INDIAN INSTITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY, SHIBPUR HOWRAH – 711 103, WEST BENGAL

NOTICE INVITING TENDER

Advt. no.: SE/D(AA)/16/52 dated 28.09.2016

NAME OF WORK "Electrical Installation work of Network Clients

Laboratory for existing PG course at Ramanujam Central Library of IIEST, Shibpur, Howrah-

711103.."

PLACE OF WORK Indian Institute of Engineering Science & Technology,

Shibpur, Howrah-711 103.

PERIOD OF COMPLETION 20 (Twenty) days.

COST OF TENDER PAPER: Rs. 500/- (Rupees five hundred only)

BID SECURITY Rs 7,000/- (Rupees seven thousand only).

LAST DATE AND TIME Date: 05/10/2016 Time: 13.00 Hours. FOR RECEIPT OF BIDS Place: Office of the University Engineer

TIME AND DATE OF
OPENING OF BIDS

Date: 05/10/2016 Time: 14.00 Hours

PLACE OF OPENING OF BIDS Office of the University Engineer

OFFICER INVITING BIDS Dean, IPM,

Indian Institute of Engineering Science & Technology,

Shibpur, Howrah-711103

TENDER DOCUMENT

Advt. no.: SE/D(AA)/16/52 dated 28.09.2016

For the work of: - "Electrical Installation work of Network Clients Laboratory for existing PG course at Ramanujam Central Library of IIEST, Shibpur, Howrah-711103."

Part – I	Deleted
Part – II	Detailed Bill of Quantities.
Part – III	Instruction to bidders (in two sections)
Part – IV	Draft Agreement Form.

B.O.Q

S.L.	Description of work	Unit	Qty.	Unit Rate (In Rs)	Amount (In Rs)
No.				(III K3)	(III KS)
1	Supply & Fixing 240 V, 3 nos. 6A, & 1 no. 20A plug socket with separate 3 nos. 6 A & 1 no. 20A Piano key type switch with indicator & 16A kit-kat flush type fuse (Brand approved by EIC) on sheet metal switch board embedded in wall incl. S & F 240x200x65mm MS (16SWG) switch board and bakelite/perspex top cover of 3mm thick by Brass screws after making housing for switch by cutting bakelite/perspex cover and making necessary connections as required	Each	48		
2	Supply & Fixing 240 V, 6A, plug socket with separate 6 A Piano key type switch (Brand approved by EIC) on sheet metal switch board embedded in wall incl. S & F 150x100x65mm MS (16SWG) switch board and bakelite / perspex top cover of 3mm thick by Brass screws after making housing for switch by cutting bakelite/perspex cover and making necessary connections as required.	Each	4		
3	Cutting Channel of size (31 mm x 31 mm) on masonry wall by Electric operated cutting machine incl. supplying & fixing heavy gauge 13 mm, 3 mm thick Polythene pipe by means of anchoring chemical (Hilti/Sika) and GI 'U' hooks of 8 SWG incl. supplying and drawing 18 SWG GI wire as Fish wire and mending good damages to	R.M	1100		
4	Supplying and Drawing 1.1 KV single core stranded 'FR' PVC insulated & unsheathed single core stranded copper wire (Brand approved by EIC) of 3 x 36/0.3 (2.5 sqmm) in the prelaid polythene pipe and by the prelaid GI fish wire and making necy. connection as required	R.M	800		
5	Supplying and Drawing 1.1 KV single core stranded 'FR' PVC insulated & unsheathed single core stranded copper wire (Brand approved by EIC) of 3 x 56/0.3 (4 sqmm) in the prelaid polythene pipe and by the prelaid GI fish wire and making necy. connection as required	R.M	175		
6	Supplying and Drawing 1.1 KV single core stranded 'FR' PVC insulated & unsheathed single core stranded copper wire (Brand approved by EIC) of 3 x 22/0.3 (1.5 sqmm) sizes in the prelaid polythene pipe and by the prelaid GI fish wire and making necy. connection as required	R.M	125		
7	Laying of cable upto 3/4 core 25 sqmm on wall/surface incl. S & FMS saddles with earthing attachment in 10 SWG GI (Hot Dip) Wire, making holes etc. as necy. mending good damages and painting	R.M	110		
8	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below :For 4 core upto 25 sqmm	Each	8		
9	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials :4 core 25 sqmm cable.	Set.	8		
10	Finishing of the PVC insulated wire ends by socketting with pin/ring type copper sockets and insulated tapes etc., including supplying sockets, tape for 2.5sqmm	Set.	120		
11	Supply only XLPE (1.1 KV grade) Armoured Al Cable of size 4 core 25 sq mm.	R.M	110		
12	Supplying and fixing double door 4 way Vertical TPN MCB Distribution board (Legrand) for MCCB(Legrand) incomer with IP-42/43 protection, on angle iron frame on wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment consisting of the flowing materials as below. a. 415 V Four Pole 80 Amps MCCB of Breaking capacity 25kA/35kA with fixed thermal and fixed magnetic / adjustable thermal and fixed magnetic setting b. Outgoing 4 nos 63 Amps TPN MCB 415 V MCB of Breaking capacity 10kA & C characteristics.	Set.	1		

Part-II

B.O.Q Part-II

	quantities for the work of: "Electrical Installation work of Netwo	rk Client	ts Labor	atory for exist	ting PG course
at Rai	nanujam Central Library of IIEST, Shibpur, Howrah-711103"				
S.L. No.	Description of work	Unit	Qty.	Unit Rate (In Rs)	Amount (In Rs)
13	Supplying and fixing double door 8 way Horizontal TPN MCB Distribution board(Legrand) with IP-42/43 protection, concealed in wall after cutting the wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment consisting of the flowing materials as below. a. 415 V 63 Amps TPN MCB(Legrand) of Breaking capacity 10kA & C characteristics as incommer. b. 240 V 6-32 Amps MCB(Legrand) of Breaking capacity 10kA & C characteristics-24 Nos.	Set.	3		
14	Supplying and fixing double door Horizontal TPN MCB Distribution board (Legrand) with IP-42/43 protection, concealed in wall after cutting the wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment consisting of the flowing materials as below. a. 415 V 63 Amps TPN MCB(Legrand) of Breaking capacity 10kA & C characteristics as incommer. b. 240 V 6-32 Amps MCB(Legrand) of Breaking capacity 10kA & C characteristics-12 Nos.	Set.	1		
15	Supply & Fixing of perforated GI cable tray with perforation not more than 17.5% suspended from ceiling incl. S&F GI connector, 6mm dia MS suspender, bolts & nuts, steel fastener etc. as required of the following size. Incl. Al painting of MS support.With out angle iron support of 100x 50 x1.25mm (18SWG)	Mtr.	15		
16	Earthing with 50 mm dia GI pipe 3.64 mm thick x 3.04 Mts. long and 1 x 4 SWG GI (Hot Dip) wire (4 Mts. long), 13 mm dia x 80 mm long GI bolts, double nuts, double washers incl. S & F 15 mm dia GI pipe protection (1 Mts. long) to be filled with bitumen partly under the ground level and partly above ground level driven to an average depth of 3.65 Mts. below the ground level by ISI-Medium GI pipe	Each	2		
17	Connecting the equipments body to earth busbar including S&F 20 mm x 3 mm galvanised (Hot Dip) MS flat on wall/floor with GI saddles as required and connection to equipments incl. drilling holes, with bolts, nuts, washers etc.	Mtr.	50		
18	Supplying & fixing earth busbar of galvanized (Hot Dip) MS flat 25 mm x 6 mm on wall having clearance of 6 mm from wall including providing drilled holes on the busbar complete with GI bolts, nuts, washers, spacing insulators etc. as required	Mtr.	5		
19	Supply and fixing of North West Heavy duty type Starter & socket Unit without Plug top cat No-PU4MHBT for A.C.Load on MS box conceled in wall.	Each.	6		
20	M.S. structural works in columns, beams etc. with simple rolled structural members (e.g. joists, angle, channel sections conforming to IS: 226, IS: 808 & SP (6)- 1964 connected to one another with bracket, gussets, cleats as per design, direction of	K.G	300		
	TOTAL COS	Γ (In Rs)			

PART-III: Instructions to Bidders

SECTION - A

1. Scope of Works

The Dean, IPM, Indian Institute of Engineering Science & Technology, Shibpur, Howrah-711103 invites item rate tender for the works as detailed in the table given below

Tender No	Brief Description of the Works	Period of Completion
	"Electrical Installation work of Network Clients Laboratory for existing PG course at Ramanujam Central Library of IIEST, Shibpur, Howrah-711103."	•

The successful bidder will be expected to complete the works by the intended completion date specified above.

- **Qualification of the bidder**: The bidder shall provide qualification information which shall include:-
 - (a) Total monetary value of construction works performed for each year of the last 3 years:
 - (b) (i) Copy of the up to date Income Tax return submitted to the concerned I.T.O
 - (ii) Copy of PAN Card & VAT Registration Certificate
 - (c) Valid trade licence.
 - (d) Report on his financial standing; and
 - (e) Details of any litigation, current or during the last 3 years in which the bidder is involved, the parties concerned and disputed amount in each case.

3. To qualify for award of the contract the bidder: -

- (i) should possess valid electrical license for executing building electrification works
- (ii) should have satisfactorily completed as a prime contractor at least one similar work of value not less than Rs 2,50,000.00 (Rupees two lakks fifty five thousand only) in the last three years.

4. Bid Price

- a) The contract shall be for the whole works as described in the Bill of Quantities, drawings and technical specifications. Corrections, if any, shall be made by crossing out, initialling, dating and rewriting.
- b) Item rates to be quoted against each item of the work in the bill of quantities and the total amount of the priced BOQ shall be the contract price. In the event of arithmetical error committed in working out the amount by the bidder, the items rates and not the amount will govern.
- c) All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price.
- d) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- e) The rates should be quoted in Indian Rupees only.

5. Submission of Quotations

- 5.1 The bidder is advised to visit the site of works at his own expense and obtain all information that may be necessary for preparing the quotation.
- **5.2** Each bidder shall submit only one quotation.
- 5.3 The quotation submitted by the bidder shall comprise the following:-
 - (a) Quotation in the format given in Section **B**.
 - (b) Priced Bill of Quantities duly signed by the bidder; and
 - (c) Qualification information form given in Section B duly completed.
 - (d) A **DD** of Rs. 500/- (Rupees five hundred only) in favour of "Registrar, IIEST, Shibpur" payable at Kolkata has to be submitted along with the tender as a cost of tender document.
 - (e) Bid security of Rs 7,000/- (Rupees seven thousand only) in the form of Bank Draft drawn on any nationalised bank in favour of "Registrar, IIEST, Shibpur" account payable at Kolkata.

5.3.1 Bid Security:

a) The Bid Security shall have to be valid for a period not less than 60 days after the deadline date specified for submission.

- b) The Bid Security of the unsuccessful bidders will be returned within 28 days of the end of bid validity period specified in Clause no 6
- c) The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.
- 5.4 The bidder shall seal the quotation in an envelope addressed to "Dean, IPM, Indian Institute of Engineering Science & Technology, Shibpur, Howrah-711103".

 The envelope will also bear the following identification: -

Quotation for: "Electrical Installation work of Network Clients Laboratory for existing PG course at Ramanujam Central Library of IIEST, Shibpur, Howrah-711103."

Do not open before	hours dated	 (time and	date of
quotation opening).			

- Quotations must be received in the office of *The University Engineer*, *Indian Institute of Engineering Science & Technology, Shibpur, Howrah-711103* latest by the specified time and date. If the specified date is declared a holiday, quotations shall be received up to the appointed time on the next working day.
- 5.6 Any quotation received by the University Engineer, *Indian Institute of Engineering Science & Technology, Shibpur, Howrah-711103* after the deadline for submission of quotations will be rejected and returned unopened to the bidder.

6. Validity of Quotation

Quotation shall remain valid for a period not less than 60 days after the deadline date specified for submission.

7. Opening of Quotations

Quotations will be opened in the presence of Bidders or their representatives who choose to attend at the specified time and date in the office of "University Engineer, Indian Institute of Engineering Science & Technology, Shibpur, Howrah-711103"

8. Information relating to evaluation of quotations and recommendations for the award of contract shall not be disclosed to bidders or any other persons not officially concerned with the process until the award to the successful bidder is announced.

9. Evaluation of Quotations

The Employer will evaluate and compare the quotations determined to be substantially responsive i.e. which

- (a) meet the qualification criteria specified in clause 3 above;
- (b) contains the bid security as specified in clause 5.3 above;
- (c) are properly signed; and
- (d) conform to the terms and conditions, specifications and drawings without material deviations.

10. Award of contract

The Employer will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price and who meets the specified qualification criteria and provided the bid security.

- 10.1 Notwithstanding the above, the Employer reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- 10.2 The bidder whose bid is accepted will be notified of the award of contract by the Employer prior to expiration of the quotation validity period.

11. Performance Security

Within 15 days of receiving letter of acceptance, the successful bidder shall deliver to the *Registrar, Indian Institute of Engineering Science & Technology, Shibpur, Howrah-711103*, the performance security either a bank guarantee or a bank draft drawn on any nationalized bank in favour of "*The Registrar, IIEST, Shibpur*" account payable at Kolkata for an amount equivalent of 3 % of the contract price. The Performance Security shall be valid until a date 28 days from the intended date of Completion in the case of a Bank Guarantee. On receipt of the 3 % performance security and signing of the Agreement the Employer will discharge the Bid Security.

12 Security Deposit:

The employer shall retain 7% from each payment due to the contractor as security deposit which shall be released when the Period of Maintenance has passed and Engineer has certified that all defects notified by the Engineer to the Contractor before the end of this period have been corrected.

13 Period of maintenance

The "Period of Maintenance" for the work is twenty four (24) month from the date of taking over possession of the completed works or two full monsoon season whichever occurs later. During the period of maintenance, the contractor will be responsible for rectifying any defects in construction free of cost to the Employer.

14. Purchase of all materials including wire, switch, cable etc as per the specifications (ISI certification marked goods wherever available) shall be the responsibility of the contractor.

SECTION - B

- 1. Format for Qualification Information.
- 2. Format for Submission of Quotation.
- 3. Format of Letter of Acceptance.

QUALIFICATION INFORMATION

l	For Individual Bidders	
l .1	Principal place of business:	
	Power of attorney of signatory of Quo [Attach copy]	otation.
1.2	Total value of Similar work performed in the last three years (in Rs. Lakhs)	2013 – 2014 2014 – 2015 2015 – 2016

1.3 Work performed as prime supplier (in the same name) on works of a similar nature over the last three years.

Project Name	Name of Employer	Description of work	Contract No.	Value of contract (Rs.Lakhs)	Date of issue of work order	Stipulated period of comple- tion	Actual date of completion	Remarks explaining reasons for delay and work completed

Existing commitments and on-going works:

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

^{*} Enclose a certificate from Engineer concerned.

1.4 Proposed subcontracts and firms involved.

Sections of the works	Value of Sub- contract	Sub-contractor (name & address)	Experience in similar work
*	*	*	*
	*	*	
*	*	*	*
	*	*	
*	*	*	*
	*	*	

- **1.5** Evidence of access to financial resources to meet the requirements of working capital: cash in hand, lines of credit, etc. List them below and attach copies of support documents.
- 1.6 Name, address, and telephone, telex, and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.
- **1.7** Information on litigation history in which the Bidder is involved.

Other party(ies)	Employer	Cause of dispute	Amount involved	Remarks showing present status

QUOTATION

Subject: "Electrical Installation work of Network Clients Laboratory for existing I course at Ramanujam Central Library of IIEST, Shibpur, Howrah-711103."	PG
Reference: Letter No / Tender No	
I/We offer to execute the Works described in the Bill of Quantities in Part II of the Tend Document in your letter / tender no referred to above in accordance with the conditions the contract enclosed therewith and at the item rates of the priced BOQ, i.e. for a to Contract Price of	of
Rs	** **
This quotation and your written acceptance of it shall constitute a binding contribetween us. We understand that you are not bound to accept the lowest or any quotation you receive.	
We hereby certify that we have taken steps to ensure that no person acting for us or on obehalf will engage in bribery.	our
We hereby confirm that this quotation is valid for 60 days as required in Clause 6 of Instructions to Bidders.	the
Yours faithfully,	
Authorized Signature : Date:	
Name & Title of Signatory :	
Name of Bidder with Seal :	
Address :	

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

Note: the Bidder shall attach duly priced and duly signed Bill of Quantities in Part-II of Tender Document

LETTER OF ACCEPTANCE CUM NOTICE TO PROCEED WITH THE WORK (LETTERHEAD OF THE EMPLOYER)

	Dated :
To:	
Dear Sirs,	
	ur Quotation dated for
the contract price of Rupeesin words and figures], is hereby accepted	[amoun
Rs (equivalent receipt of the letter. The Performance draft in favour of The Registrar, IIEST a date 28 days from the intended date of	furnish performance security for an amount of at to 3% of the contract price) within 15 days of the Security in the form of Bank guarantee or a Bank Shibpur payable at KOLKATA shall be valid until Completion i.e. up to
later than	he agreement form and proceed with the work no under the instructions of the Engineer ensure its completion within the contract period.
With the issuance of this accept Security, contract for the above said work.	otance letter and your furnishing the Performance rk stands concluded.
Yours faithfully,	
Authorized Signature	
Name and title of Signatory	

PART-IV Draft Agreement form

ARTICLES OF AGREEMENT

1.	This	deed of agreement is made in the form of agreement on day month 2016, between <i>The Dean, IPM, Indian</i>					
	(Empland _	Institute of Engineering Science and Technology, Shibpur, Howrah-711103 (Employer) or his authorized representative (hereinafter referred to as the first party) and (Name of the contractor), S/O					
	"Elec at Ra	the control of the co					
2.	Co	est of the Contract					
		e total cost of the works (hereinafter referred to as the "total cost") is Rsreflected in Annexure - 1.					
3	Pa	yments under this contract:					
		yments to the second party for the construction work will be released by the first rty in the following manner:					
	3.1	Contractor will raise bills in an interval of not less than 15 days along with details of measurement of the executed quantities of items of works in the Bill of Quantities, in a tabulated form as approved by the Engineer, nominated by the first party (who is responsible for supervising the contractor, administering the contract, certifying the payments due to the contractor, issuing and valuing variations to the contract, awarding extensions of time etc.)					
	3.2	The Engineer shall check the Contractor's bill and within 14 days certify the amount to be paid to the Contractor					
	3.3	The value of the work executed shall be determined by the Engineer					
	3.4	The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.					
	3.5	The Engineer may exclude any item certified in a previous bill or reduce the proportion of any item previously certified in any bill in the light of later information.					

4. Notices by Contractor to Engineer

The second party will issue notice to the first party or the Engineer to visit the site and record the measurement of the quantity of the items of works completed for raising the bill.

5. Completion time

The works should be completed in 20 (twenty) days from the date of notice to proceed with the work. In exceptional circumstances, the time period stated in this clause may be extended in writing by mutual consent of both the parties.

- 6. If any of the compensation events mentioned below would prevent the work being completed by the intended completion date, the first party will decide on the intended completion date being extended by a suitable period:
 - a) The first party does not give access to the site or a part thereof by the agreed period.
 - b) The first party orders a delay
 - c) Payments due to the second party are delayed without reason.
 - d) Ground conditions are substantially more adverse than could reasonably have been assumed before issue of letter of acceptance and from information provided to second party or from visual inspection of the site.
- 7. Any willful delay on the part of the second party in completing the construction within the stipulated period will render him liable to pay liquidated damages. @ Rs. *_____ per day which will be deducted from payments due to him. The first party may cancel the contract and take recourse to such other action as deemed appropriate once the total amount of liquidated damages exceeds 2 % of the contract amount.

(Note: The amount of liquidated damages per day should be determined at 0.05 % of the contract value of the works and indicated here).

8. Duties and responsibilities of the first party

8.1 The first party shall be responsible for providing regular and frequent supervision and guidance to the second party for carrying out the works as per specifications. This will include written guidelines and regular site visit of the authorized

personnel of the first party, for checking quality of material and construction to ensure that it is as per the norms.

8.2 Deleted

- 8.3 The Engineer or such other person as may be authorized by the first party shall hold meeting where the second party or his representative at site will submit the latest information including progress report and difficulties if any, in the execution of the work. The whole team may jointly inspect the site on a particular day to take stock of activities.
- 8.4 The Engineer shall record his observations/instructions at the time of his site visit in a site register maintained by the second party. The second party will carry out the instructions and promptly rectify any deviations pointed out by the engineer. If the deviations are not rectified, within the time specified in the Engineer's notice, the first party as well as the engineer nominated by it, may instruct stoppage or suspension of the construction. It shall thereupon be open to the first party or the engineer to have the deviations rectified at the cost of the second party.

9. Duties and responsibilities of the second party

- **9.1** The second party shall:
 - a) take up the works and arrange for its completion within the time period stipulated in clause 5;
 - b) employ suitable skilled persons to carry out the works;
 - c) regularly supervise and monitor the progress of work;
 - d) abide by the technical suggestions / direction of supervisory personnel including engineers etc. regarding building construction;
 - e) be responsible for bringing any discrepancy to the notice of the representative of the first party and seek necessary clarification:
 - f) ensure that the work is carried out in accordance with specifications, drawings and within the total of the contract amount without any cost escalation;
 - g) keep the first party informed about the progress of work;
 - h) be responsible for all security and watch and ward arrangements at site till handing over of the building to the first party; and
 - i) maintain necessary insurance against loss of materials/cash, etc. or workman disability compensation claims of the personnel deployed on the works as well as third party claims.

- j) pay all duties, taxes and other levies payable by construction agencies as per law under the contract (First party will effect deduction from running bills in respect of such taxes as may be imposed under the law).
- k) clear the site on completion of work.

10. Variations / Extra Items

The works shall be carried out by the second party in accordance with the approved drawings and specifications. However, if, on account of site conditions or any other factors, variations are considered necessary, the following procedure shall be followed:-

- a) The second party shall provide the Engineer with a quotation 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 before the Variation is ordered.
- b) If the quotation given by the second party is unreasonable, 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.
- c) The second party shall not be entitled to additional payment for costs, which could have been avoided by giving early warning.

11. Securities

- a) The Performance Security 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. The Performance Security shall be valid until a date 28 days from the intended date of Completion in the case of a Bank Guarantee.
- b) The employer shall retain 7% from each payment due to the contractor as security deposit which shall be released when the Period of Maintenance has passed and Engineer has certified that all defects notified by the Engineer to the Contractor before the end of this period have been corrected.

12. Termination

12.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.

- 12.2 Fundamental breaches of Contract include, but shall not be limited to the following:
 - (a) the contractor stops work for 07 days and the stoppage has not been authorized by the Engineer;
 - (b) the Contractor has become bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (c) 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;
 - (d) the Contractor does not maintain a security which is required;
- 12.3 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 12.4 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.

13. **Payment upon Termination**

- 13.1 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.
- 13.2 If the Contract is terminated at the Employer's convenience, 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.

14. Dispute settlement

If over the works, any dispute arises between the two parties, relating to any aspects of this Agreement, the parties shall first attempt to settle the dispute through mutual and amicable consultation.

In the event of agreement not being reached, the matter will be referred for arbitration by a Sole Arbitrator not below the level of retired Superintending Engineer, PWD to be appointed by the first party. The Arbitration will be

conducted in accordance with the Arbitration and Conciliation Act, 1996. The decision of the Arbitrator shall be final and binding on both the parties.

15. Period of maintenance

The "Period of Maintenance" for the work is twenty four (24) month from the date of taking over possession of the completed works or two full monsoon season whichever occurs later. During the period of maintenance, the contractor will be responsible for rectifying any defects in construction free of cost to the Employer.

Annexure I

BILL OF QUANTITIES

Sl.No.	Description of	Estimated Cost				
	Work	Qty.	Unit	Rate in figure (Rs)	Rate in Words	Amount (Rs.)

	Gross Total Cost:	Ks
	e the works described in the Bill of Quanti f the contract as per the quoted rates, i.e., for	
Rs amount in words).	(amount in figures) (Rs	

Signature of Contractor