of the Bid Price. For each such proposal the qualification and the experience of the identified sub-contractor in the relevant field should be furnished alongwith the bid to enable the employer to satisfy himself about their qualifications before agreeing for such sub-contracting and include it in the contract.

In view of the above, normally no additional sub-contracting should arise during execution of the contract.

- (b) In the case of dispute with a Foreign contractor the dispute shall be settled in accordance with provisions of UNCITRAL Arbitration Rules. The Arbitral Tribunal shall consist of three Arbitrators one each to be appointed by the Employer and the Contractor. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties, and shall act a presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding arbitrator shall be appointed by the * Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Dispute Resolution (India).
- (c) If one of the parties fails to appoint its arbitrator in pursuance of sub-clause (a) and (b) above within 30 days after receipt of the notice of the appointment of its arbitrator by the other party, then the * Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Dispute Resolution (India), both in cases of the Foreign Contractor as well as Indian Contractor, shall appoint the arbitrator. A certified copy of the order of the *Indian Council of Arbitration /President of the Institution of Engineers (India)/The International Centre for Alternative Disputes Resolution (India), making such an appointment shall be furnished to each of the parties.
- (d) Arbitration proceedings shall be held at Calicut (Kozhikode), Kerala, India, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English.
- (e) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the arbitral tribunal. However, the expenses incurred by each party in connection with the preparation, presentation, etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.
- (f) Where the value of the contract is Rs.50 millions and below, the disputes or differences arising shall be referred to the Sole Arbitrator. The Sole Arbitrator should be appointed by agreement between the parties; failing such agreement, by the appointing authority, namely the *Indian Council of Arbitration/President of the Institution of Engineers (India)/The International Centre for Alternative Disputes Resolution (India).
- (g) Performance under the contract shall continue during the arbitration proceedings and payments due to the contractor by the owners shall not be withheld, unless they are the subject matter of the arbitration proceedings.

5. PROTECTION OF ENVIRONMENT:

Add the following as GCC Clause 16.2:

The contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

During continuance of the contract, the contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

Salient features of some of the major laws that are applicable are given below :

The Water (Prevention and Control of Pollution) Act, 1974, This provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. 'Pollution' means such

* *Choose one alternative. Insert Chairman of the executive Committee of the Indian Roads Congress (for highway project) or any other appropriate institutions (for other types of works).*

contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.

The Air (Prevention and Control of Pollution) Act, 1981, This provides for prevention, control and abatement of air pollution. 'Air Pollution' means the presence in the atmosphere of any 'air pollutant', which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

The Environment (Protection) Act, 1986, This provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants and property. 'Environment' includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property.

The Public Liability Insurance Act, 1991, This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.

6. LIQUIDATED DAMAGES:

Sub-clause 49.1:

Please substitute the last sentence with the following:

“Time is the essence of the contract and payment or deduction of liquidated damages shall not relieve the contractor from his obligation to complete the work as per agreed construction program and milestones or from any other of the contractor’s obligations and liabilities under the contract.”

SECTION 4: CONTRACT DATA

Contract Data

Items marked "N/A" do not apply in this Contract.

The following documents are also part of the Contract: **Clause Reference**

- The Schedule of Operating and Maintenance Manuals [58]
-
- The Schedule of Key Personnel [9]
- The Methodology and Program of Construction & Environmental Management Plan [27]
- The Schedule of Key and Critical equipment to be deployed on the work as per agreed program of construction [27]
- Site Investigation reports [14]

The Borrower is The Director, National Institute of Technology Calicut [1.1]
[name of Borrower and statement of relationship with the Employer, if different from the Borrower].

The World Bank means *International Development Association (IDA)*, [1.1]
and loan refers to an IDA Credit.

The above insertions should correspond to the information provided in the Invitation of Bids.

The Employer is

Name: The Director (1.1)

Address: National Institute of Technology Calicut

Name of authorized Representative: _____

The Engineer is - Nominated by the Employer (1.1)

Name: _____

Address: _____

Name of Authorized Representative: _____

The Adjudicator appointed jointly by the Employer and Contractor is:

*Name : _____ (1.1)

*Address : _____

(*to be filled in after the Adjudicator has been appointed)

The name and identification number of the Contract is: Engg/TEQIP/NCB2/2004

[insert name and number as indicated in the Invitation for Bids (or Prequalification, if any)]. [1.1]

The Works consist of the Construction of Computer Centre

The Start Date shall be the date of issue of notice to proceed with the work.(1.1)

The Intended Completion Date for the whole of the Works is----- with the following milestones: (This will be decided after decision of Award)

[17, 28]

Milestone dates:

<u>Physical works to be completed</u>	<u>Period from the date of issue of notice to proceed with the work</u>
Milestone 1 i.e. <u>plinth level</u>	<u>04 months.</u>
Milestone 2 i.e. <u>first floor roof</u>	<u>07 months.</u>
Milestone 3 i.e. <u>second floor roof</u>	<u>10 months.</u>
Milestone 4 i.e. <u>finishing</u>	<u>14 months.</u>

The following documents also form part of the Contract:

[2.3]

The Contractor shall submit a revised Program including Environmental Management Plan for the Works (in such form and detail as the engineer shall reasonably prescribe) within _____ days of delivery of the Letter of Acceptance.

[27]

[This program should be in adequate detail and generally conform to the program submitted alongwith bid in response to ITB Clause 4.3 (k). Deviations if any from that should be clearly explained and should be satisfactory to the Engineer]

The Site Possession Dates shall be:

[21]

Section 1 – Date of issuance of notice to proceed

The Site is located at the Campus of the National Institute of Technology, Calicut and is defined in drawings nos. _____

[1]

The Defects Liability Period is 3 calendar years from the date of certification of completion of works.

[35]

Insurance requirements are as under: N/A

[13]

		Minimum Cover for Insurance	Maximum deductible for Insurance
(i)	Works and Plant and Materials	Rs.2.0 Million	Rs.20,000/-
(ii)	Loss or damage to Equipment	Rs.0.2 Million	Rs.4,000/-
(iii)	Other Property	Rs.0.1 Million	Rs.2,000/-
(iv)	Personal injury or death insurance:	Rs.2.0 Million	Rs.20,000/-
	a) for other people;		
	b) for Contractor's Employees	In accordance with the statutory requirements applicable to India	

The following events shall also be Compensation Events: N/A [44]

1. _____
2. _____
3. _____
4. _____

The period between Program updates shall be 45 days. [27]

The amount to be withheld for late submission of an updated Program shall be Rs.500/- per day [27]

The language of the Contract documents is English [3]

The law which applies to the Contract is the laws of Union of India [3]

The currency of the Contract is Indian Rupees. [46]

Fees and types of reimbursable expenses to be paid to the Adjudicator Rs.1,000/- per day sitting fee and TA/DA and contingency as per rules [25]

Appointing Authority for the Adjudicator : Director, NIT Calicut [26]

The proportion of payments retained (retention money) shall be 6% from each bill subject to a maximum of 5% of final contract price [48]

The liquidated damages for the whole of the works are Rs.500/- per day and that for the milestone are as under subject to a maximum of 2% of final contract price: [49]

For milestone 1	Rs. <u>500</u> per day
For milestone 2	Rs. <u>500</u> per day
For milestone 3	Rs. <u>500</u> per day
For milestone 4	Rs. <u>500</u> per day

The maximum amount of liquidated damages for the whole of the works is ten percent of final contract price. [49]

The amounts of the advance payment are: N/A [51]

The Securities shall be for the following minimum amounts equivalent as a percentage of [52] the Contract Price:

Performance Security for 5 per cent of contract price plus 5% of unbalance amount as additional security in terms of ITB Clause 29.5.

The standard form of Performance Security acceptable to the Employer shall be an unconditional Bank Guarantee of the type as presented in Section 8 of the Bidding Documents.

The following events shall also be fundamental breach of contract: [59.2]

1. The Contractor has contravened Sub-clause 7 of GCC read with SCC and Clause 9.0 of GCC
2. The contractor does not adhere to the agreed construction program (Clause 27 of GCC) and also fails to take satisfactory remedial action as per agreements reached in the management meetings (Clause 31) for a period of 60 days.

3. The contractor fails to carry out of the instructions of Engineer within a reasonable time determined by the Engineer in accordance with GCC Clause 16.1 and 23.1.

The percentage to apply to the value of the work not completed representing the Employer's [60] additional cost for completing the Works shall be 20 percent.

SECTION 5: SPECIFICATIONS

Specifications

Construction of a Computer Centre complete with fittings, doors and windows, flooring, plumbing, lighting, electrification and finishing etc. as per the drawings.

SECTION 6: DRAWINGS

Drawings

See PART III

SECTION 7: BILL OF QUANTITIES

Bill of Quantities

(For detailed schedule see Part – II)

Note:

- (1) Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the **Bill of Quantities** (refer: ITB Clause 13.2 and GCC Clause 43.3).
- (2) Unit rates and prices shall be quoted by the bidder in Indian rupee [ITB Clause 14.1].
- (3) Where there is a discrepancy between the rate in figures and words, the rates in words will govern. [ITB Clause 27.1(a)]
- 4) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern [ITB Clause 27.1 (b)].

SECTION 8: FORMS OF SECURITIES

Forms of Securities

Acceptable forms of securities are annexed. Bidders should not complete the Performance and Advance Payment Security forms at this time. Only the successful Bidder will be required to provide Performance and Advance Payment Securities in accordance with one of the forms, or in a similar form acceptable to the Employer.

Annexure A:	Bid Security (Bank Guarantee)
Annexure B:	Performance Bank Guarantee
Annexure B1:	Performance Bank Guarantee for Unbalanced Items
Annexure C:	Deleted
Annexure D:	Bank Guarantee for Advance Payment

BID SECURITY (BANK GUARANTEE)

WHEREAS, _____ [*name of Bidder*] (hereinafter called "the Bidder") has submitted his Bid dated _____ [*date*] for the construction of _____ [*name of Contract*] (hereinafter called "the Bid").

KNOW ALL PEOPLE by these presents that We _____ [*name of bank*] of _____ [*name of country*] having our registered office at _____ (hereinafter called "the Bank") are bound unto _____ [*name of Employer*] (hereinafter called "the Employer") in the sum of _____¹ for which payment well and truly to be made to the said Employer the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 19____.

THE CONDITIONS of this obligation are:

- (1) If after Bid opening the Bidder withdraws his bid during the period of Bid validity specified in the Form of Bid;
- or
- (2) If the Bidder having been notified of the acceptance of his bid by the Employer during the period of Bid validity:
- (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or
 - (b) fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders; or
 - (c) does not accept the correction of the Bid Price pursuant to Clause 27;

we undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date _____² days after the deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE _____ SIGNATURE OF THE BANK _____

WITNESS _____ SEAL _____

[signature, name, and address]

1 The Bidder should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 16.1 of the Instructions to Bidders.

2 45 days after the end of the validity period of the Bid.

PERFORMANCE BANK GUARANTEE

To:

The Director
National Institute of Technology Calicut

WHEREAS _____ [name and address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. _____ dated _____ to execute _____ [name of Contract and brief description of Works] (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of _____ [amount of guarantee] / _____ [in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [amount of guarantee]¹ as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until (i.e.) 28 days from the date of expiry of the Defects Liability Period.

Signature and seal of the guarantor _____
Name of Bank _____
Address _____
Date _____

1 An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract and denominated in Indian Rupees.

PERFORMANCE BANK GUARANTEE (for unbalanced items)

To:

The Director
National Institute of Technology Calicut

WHEREAS _____ [name and address of Contractor] (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. _____ dated _____ to execute _____ [name of Contract and brief description of Works] (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of _____ [amount of guarantee] / _____ [in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [amount of guarantee]¹ as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until (i.e.) 28 days from the date of issue of the certificate of completion of works.

Signature and seal of the guarantor _____
Name of Bank _____
Address _____
Date _____

1 An amount shall be inserted by the Guarantor, representing additional security for unbalanced Bids, if any and denominated in Indian Rupees.

BANK GUARANTEE FOR PAYMENT OF SECURED ADVANCE

To: _____ [name of Employer]
_____ [address of Employer]
_____ [name of Contract]

Gentlemen:

In accordance with the provisions of the Conditions of Contract, subclause 51.4 ("Secured Advance Payment") of the above-mentioned Contract, _____ [name and address of Contractor] (hereinafter called "the Contractor") shall deposit with _____ [name of Employer] a bank guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of _____ [amount of guarantee]¹ _____ [in words].

We, the _____ [bank or financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to _____ [name of Employer] on his first demand without whatsoever right of objection on our part and without his first claim to the Contractor, in the amount not exceeding _____ [amount of guarantee]¹ _____ [in words].

We further agree that no change or addition to or other modification of the terms of the Contract or of Works to be performed there under or of any of the Contract documents which may be made between _____ [name of Employer] and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until _____ [name of Employer] receives full repayment of the same amount from the Contractor.

Yours truly,

Signature and seal: _____
Name of Bank/Financial Institution: _____
Address: _____
Date: _____

¹ An amount shall be inserted by the bank representing the amount of the Advance Payment, and denominated in Indian Rupees.

DETAILS OF PARTICIPATION IN THE JOINT VENTURE

(Not applicable)

BID DOCUMENT

PART - II

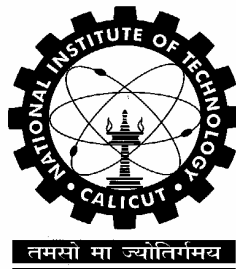
PRICE BID

NATIONAL COMPETITIVE BIDDING
for
CIVIL WORKS

CONSTRUCTION OF COMPUTER CENTRE

Under

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME



NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

NIT CAMPUS (P.O), CALICUT - 673 601, KERALA

NATIONAL INSTITUTE OF TECHNOLOGY, CALICUT
PART – A (Civil and Plumbing work)

SCHEDULE – A
Schedule and rates and approximate quantities

.....

Name of work: Construction of a building for Computer Centre (under TEQIP).

P.A.C. Rs. : **/-**

E.M.D. Rs.:/-

Sl. No.	Description	MDSS No.	Qty.	Unit	Rate		Amount
					In figures	In words	
1.	Clearing thick and thorny jungle and small trees of grith upto 30cm and rooting out including removal of rubbish upto a distance of 150m outside the periphery of the area cleared.	16	1250 m ²	Hundred square metre			
2	Felling trees including cutting trunks and branches, removing roots etc. and stacking serviceable materials beyond 60 cm and 120cm. girth etc. complete	23	5 Nos.	Each			
3.	Earth work excavation in hard soil and depositing on bank with initial lead upto 50m. And lift upto 1.50m. Including breaking clods, watering, ramming and sectioning of spoil bank etc. complete, site levelling.	23	500 m ³	Ten cubic metre			
4	Earth work excavation in all classes of soil except hard rock requiring blasting including depositing on bank with initial lead upto 50m and lift upto 1.50m. Breaking clods, watering, ramming and sectioning of spoil bank etc. complete. for foundation trenches.	23	325 m ³	Ten cubic metre			
5	Earth work excavation in ordinary rock and		120 m ³	Ten cubic			

	depositing on bank with initial lead upto 50m. and lift upto 1.50m. breaking clods, watering, ramming and sectioning of spoil bank stacking serviceable materials for measurement and disposal of unserviceable materials as directed	23		metre			
6	Cement concrete 1:4:8 (one cement four sand eight metal) using 40mm hard granite broken stone including cost and conveyance of all materials and labour charges etc. complete. for foundation	28	33 m ³	One cubic metre			
7	Vibrated R.C.C. 1:1 ½:3, (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work, watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete but excluding cost of reinforcement for column footing	30	65 m ³	Ten cubic decimetr			
8	Vibrated R.C.C. 1:1 1/2:3 (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete. but excluding cost of reinforcement for columns in ground floor	30	32 m ³	Ten cubic deci-metre			
9	Vibrated R.C.C. 1:1 1/2:3 (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete but excluding cost of reinforce-ment for column in first floor	30	22 m ³	Ten cubic deci-metre			
10	Vibrated R.C.C. 1:1 1/2 :3 (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work, watering, curing etc.		1.50 m ³	Ten cubic deci-metre			

	including cost and conveyance of all materials and labour charges etc. complete but excluding cost of reinforcement for column in second floor	30					
11	Vibrated R.C.C. 1:2:4 (one cement two sand four metal), using 20mm hard granite broken stone with all form work watering curing etc. including cost and conveyance of all materials and labour charges etc. complete for column in second floor.	30	10 m ³	Ten cubic deci-metre.			
12	Vibrated R.C.C. 1:1 1/2 :3 (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete but excluding cost of reinforcement for plinth beams in ground floor	30	20 m ³	Ten cubic deci-metre			
13	Vibrated R.C.C 1:1 1/2 :3(one cement one and half sand three metal)using 20mm hard granite broken stone with all form work watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete but excluding cost of reinforcement for lintels, beams, sunshade, etc. in ground floor.	30	48 m ³	Ten cubic deci-metre			
14	Vibrated R.C.C.1:1 1/2 :3 (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete but excluding cost of reinforcement for lintels, beams, sunshade, etc in first floor	30	48 m ³	Ten cubic deci-metre			
15	Vibrated R.C.C. 1:1 1/2:3 (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work watering curing etc. including cost and conveyance of all materials and labour charges etc. complete but excluding cost of reinforcement for lintels, beams, sunshade etc. in	30	2 m ³	Ten cubic deci-metre			

	second floor						
16	Vibrated R.C.C.1:1 1/2:3 (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete but excluding cost of reinforcement for slabs in Ground floor.	30	80 m ³	Ten cubic deci- metre			
17	Vibrated R.C.C. 1:1 1/2 :3 (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete but excluding cost of reinforcement for slabs in first floor.	30	73 m ³	Ten cubic deci- metre			
18	Vibrated R.C.C. 1:1 1/2:3 (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete but excluding cost of reinforcement for slabs in second floor	30	5 m ³	Ten cubic deci- metre			
19	Vibrated R.C.C. 1: 1/2:3, (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work (double shuttering) watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete but excluding cost of reinforcement. complete. for water tank sides in ground floor.	30	4.50 m ²	Ten cubic deci – metre			
20	Vibrated R.C.C. 1: 11/2:3, (one cement one and half sand three metal) using 20mm hard granite broken stone with all form work watering, curing etc. including cost and conveyance of all material and labour charges etc. complete. for water tank sides in third floor.	30	1 m ³	Ten cubic deci- metre			

21	R.C. C lathing in cement concrete 1:1 ½ : 3 (one cement one and a half sand three broken tiles) using broken tiles with all form works watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete.	30	1 m ²	One square metre			
22	Reinforcement for R.C.C. work bend tied and placed in position using tor steel bending cold including cost and conveyance of all materials and labour charges etc. complete.	30	510 Qtl.	One quintal			
23	R.R masonry in cement mortar 1:6 (one cement six sand) for foundation and basement including cost and conveyance of all materials and labour charges etc. complete.	36	245 m ³	One cubic metre			
24	Earthwork excavation in hard soil and depositing on bank with initial lead upto 50m and lift upto 1.50m breaking clods watering ramming and sectioning of spoil banks etc for filling the site. (Earth should be brought by the Contractor)	23	660 m ³	Ten cubic metre			
25	Neatly dressed laterite masonry in cement mortar 1:5 (one cement five sand) using existing size laterite stones including cost and conveyance of all materials and labour charges etc. complete for foundation and basement.	36 - C	12 m ³	One cubic metre			
26	Neatly dressed laterite masonry in cement mortar 1:5 (one cement five sand) using existing size laterite stones superstructure including cost and conveyance of all materials and labour charges etc. complete for walls in ground floor.	36 - C	72 m ³	One cubic metre			
27	Neatly dressed laterite masonry in cement mortar 1:5 (one cement five sand) using existing size laterite stones including cost and conveyance of all materials and labour charges etc. complete for walls in ground floor.	36 - C	45 m ³	One cubic metre			

28	Neatly dressed laterite masonry in cement mortar 1:5 (one cement five sand) using existing size laterite stones including cost and conveyance of all materials and labour charges etc. complete for walls in ground floor.	36 - C	8 m ³	One cubic metre			
29	Brick work in cement mortar 1:5 (one cement five sand) with existing size first class wire cut bricks including cost and conveyance of all materials and labour charges etc. complete for walls in ground floor.	36 - C	11 m ³	One cubic metre			
30	Brick work in cement mortar 1:5 (one cement five sand) with existing size first class wire cut bricks including cost and conveyance of all materials and labour charges etc. complete for walls in first floor	31	12 m ³	One cubic metre			
31	Dry rubble masonry using rubble including cost and conveyance of all materials and labour charges etc. complete.	39	30 m ³	One cubic metre			
32	Supplying and fixing teak wood planed and framed work for the frames of door, window and ventilator etc. including cost and conveyance of all materials and labour charges etc. complete.	82	450 dm ³	Ten cubic deci-metre			
33	Supplying and fixing teak wood fully panelled shutters using best teak wood scantling for frames with two or three panels and 12mm thick teak wood planks as panel insert including cost and conveyance of all materials and labour charges etc. complete.		15 m ²	Ten square metre			
34	Supplying and fixing teak wood fully glazed shutters with 3mm plain glass including cost and conveyance of all materials and labour charges etc. complete.		3 m ²	Ten square deci-metre			
35	Supplying and fixing fully panelled P.V.C. shutters		12 m ²	One			

	(The brand to be specifically approved) with frame with necessary grooves and rubber holder fixed on wall with screw wooden plug etc. including cost and conveyance of all materials and labour charges etc. complete as per the instructions of departmental officers. (The teak wood insert on frames to be done all through the external frames and fixtures of door.)			square metre			
36	Providing holdfast work to doors, windows and ventilators etc. including cost and conveyance of all materials and labour charges etc. complete.		20 Kg..	One quintal			
37	Providing M.S. rods to windows, ventilators etc. including cost and conveyance of all materials and labour charges etc. complete.		50 Kg.	One quintal			
38	Providing M.S. grills with flat iron welded with a coat of iron primer and fixing in position including cost and conveyance of all materials and labour charges etc. complete.		101 Qtl.	One Quintal			
39	Cement concrete 1:4:8 (one cement four sand eight metal) using 40mm hard granite broken stone including cost and conveyance of all materials and labour charges etc. complete for flooring.		70 m ³	One cubic metre			
40	Cement concrete 1:2:4 (one cement two sand four metal) using 20mm hard granite broken stone including cost and conveyance of all materials and labour charges etc. complete.	62	6 m ³	Ten cubic deci-metre			
41	Plastering with cement mortar 1:3, (one cement three sand) 12mm thick to the under side of slab sunshade etc. including cost and conveyance of all materials and labour charges etc. complete.	62	1400 m ²	Ten square metre			
42	Plastering with C.M. 1:3,(one cement three sand)12mm thick with the addition of acco-proof 1Kg/bag of cement for slab top with cost and	62	710 m ²	Ten square metre			

	conveyance etc. including cost and conveyance of all materials and labour charges etc. complete.						
43	Plastering with C.M. 1:5, (one cement five sand) 12mm thick one coat for wall inside and outside with necessary scaffolding including cost and conveyance of all materials and labour charges etc. complete.	62	2570 m ²	Ten square metre			
44	Plastering with cement mortar 1:3,(one cement three sand) 12mm thick with threaded lines wherever necessary including cost and conveyance of all materials and labour charges etc. complete.		200 m ²	Ten square metre			
45	Plastering with C.M. 1:3, (one cement three sand) 12mm thick with neat cement flushing coat and threaded lines wherever necessary etc. including cost and conveyance of all materials and labour charges etc. complete.		115 m ²	Ten square metre			
46	Plastering with C.M.1:3, (one cement three sand) 12mm thick with neat cement flushing coat with the addition of colouring compound (red oxide) with thread line wherever necessary etc. including cost and conveyance of all materials and labour charges etc. complete.		10m ²	Ten square metre			
47	Supplying, paving and mirror polishing marble slab (better than white marble makrana 2nd quality) 20mm thick specially approved by the Engineer over a base coat of plastering with cement mortar 1:3, (one cement three sand) 12mm thick, machine or hand polish intermediate filling and mirror polishing to a smooth finish, curing etc. including cost and conveyance of all materials and labour charges etc. complete. (The marble slab to be selected by the dept. and will be of any colour or texture decided by the dept.)		640 m ²	One square metre			

48	Flooring with best quality paving tiles best quality as specified by Department over a base coat of cement plaster 1:3, (one cement three sand) 12mm thick etc. including cost and conveyance of all materials and labour charges etc. complete..(The brand, colour and size of the tiles will be the best specifically selected and approved by the Engineer from the market.)		650 m ²	One square metre			
49	Dadoing with best quality glazed tiles over a base coat of cement plastering 1:3, (one cement three sand) 12mm thick etc. including cost and conveyance of all materials and labour charges etc. complete. As per the instructions of the departmental officers. (The brand, colour and size of the tiles will be the best as specifically selected and approved by the Engineer)		290 m ²	One square metre			
50	Supplying, paving mirror polished granite stone 20mm thick over a base coat of cement plastering 1:3, (one cement three sand) 12mm thick, intermediate filling with suitable colour fillers, grinding the edges wherever necessary including cost and conveyance of all labour charges etc. complete. (The granite type, colour, texture etc. will be the one selected by the Engineer.)		1 m ²	One square metre			
51	Supplying and paving mirror polished granite tiles 12mm or nearest thick over a base coat of cement plastering 1:3, 12mm thick including cost and conveyance of all materials and labour charges etc. complete.		1 m ²	One square metre			
52	Providing cement mortar bordering 75mm wide and 15mm thick in c.m 1:3 (one cement three sand) with cost and conveyance of all materials and labour charges etc. complete.		75 mtrs	Ten metre			
53	Pointing R.R. masonry in cement mortar 1:3 (one		100 m ²	Ten			

	cement three sand) including cost and conveyance of all materials and labour charges etc. complete.			square metre			
54	Providing water cutting with cement mortar 1:3 (one cement three sand) 15mm x 12mm section including cost and conveyance of all materials and labour charges etc. complete		260 m	Ten metre			
55	Supplying and fixing best quality Indian type white glazed earthen ware W.C. pan with trap and fittings (Orissa type) 580mm or nearest size with 'S' or 'P' trap as may be required, with 12.5 Litre PVC low level flushing cistern with concealed type C.P. stop cock and 15mm float valve C.I. brackets, 32mm PVC flush pipe with mosquito proof arrangements 1 No. 15mm PVC connection G.I.chain pull etc. complete including embedding the closet in concrete with cost and conveyance of all materials and labour charges etc. complete. (The brand and colour of the closet to be the best in market and is to be specifically approved by the Engineer).		6 Nos.	Each			
56	Supplying and fixing European type white glazed earthen ware water closet with trap (Indian make best quality) and duroplastic seat cover and lid best C.P. brass hinges and rubber buffers 1 No. 15mm C.P. concealed type stop cock 12.5 litre capacity low level PVC flushing cistern with fittings (brackets etc.) with 32mm dia PVC flush pipe over flow with mosquito proof arrangements, G.I. chain pull etc. complete including cutting and making good the walls etc. with cost and conveyance of all materials and labour charges etc. complete. (The brand and colour will be the best as decided by the Engineer).		2 Nos.	Each			
57	Supplying and fixing 550x400mm or nearest size wash hand basin of white glazed earthen ware,		8 Nos.	Each			

	(Indian best quality) with G. I. Brackets painted white one coat 15mm C.P. brass pillar tap, 1 No. 15mm PVC connection with brass union, 1 No. 15mm CP conceal type stop cock, C.P. brass chain with rubber plug, 32mm PVC waste pipe etc. including cutting and making good the walls etc. with cost and conveyance of all materials and labour charges etc. complete. (The brand and colour of the wash basin to be the best as approved by the Engineer)						
58	Supplying and fixing white glazed earthen ware flat back lipped front urinals of size 430 d 230 x 350 mm or nearest size (Indian make best quality) with 'S' or 'P' trap and PVC waste line 32mm dia, 15mm nylon connection with brass union and clamps 15mm C. P. concealed type stop cock etc. with cost and conveyance of all materials and labour charges etc. complete. (The brand to be approved in advance by the Engineer)		6 Nos.	Each			
59	Supplying and fixing 15mm waste no taps etc. (best approved quality) including cost and conveyance of all materials and labour charges etc. complete.		4Nos.	Each			
60	Supplying and fixing 110mm PVC pipe 4 Kg/cm ² (approved quality) including cutting masonry concrete floor etc. for taking connections fixing to wall with PVC clamps and screws on teak wood plugs embedded in cement mortar including cost and conveyance of all materials and labour charges etc. complete		120 m	Each			
61	Supplying and fixing 110mm three way (moulded type) PVC junction with door (approved quality) including cost and conveyance of all materials and labour charges etc. complete.		5 Nos.	Each			

62	Supplying and fixing 110mm PVC Door tee (approved quality) including cost and conveyance of all materials and labour charges etc. complete.		10 Nos.	Each			
63	Supplying and fixing 110mm PVC door elbow (approved quality) including cost and conveyance of all materials and labour charges etc. complete.		10 Nos.	Each			
64	Supplying and fixing 110mm PVC bend/offset (approved quality) including cost and conveyance of all materials and labour charges etc. complete.		20 Nos.	Each			
65	Supplying and fixing 110mm PVC vent cowl (approved quality) including cost and conveyance of all materials and labour charges etc. complete.		5 Nos.	Each			
66	Supplying and fixing 90mm PVC pipes (4 Kg / cm ²) (approved quality) including cutting masonry concrete floors, sunshades etc. wherever necessary for taking connections fixing to wall with PVC clamps and screws on teak wood plugs embeded in cement mortar including cost and conveyance of all materials and labour charges etc. complete.		40 m	One metre			
67	Supplying and fixing 90mm PVC door tee / Y junction approved quantity including cost and conveyance of all materials and labour charges etc. complete.		10 Nos.	Each			
68	Supplying and fixing 90mm PVC door elbow (approved quality) including cost and conveyance of all materials and labour charges etc. complete.		10 Nos.	Each			
69	Supplying and fixing 90mm PVC bend / offset (best approved quality) including cost and conveyance of all materials and labour charges etc. complete.		15 Nos.	Each			
70	Supplying and fixing 90mm PVC plain tee (best approved quality) fixing to wall on teak wood plug using PVC clamps and screws including cost and conveyance of all materials and labour charges etc. complete.		10 Nos.	Each			

71	Supplying and fixing 65 mm PVC pipe (4 Kg/ cm ²) (best approved quality) including fixing to walls with the PVC clamps on teak wood plugs with cost and conveyance of all materials and labour charges etc. complete.		10Mts.	Each			
72	Supplying and fixing 65mm PVC bend offset (best approved quality) fixing to wall on teak wood plug using PVC clamps and screws including cost and conveyance of all materials and labour charges etc. complete.		5 Nos.	Each			
73	Supplying and fixing 65mm PVC tee (approved quality) including cost and conveyance of all materials and labour charges etc. complete.		10 Nos.	Each			
74	Supplying, threading, laying and jointing 15mm threaded PVC pipes (best approved quality) and specials such as bend, tee elbow etc. fixing to walls on teak wood plug with PVC clamps and screws etc. and specials including cost and conveyance of all materials and labour charges etc. complete.		15 Mts	One metre			
75	Supplying, threading, laying and jointing 20mm threaded PVC pipes (best approved quality) and specials such as bend, tee elbow etc. fixing to walls on teak wood plug with PVC clamps and screws etc. and specials including cost and conveyance of all materials and labour charges etc. complete.		30 Mts.	One metre			
76	Supplying, threading, laying and jointing 25mm threaded PVC pipes (best approved quality) and specials such as bend, tee elbow etc. fixing to walls on teak wood plug with PVC clamps and screws etc. and specials including cost and conveyance of all materials and labour charges etc. complete.		50 Mts.	One metre			

77	Supplying, threading, laying and jointing 32mm threaded PVC pipes (best approved quality) and specials such as bend, tee elbow etc. fixing to walls on teak wood plug with PVC clamps and screws etc. and specials including cost and conveyance of all materials and labour charges etc. complete.		20 Mts.	One metre			
78	Supplying, threading, laying and jointing 40mm threaded PVC pipes (best approved quality) and specials such as bend, tee elbow etc. fixing to walls on teak wood plug with PVC clamps and screws etc. and specials including cost and conveyance of all materials and labour charges etc. complete.		50 Mts.	One metre			
79	Supplying and fixing 20mm G.M. full way wheel valve (Leader or equivalent quality) including cost and conveyance of all materials and labour charges etc. complete.		4 Nos.	Each			
80	Supplying and fixing 25mm G.M. full way wheel valve (Leader or equivalent quality) including cost and conveyance of all materials and labour charges etc. complete.		4 Nos.	Each			
81	Supplying and fixing 32mm G.M. full way wheel valve (Leader or equivalent quality) including cost and conveyance of all materials and labour charges etc. complete.		2 Nos.	Each			
82	Supplying and fixing 40mm G.M. full way wheel valve (Leader or equivalent quality) including cost and conveyance of all materials and labour charges etc. complete.		1 No.	Each			
83	Supplying and fixing 15mm SDB taps approximate wt. 400 grams (best approved quality) including cost and conveyance of all materials and labour charges etc. complete.		1 No.	Each			

84	Supplying and fixing 15mm waste not tap weighting 400gms including cost and conveyance of all materials and labour charges etc. complete.		15 Nos.	Each			
85	Supplying and fixing 450 x 300 mm mirror with PVC frame (best approved quality) including cost and conveyance of all materials and labour charges etc. complete.		5 Nos.	Each			
86	Supplying and fixing 150mm powder coated iron butt hinges (heavy type) including cost and conveyance of all materials and labour charges etc. complete.		20 Nos.	Each			
87	Supplying and fixing 100 mm powder coated iron butt hinges (heavy type) including cost and conveyance of all materials and labour charges etc. complete.		20 Nos.	Each			
88	Supplying and fixing 75mm powder coated iron butt hinges (heavy type) including cost and conveyance of all materials and labour charges etc. complete.		25 Nos.	Ten Numbers			
89	Supplying and fixing best quality brass pirot hinges (heavy type) including cost and conveyance of all materials and labour charges etc. complete.		10 Nos.	Each			
90	Supplying and fixing 200 mm anodized aluminum tower bolts (heavy type) including cost and conveyance of all materials and labour charges etc. complete.		15 Nos.	Each			
91	Supplying and fixing 100 mm aluminum tower bolts (heavy type) including cost and conveyance of all materials and labour charges etc. complete.		5 Nos.	Each			
92	Supplying and fixing 300 x 16 mm C.P. steel aldrep (best approved quality) with necessary fittings etc. including cost and conveyance of all materials and labour charges etc. complete.		10 Nos.	Each			

93	Supplying and fixing 150mm anodized aluminum door handle (heavy type) including cost and conveyance of all materials and labour charges etc. complete.		20 Nos.	Each			
94	Supplying and fixing 200mm or nearest size iron oxy hooks and eyes including cost and conveyance of all materials and labour charges etc. complete.		10 Nos.	Ten Numbers			
95	Supplying and fixing 60mm brass screwed type hooks and eyes including cost and conveyance of all materials and labour charges etc. complete.		30 Nos.	Each			
96	Supplying and fixing 25 / 8 mm iron oxy screws including cost and conveyance of all materials and labour charges etc. complete.		200 Nos.	Ten Numbers			
97	Supplying and fixing 20 / 7mm iron oxy screws including cost and conveyance of all materials and labour charges etc. complete.		600 Nos.	Ten Numbers			
98	Fabricating, supplying and fixing hand rails using 120mm x 60mm teak wood scantling for top and 20mmx20mm square rode for verticals and diagonals 900mm height welded with a coat of iron primer including cost and conveyance of all materials and labour charges etc. complete.		32m	One metre			
99	Pest control treatment for floors and walls using best approved quality insecticide including cost and conveyance of all materials and labour charges etc. complete.		610 m ²	One square metre			
100	Painting priming coat on walls and ceiling using white cement including cost and conveyance of all materials and labour charges etc. complete.		2270 m ²	Ten square metre			
101	Painting priming coat on walls using best approved quality water primer including cost and conveyance of all materials and labour charges etc. complete.		1420 m ²	Ten square metre			

102	Painting priming coat on new wood work after clearing the surface including cost and conveyance of all materials and labour charges etc. complete.		10m2	Ten square metre			
103	Painting with best approved quality cement water proof paint two coats on new surface after clearing the surface including cost and conveyance of all materials and labour charges etc. complete.		10m2	Ten square metre			
104	White washing two coats for walls after cleaning the surface etc. including cost and conveyance of all materials and labour charges etc. complete.		2060 m ²	Ten square metre			
105	Painting with synthetic enamel paint two coats on new surface after cleaning the surface etc. including cost and conveyance of all materials and labour charges etc. complete. (The brand and colour of the paint to be the best as specifically approved by the Engineer)		450 m ²	Ten square metre			
106	Polishing with french polish two coats after cleaning the surface etc. including cost and conveyance of all materials and labour charges etc. complete (the brand to be the best as specifically approved by the Engineer.)		50 m ²	Ten square metre			
107	Polishing the red oxide floor after treating the surface including cost and conveyance of all materials and labour charges etc. complete.		10m2	Ten square metre			
108	Painting with weather proof paint (Apex or equivalent quality) two coats on new surface after cleaning the surface etc. including cost and conveyance of all materials and labour charges etc. complete.		880m2	Ten square metre			
109	Distempering with oil bound distemper two coats on new surface over a priming coat etc. including cost and conveyance of all materials and labour charges etc. complete.		1420 m ²	Ten square metre			

110	Construction sewer manholes of size 60cm x 60 cm inside and depth not exceeding 120 cm with 20 cm thick walls in cement mortar 1:6, plastering inside with cement mortar 1:3, 12mm thick with neat cement flushing coat and foundation concrete 20cm thick and forming channels with cement concrete 1:3:6 using 40 mm broken stone providing collars around pipes with cement concrete 1:2:4 using 20mm broken stone R.C.C cover slab of size 80 cm x 80 cm x 10 cm with C.C. 1:2:4 and necessary reinforcement.		5 Nos.	Each			
111	Supplying and fixing best approved quality 6 lever mortise lock (Godrej or equivalent quality) including cost and conveyance of all materials and labour charges etc. complete.		10 Nos.	Each			
112	Supplying and fixing best quality automatic door closer including cost and conveyance of all materials and labour charges etc. complete.		12 Nos.	Each			
113	Supplying and fixing 150mm or nearest size aluminium wind stay (Heavy type) etc. including cost and conveyance of all materials and labour charges etc. complete.		15 Nos.	Each			
114	Supplying and fixing best approved quality 7 lever pad locks (Godrej) (65mm or nearest) including cost and conveyance of all materials and labour charges etc. complete.		10 Nos.	Each			
115	Pointing brick work with cement mortar 1:3, (one cement three sand) including cost and conveyance of all materials and labour charges etc. complete.		10 m ²	Ten square metre			
116	Supplying and fixing 200mm PVC gutter (wall thickness 5mm) with socket, nozzles and stoppers,		1 m	One metre			

	M.S. clamps of 16mm dia. Supported and clamped as purlins with bends for holding flat to fix as purlin including charges for splitting 200 mm pipe to two halves length wise and making holes for nozzles etc. socket joints with bolts, nuts, bitumen washers and plate washers including cost and conveyance of all materials and labour charges etc. complete.						
117	Supplying and fixing 150mm PVC grating etc. including cost and conveyance of all materials and labour charges etc. complete.		15 Nos.	Each			
118	Supplying and fixing Anodized Aluminium fully glazed shutters with two or three panels for top portion with locking arrangements. Upper fixed portion using 62.50 x 38 x 1.60mm box type member for horizontal and vertical two panels fully glazed using 4mm plain glass with rubber bedding and glazing clips. Lower sliding portion with two track 62.50mm x 38 x 1.6mm aluminium section for vertical and glazed with 4mm plain glass etc. complete with cost and conveyance of all materials and labour charges etc. complete as per the instructions of department officers.		225 m ²	One square metre			
119	Supplying and fixing steel door with an outer frame 32x32x6mm angle iron with legs welded to fix on wall and 25 x 25x 5mm equal angle and 1mm thick G.I Sheet welded on the frame with stiffness using 25x6mm flats with necessary locking arrangements, hinges etc with a coat of iron primer including cost and conveyance of all materials and labour charges etc. complete.		5 m ²	One square metre			
120	Fabricating supplying and fixing fully paneled partition with door using 62.50mmx38mmx1.60mm		80m ²	One square			

	box type section and 10mm or nearest available size both side prelaminate particle board (exterior grade) as panel insert frames fixed on wall and floor with screws on plugs including cost and conveyance of all materials and labour charges etc. complete.			metre			
121	Fabricating supplying and fixing partly paneled and partly glazed partition with door using 62.50mmx38mmx1.60mm box type section for frame work and 10mm or nearest thick both side prelaminate particle board (exterior grade) and 5.50mm float glass frames fixed on wall and floor with screws on plugs including cost and conveyance of all materials and labour charges etc. complete.		90m ²	One square metre			
122	R.C.C. 1:2:4 (one cement two sand four metal) using 20mm hard granite broken stone with all form work watering, curing etc. including cost and conveyance of all materials and labour charges etc. complete for paving slabs.		1 m ³	Ten cubic deci – metre			
123	Supplying and fixing in position 10mm dia 250mm long stain less steel fan hooks etc. complete.		50 Nos.	Each			
124	Earth work excavation in ordinary soil and depositing on bank with initial lead up to 50m and lift up to 1.50m etc. for refilling (For filling with excavated earth) including all labour charges etc. complete.		200 m ³	Ten cubic metre			
125	Supplying and fixing powder aluminium door using 120x50x2mm powder coated aluminium section for outer frame and shutter frame using 90x50x2mm box type powder coated aluminium section for vertical top centre bottom portion with 120x50x2mm powder coated aluminium box section scutter fully glazed with 4mm float glass fixed on aluminium section with necessary glazing clips and rubber beading etc. with necessary locking arrangements stoppers, pivot		35m ²	One square metre			

	type floor hinges 200mm tower bolts, mortice lock and providing 2 Nos. door handle using powder coated aluminium section in full length with cost and conveyance of all materials and labour charges etc.complete.						
126	Supplying and fixing sun control film after clearing the surface etc. including cost and conveyance of all materials and labour charges etc. complete.		35m2	One square metre			
127	Fabricating supplying and fixing electro colouring structural glazing work opening/fixed shutters using 75mmx57mmx1.30mm or nearest available size electro colouring aluminium glazing sections and 5.50m thick one side. Glass fixed on the frame using best quality tap with necessary adhesive and filling the gaps opening portions using 25x25x1.60mm electro colony aluminium sections. Frames fixed on wall and floor with necessary screws on plugs including cost and conveyance of all materials and labour charges etc. complete.		250m2	One square metre			
128	Supplying and paving best quality highting compressed floor paving tiles (European, common wealth or equivalent) over a base coat of cement plastering 1:3 (one cement, three sand), 12mm thick including cost and conveyance of all materials and labour charges etc. complete.		1 m2	One square metre			
129	Supplying and paving best quality interlocked floor paving tiles over spreading and leveling the quarry dust and ramming the floor with roller including cost and conveyance of all materials and labour charges etc. complete.		1 m2	One square metre			
	TOTAL						

Quote for Electrical Works also

Schedule follows

NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

PART – B

SCHEDULE - A

Name of Work: Electrification of New Computer Centre

Sl. No.	Description	Qty.	Unit	Rate		Amount
				In figures	In words	
1.	Supplying and wiring light points in 20mm rigid PVC conduit black pipe (medium) with specials conforming to relevent ISS, using 1.5sq.mm PVC insulated single core copper wire (Finolex/RR Kabel/ Havells) with 1.5sq mm green coloured PVC insulated single core copper earth wire (Finolex/RR Kabel/ Havells) copper socket, brass nut and bolt, crimping etc, in recess after cutting grooves on the wall, fixing with stapples, filling the grooves with cement mortar and including 6 amps modular plate switch (MK/ MDS or equivalent) with its own front plate and metal board in recess and 5 amps 3 plate ceiling rose on 3mm hylam sheet/PVC round white lids, making good the damages, colour washing etc, as required (Maximum 8 points in one circuit) (Pipe, Junction Box, Bend and Ceiling rose should have ISI mark).	135 pts	point			
2	Supply and wiring wall fan point as details in item (1) above including providing 5 amps universal plug socket (MK/ MDS or equivalent) on suitable size metal board with 3 mm hylam sheet instead of ceiling rose.	55 pts	point			

3.	Supply and wiring ceiling fan points as detailed in item (1) above, including supply and fixing step type (5 Step) electronic fan regulator (socket type, MK/ MDS or equivalent) with its own front plate and metal board etc, as required.	15 pts	point			
4	Supply and wiring staircase light points as detailed in item (1) above, upto and including providing two numbers 5amps modular plate switches(MK/ MDS or equivalent) and ceiling rose as required.	2 pts	point			
5	Supply and wiring calling bell point as detailed in item (1) above, using 6 Amps modular plate bell push (MK/ MDS or equivalent), fixing 5 amps ceiling rose and fixing one number 150x100x50 mm M.S board with 3 mm thick hylam sheet front cover etc as required.	1 pt	point			
6	Supply and wiring plugpoints as detailed in item (1) above, upto and including supply and fixing 6 amps modular type universal 3 pin plug socket and 6 amps modular plate switch (MK/ MDS or equivalent) with its own front cover ,metal box etc in independent position.	10 pts	point			
7	Supply and wiring plug points as detailed in item (6) above, in combined position.	20 pts	point			
8	Supply Installation, testing and commissioning of bulk head fitting with 9 watts C.F.L (Crompton CBH9 or equivalent) and giving connection with 16/0.20 mm PVC insulated and sheathed 3 core round flexible copper wire etc as required.	8 nos	each			
9	Supply, Installation, testing and commissioning of 2x11 watt surface mounting type mirror optic luminaires with 2 nos 11 watt CFL and giving connection with 16/0.20 mm PVC insulated and sheathed 3 core round flexible copper wire etc as required.	20 nos	each			

10	Supply and fixing 230 mm (9" sweep) Light duty exhaust fan 230 / 250 V (Crompton/ Usha/ Khaitan) with front guard, including making necessary holes on the wall, making good the damages, fixing using bolt and nut etc. and giving connections with required length of 16/ 0.20 mm PVC insulated and sheathed 3 core round flexible copper wire etc, as required.	8 Nos.	each			
11	Supply and fixing 305mm (12" sweep) medium duty exhaust fan 230 / 250 V (Crompton/ Usha/ Khaitan) with shutter ,including making necessary holes on the wall, making good the damages, fixing using bolt and nut etc. and giving connections with required length of 16/ 0.20 mm PVC insulated and sheathed 3 core round flexible copper wire etc, as required.	1No.	each			
12	Supplying and fixing 16 amps universal socket and one number 16A modular plate switch (MK/ MDS or equivalent) with its own front plate, metal box etc and giving connections.	30 nos	each			
13	Supply & fixing one number SP&N metal plug enclosure with 20 amps 2 pole and earth metal plug with pin and 20 amps SPMCB (C curve) and giving connections (MDS / MerlinGerin/ Seimens / ABB make enclosure & MCB)	30 Nos	each			
14	Supplying and fixing two numbers 5 amps universal socket and two numbers 5 amps flush type SP switches (Anchor) on 150x150x50 mm size metal board with neatly side finished 3 mm thick hylam sheet front cover, and giving connections.	50Sets	each			
15	Supplying and fixing 4 numbers 5 amps universal socket and 4 numbers 5 amps flush type SP switches (Anchor) on 250x200x50 mm size metal board with neatly side finished 3 mm thick hylam sheet front cover, and giving connections.	40 Sets	each			

16	Supplying and fixing 3 numbers 5 amps universal socket, 3 numbers 5 amps flush type SP switches, one number 5/15 amps universal socket and 15 amps flush type S P switch (Anchor) on 250x200x50 mm size metal board with neatly side finished 3 mm thick hylam sheet front cover, and giving connections.	10 Sets	each			
17	Installation, testing and commissioning of prewired 40W fluorescent tube fittings (box type) including supply and fixing 2 numbers 25 x 6mm size flat iron clamps and giving connection with 16/0.20 mm PVC insulated and sheathed 3 core round flexible copper wire etc as required.	20 nos	each			
18	Installation, testing and commissioning of prewired 40W fluorescent tube fittings (box type) with all accessories and tube directly on the wall or on the ceiling using 2 nos. well varnished T.W round blocks,using bolt and nut etc,and giving connection with 16/0.20 mm PVC insulated and sheathed 3 core round flexible copper wire etc.	15 nos	each			
19	Installation, testing and commissioning of 1200 mm sweep Ceiling fan with all accessories and giving connection with required length of 16/0.20 mm PVC insulated and sheathed 3 core round flexible copper wire etc.	15 nos	each			
20	Supply and fixing one number 4 way metal enclosure in recess,after cutting holes on the wall as required.(MDS /ABB / Seimens /Merlin Gerin make)	2 nos	nos			
21	Supply and fixing one number 8 way single phase double covered MCBDB, with neutral link,DIN bar,earth bar etc in recess,after cutting holes on the wall as required.(MDS /ABB / Seimens /Merlin Gerin make DB)	1 no	each			

22	Supply and fixing one number 12 way single phase double covered MCBDB, with neutral link,DIN bar,earth bar etc in recess,after cutting holes on the wall as required.(MDS /ABB / Seimens /Merlin Gerin make DB)	1 no	each			
23	Supply and fixing one number 3 phase 1+3 (4 way) double covered dust and vermin proof MCBDB, inclusive of busbar, neutral link, earth bar, DIN bar etc, in recess after cutting holes, making good the damages of wall, colour washing etc. and giving connections as required. (MDS /ABB / Seimens /Merlin Gerin make DB)	10 nos	set			
24	Supply and fixing one number 3 phase 4 way vertical type double covered dust and vermin proof MCBDB, inclusive of busbar, neutral link, earth bar, DIN bar etc, in recess after cutting holes , making good the damages of wall, colour washing etc. and giving connections as required. (MDS /ABB / Seimens /Merlin Gerin make DB)	7 nos	set			
25	Supply and fixing one number 8 way vertical type double covered dust and vermin proof MCBDB, inclusive of busbar, neutral link, earth bar, DIN bar etc, in recess after cutting holes , making good the damages of wall, colour washing etc. and giving connections as required. (MDS /ABB / Seimens /Merlin Gerin make DB)	1 no	set			
26	Supply and fixing one number 125 A MCCB as incomer and 3 Nos 63 A TPMCB as out going on 3 phase, 4 way vertical type double covered DB suitable for fixing the above (MDS DPX-E-125 A MCCB, MCB & DB or equivalent.) and giving connections as required.	2 Sets	each			
27	Supply and fixing one number 63 A 4 pole ELCB having sensitivity 100/300mA, on existing MCBDB and giving connections as required. (MDS /ABB / Seimens /Merlin Gerin make ELCB)	4nos	each			

28	Supply and fixing one number 32 A 4 pole ELCB having sensitivity 30mA, on existing MCBDB and giving connections as required. (MDS /ABB / Seimens /Merlin Gerin make ELCB)	2nos	each			
29	Supply and fixing one number 40/ 63 A TPN MCB (C curve), on existing MCBDB and giving connections as required. (MDS /ABB / Seimens /Merlin Gerin make MCB)	15 nos	each			
30	Supply and fixing one number 40/63 A TP MCB (C curve), on existing MCBDB and giving connections as required. (MDS /ABB / Seimens /Merlin Gerin make MCB,)	12 nos	each			
31	Supply and fixing one number 16/32 A TP MCB (C curve), on existing MCBDB and giving connections as required. (MDS /ABB / Seimens /Merlin Gerin make MCB,)	2nos	each			
32	Supply and fixing one number 6/10/16 /20 A SP MCB (C curve), on existing MCBDB, and giving connections as required. (MDS /ABB / Seimens /Merlin Gerin make MCB)	156 nos	each			
33	Supply and laying 2 nos. of 2.5sq.mm, PVC insulated single core copper wire (Finolex/Havells) with one number 1.5 sq.mm green coloured PVC insulated single core copper wire (Finolex/Havells) using 20mm rigid PVC black pipe (medium) with specials, conforming to relevent ISS, laying through the roof slab/consealing on the wall, after cutting grooves and fixing the pipe with stapples, filling the grooves with cement mortar etc., as required.	800mtr	mtr			
34	Supply and laying 2 nos. 2.5sq.mm PVC insulated single core copper wire (Finolex /Havells) through the existing PVC pipe.	600 mtr	Mtr			

35	Supply and laying 2 nos. of 4.0sq.mm, PVC insulated single core copper wire (Finolex/ Havells) with one number 1.5 sq.mm green coloured PVC insulated single core copper wire (Finolex/Havells) using 25mm rigid PVC black pipe (medium) with specials, conforming to relevent ISS, laying through the roof slab/consealing on the wall, after cutting grooves and fixing the pipe with stapples, filling the grooves with cement mortar etc., as required.	200 mtr	Mtr			
36	Supply and laying 2 nos. of 4.0 sq.mm, PVC insulated single core copper wire (Finolex/ Havells) with one number 1.50 mm green coloured PVC inuslated copper wire (Finolex/Havells) through the existing PVC pipe	100Mtrs	Mtr			
37	Supply & laying 2 nos. 6.0 sq.mm, PVC insulated single core copper wire (Finolex/ Havells) with one number 2.5.mm green coloured PVC insulated copper wire (Finolex/ Havells) using 20mm rigid PVC black pipe with specials as detailed in item (33) above. and giving connections etc as required.	50 mtr	Mtr			
38	Supply and laying 4 nos. of 6.0 sq.mm, PVC insulated single core copper wire (Finolex/ Havells) with 2 numbers 2.5.mm green coloured PVC insulated copper wire (Finolex/ Havells) using 25mm rigid PVC black pipe with specials as detailed in item (33) above. and giving connections etc as required.	150 Mtrs	Mtr			
39	Supply and laying 2 nos 10 sq.mm PVC insulated single core copper wire and one number 4 sq.mm PVC insualted single core copper wire (Finolex/ Havells) through 25mm PVC pipe as detailed in item (33) above.	10 Mtrs	Mtr			
40	Supply and laying 4 nos 10 sq.mm PVC insulated single core copper wire and 2 numbers 4 sq.mm PVC insualted single core copper wire (Finolex/ Havells) through 32mm PVC pipe as detailed in item (33) above.	50 Mtrs.	Mtr			

41	Supply and laying 4 nos 16 sq.mm PVC insulated single core copper wire and 2 numbers 6 sq.mm PVC insulated single core copper wire (Finolex/ Havells) through 38 mm PVC pipe as detailed in item (33) above.	40 Mtrs.	Mtr			
42	Supply and laying one number 4x25 sq.mm heavy duty PVC insulated and sheathed armoured aluminium power cable, 1.1 KV grade, conductors of best conductivity aluminium conforming to relevant ISS, with 2 numbers 10 SWG copper along with the cable, clamping on the wall using black painted heavy gauge metal clamps spacing not to exceed 50 cms and making good the damages, giving connections etc., as required. (Gloster/ Havells/Rallison /SARK U.G Cables)	20 mtrs	Mtr			
43	Supply and laying one number 3 1/2 x 70 sq.mm heavy duty PVC insulated and sheathed armoured aluminium power cable, 1.1 KV grade, conductors of best conductivity aluminium conforming to relevant ISS, with 2 numbers 8 SWG copper along with the cable, clamping on the wall using black painted heavy gauge metal clamps spacing not to exceed 50 cms and making good the damages, giving connections etc., as required. (Gloster/ Havells/Rallison /SARK U.G Cables).	15 mtrs	Mtr			
44	Supply and laying one number 3 1/2x240 sq.mm heavy duty PVC insulated and sheathed armoured aluminium power cable, 1.1 KV grade, conductors of best conductivity aluminium conforming to relevant ISS, in ground, including excavation of trench of size 35x75 cms, providing protective covering with country burnt bricks, laid breadthwise, refilling the trenches, making good the damages, giving connections etc, as required. (Gloster/ Havells/Rallison /SARK U.G Cables).	275 Mtrs.				

45	Supply and providing cable gland with copper earthing clips suitable for the following sizes of armoured aluminium power cables.					
(a)	3 1/2 x 240 sq.mm	2 Nos	each			
(b)	3 1/2 x 70 sq:mm	4 Nos.	each			
(c)	4x 25 sq:mm	4nos	each			
46	Supply and providing superior quality ring type aluminium sockets suitable for following sizes of aluminium cables including crimping etc. as required.					
(a)	240 sq.mm	6 Nos	each			
(b)	120 sq.mm	2 Nos	each			
(c)	70 sq:mm	6 Nos	each			
(d)	35 sq:mm	2 Nos	each			
(e)	25 sq.mm	10 Nos	each			
47	Supply and providing superior quality tubular type aluminium sockets suitable for 25 sq mm Al. cable and including crimping etc. as required.	20 nos				

48	Supply, Installation, Testing and commissioning of a cubical type floor mounting switch board made from 30x30x6 mm size angle iron and 1.63 mm M.S sheet, spray painted over a coat of primer, with one number 250 Amps TPN SFU (Siemens or equivalent) with 150 Amps HRC fuses, one number 250 Amps, 415 V, 50 Hz, TPN busbar chamber with detachable front cover, 32x6 mm copper bus bars, sleeved with heat shrink sleeves, slidelock fuse units, coloured phase indication lamps and switches, seperate cable entry / wire way boxes on both sides of switches with detachable front cover, providing rubber beedings, 4 numbers 125 Amps TPN SFU with HRC fuses, 3 Nos 63 Amps TPN SFU with HRC fuses, 3 nos 32 Amps TPN SFU with HRC fuses (Siemens or equivalent) and a dummy space for a TPN SFU, earthing all the switches and metal parts with 20 x 3 mm copper strip, giving rigid connections from 250 ampsTPN SFU to busbar with 32x6 mm copper bars, bus bar to sub switches with 25 x 6 mm and 20 x 3 mm copper bar, sleeved with heat shrink sleeves, giving necessary connections, marking the identification of switches with white paint , providing danger notice board etc,as required.The minimum clearance from the bottom switch to the ground level should be 60 cms. The unit as a whole should be dust and vermin proof.	1 set	each			
49	Supply and providing plate earthing as per IS: 3043 with 600x600x6.3mm G.I earth plate, with required length of 20mm dia class 'B' G.I pipe, extending the middle of the plate and clamping to the plate with minimum 2 nos. G.I. Clamps of size 25x3 mm flat with 25x6mm G.I bolt and nut including drilling necessary holes, fixing G.I strip with clamps, bolt and nut as test joint to the watering pipe, filling charcoal around the plate at a distance of 15cms, providing G.I funnel with welded mesh, brick work masonry at the top plastering inside and top of the manhole, fixing cast iron gulley trap, with C.I covering etc. as required.	2 sets	each			

50	Supply and providing 25 x 6mm G.I. Flat from earth plate to the test joint with 3 nos. 25x10mm G.I bolt and nut.	8 Mtrs.	Mtr			
51	Supply and providing 25x3 mm copper strip , 0.6 mtr below the ground level for main earthing and giving connections, as required.	35 Mtr.	Mtr			
52	Supply and providing ring type copper sockets suitable for the following cables, including crimping etc. as required.					
(a)	10. Sq.mm	50 nos	each			
(b)	6 sq.mm	100Nos	each			
(c)	4 sq.mm	50 Nos	each			
(d)	2.5 sq.mm	200 Nos	each			
(e)	1.5 sq.mm	150 Nos	each			
53	Supply and providing hexagonal headed brass nut and bolt and fixing on the wireway box/ earth busbar etc. as required.					
(a)	12 x 3 mm	150 Nos	each			
(b)	25 x 6 mm	25 Nos	each			
54	Supply and providing one number DCP type fire estinguisher (5 Kg capacity) with hose clamps etc.	1 No.	each			
55	Supply and providing one number 2 mtr x 1 mtr x 12mm size, electrically graded, rubber mat (IS 5424/1969) in front of the main switch board.	1 No.	each			
56	Purchase of 1200 mm sweep A.C ceiling fan with double ball bearing (Crompton/ Usha /Ortem/ Khaitan) with all accessories at DGS&D rates .	15 Nos.	each			

57	Purchase of 400 mm sweep A.C wall fan with 3 speed positions(Crompton/ Usha / Khaitan) with all accessories (approved models).	55 nos	each			
58	Purchase of 4' 40 watt fluorescent tube fittings (Miroлта) with end caps (Philips/ Bajaj Crompton) complete with all accessories and tube	35 nos	each			
59	Purchase of fixing recessed mounting type 2X 40 watt mirror optic luminaire with anodised aluminium / steel reflectors with, cross louvers, etc complete with 40 watt copper wound ballasts, starters, capacitor etc, including tubes. (Philips/ Bajaj / Crompton)	60 nos	each			
60	Inspection fee for getting safety certificate from Electrical inspectorate	L.S.	each			
	TOTAL (Rupees only)					

QUOTED RATE OF THE CONTRACTOR

I / We agree to undertake to execute the work as per the rate quoted above for different items.....
..... (here enter the amount in figures and words).

Signature of Contractor :.....
Name of Contractor :.....
Registration No :.....

No. of corrections :
No. of overwriting :

Officer opening the Tender

Executive Engineer

SCHEDULE –B

Name of Work : Construction of Computer Centre
Time of completion : 14 Months
Rate of progress : Refer Bid Document

CONTRACTOR

EXECUTIVE ENGINEER

Date: