



## TENDER DOCUMENT

**INTERNAL/ EXTERNAL ELECTRIFICATION, COMPUTER  
NETWORKING AND AIR-CONDITIONING WORKS FOR  
EXTENSION OF ACADEMIC BUILDING BLOCK-1 TO  
FACILITATE THE DEPARTMENTS OF MINING, INDUSTRIAL  
AND METALLURGY ENGINEERING, MUET, JAMSHORO**

FROM  
EXECUTIVE ENGINEER

**DEPUTY DIRECTOR  
(Procurement)****“SAY NO TO CORRUPTION”****No. & Dated: DD(Proc.)/MUET/JAM/115, 21-05-2018****NOTICE INVITING TENDERS**

All the interested Contractors / Firms / Parties / Suppliers, Manufacturers and Sole Distributors meeting eligibility criteria, viz. having registration with Federal Board of Revenue (FBR) for Income Tax, Sales Tax in case of procurement of goods, registration with the Sindh Revenue Board in case of procurement of Works and Services and registration with Pakistan Engineering Council as the case may be and not black listed in any procuring agency or authority, are invited to participate in full / item rate tender for the following works:

S#	Name of Work	Estimated Cost	Tender Fee	Completion Time	Earnest Money	Date of Purchase	Date of Submission of Bids	Purchase From
1.	Repairing & Maintenance of Lavatory Blocks of Shah Abdul Latif Hostel of MUET, Jamshoro.	1.194 (M)	3,000	03 Months	5%	24-05-2018 To 11-06-2018	12-06-2018 upto 10.30 A.M	Executive Engineer (Maintenance)
2.	Procurement of Equipment for Textile Engineering Department Under the Industrial Linkage Program (ILP) at MUET, Jamshoro. (Re-invited).	1.950 (M)	3,000	04 Months	5%	24-05-2018 To 11-06-2018	12-06-2018 upto 11.00 A.M	Deputy Director (Procurement)
3.	Purchase of Smart ID Card Printer's Consumables and Lanyards with Card Holders.	3.031 (M)	3,000	01 Month	5%	24-05-2018 To 11-06-2018	12-06-2018 upto 11.00 A.M	Deputy Director (Procurement)
4.	Internal & External Electrification, Computer Networking and Air-Conditioning Works of Mehran University Science & Technology Park, MUET, Jamshoro.	7.034 (M)	3,000	12 Months	5%	24-05-2018 To 11-06-2018	12-06-2018 upto 12.00 Noon	Executive Engineer (Development)
5.	Internal & External Electrification, Computer Networking and Air-Conditioning Works for Extension of Academic Building Block-01 to Facilitate the Department of Mining, Industrial and Metallurgy Engineering, MUET, Jamshoro.	10.795 (M)	3,000	12 Months	5%	24-05-2018 To 11-06-2018	12-06-2018 upto 12.00 Noon	Executive Engineer (Development)
6.	Internal & External Electrification, Computer Networking and Air-Conditioning Works for Extension of Academic Building Block-02 to Facilitate the Institute of P&NG Engineering, Electronics Engineering & Computer Engineering Departments, MUET, Jamshoro.	6.965 (M)	3,000	12 Months	5%	24-05-2018 To 11-06-2018	12-06-2018 upto 12.00 Noon	Executive Engineer (Development)

The terms and conditions are given as under:-

1. The tender documents can be had from above office or can be downloaded from SPPRA website i.e. [www.pprasindh.gov.pk](http://www.pprasindh.gov.pk) and University website [www.muet.edu.pk/tenders-notices](http://www.muet.edu.pk/tenders-notices) on the payment noted above (non-refundable) on any working day except the day of opening of tenders. The sealed tenders on prescribed proforma along with earnest money mentioned above of total bid in the form of Pay Order for S.No. 01 will be opened on the 12-06-2018 @ 11.00 (A.M), for S.No. 02 to 03 @ 11.30 (A.M) and for S.No. 04 to 06 @ 12.30 (P.M) in respective offices, in presence of the Contractors / Suppliers / representatives, who so ever will be present at that time. In case of any unforeseen situation resulting in closure of office on the date of opening or if Government declares Holiday the tender shall be submitted / opened on the next working day at the same time & venue. Any Conditional or un-accompanied of the earnest money, tender will not be considered in the competition.
2. The Method of Procurement is Single Stage - One Envelope Procedure

3. The Bidders should have atleast 03 years for S.No: 01 to 03 successful experience and 10 Years for S.No: 04 to 06 successful experience of same service of any university or large organization.
4. For S.No. 04 to 06 Experience of works worth more than or equal to 07 Million are necessary and hence copies of completion certificates and work orders be submitted for verification.
5. The Bidders should register with tax paying agencies which would be verified by concerned agencies.
6. The Bidders should have the valid PEC license with electric field (for S.No: 04 to 06).
7. The Bidders should have the Regional Electric Inspector license (for S.No: 04 to 06).
8. The Bidders should have atleast Rs. 1,000,000.00 annual turnover for S.No: 01 to 03 and 10.00 (M) annual turnover for S.No: 04 to 06 of 03 years which would be verified by bank statement.

***The Procuring Agency reserves the right to reject any or all bids subject to relevant provisions of SPP Rules, 2010 (Amended 2017) and may cancel the bidding process at any time prior to the acceptance of a bid or proposal under Rule-25” of said Rules.***

**Deputy Director (Procurement),**  
Mehran University of Engg. & Tech. Jamshoro,  
Phone No. 022-2109010 Fax: 022-2771403  
Email: nadeem.soomro@admin.muet.edu.pk

# General Conditions

## General Provisions

### 1.1 Definitions

In the Conditions of Contract (“these Conditions”), which include Particular Conditions, Parts A and B, and these General Conditions, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

- A. **“Employer”** means the Mehran University solely represented by the vice Chancellor of Mehran University.
- B. **“Contractor”** means the persons or, firm or company, whose tender has been accepted by the Employer and includes Contractors representative, successors and permitted assignees.
- C. **“Consultant”** means Naqvi & Siddiqui who prepared the Drawings, design and these documents, will provide consulting services to the Employer during construction.
- D. **“Executive Engineer (Dev.)”** means the authorized Officer of the University, who possess the role of Controlling and Co-ordination between University, Consultants and Contractor.
- E. **“Works”** means all the works and things to be executed, supplied or done in accordance with the contract.
- F. **“University”**: means Mehran University of Engineering & Technology, Jamshoro.

#### 1.1.1 The Contract

1.1.1.1 “Contract” means the Contract Agreement, the Letter of Acceptance, the Letter of Tender, these Conditions, the Specification, the Drawings, the Schedules, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.

1.1.1.2 “Contract Agreement” means the contract agreement referred to in Sub- Clause 1.6 [ Contract Agreement ].

1.1.1.3 “Letter of Acceptance” means the letter of formal acceptance, signed by the Procuring Agency, of the Letter of Tender, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression “Letter of Acceptance” means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.

1.1.1.4 “Letter of Tender” means the document entitled letter of tender or letter of bid, which was completed by the Contractor and includes the signed offer to the Procuring Agency for the Works.

1.1.1.5 “Specification” means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Works.

1.1.1.6 “Drawings” means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Procuring Agency in accordance with the Contract.

1.1.1.7 “Schedules” means the document(s) entitled schedules, completed by the Contractor and submitted with the Letter of Tender, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and schedules of rates and/or prices.

1.1.1.8 “Tender” means the Letter of Tender and all other documents which the Contractor submitted with the Letter of Tender, as included in the Contract.

1.1.1.9 “Bill of Quantities”, “Daywork Schedule” and “Schedule of Payment Currencies” mean the documents so named (if any) which are comprised in the Schedules.

1.1.1.10 “Contract Data” means the pages completed by the Procuring Agency entitled contract data which constitute Part A of the Particular Conditions.

## 1.1.2 Parties and Persons

1.1.2.1 “Party” means the Procuring Agency or the Contractor, as the context requires.

1.1.2.2 “Procuring Agency” means the person named as employer in the Contract Data and the legal successors in title to this person.

1.1.2.3 “Contractor” means the person(s) named as contractor in the Letter of Tender accepted by the Employer and the legal successors in title to this person(s).

1.1.2.4 “Engineer” means the person appointed by the Procuring Agency to act as the Engineer for the purposes of the Contract and named in the Contract Data, or other person appointed from time to time by the Employer and notified to the Contractor under Sub-Clause 3.4 [ Replacement of the Engineer ].

1.1.2.5 “Contractor’s Representative” means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 4.3 [ Contractor’s Representative ], who acts on behalf of the Contractor.

1.1.2.6 “Procuring Agency’s Personnel” means the Engineer, the assistants referred to in Sub-Clause 3.2 [ Delegation by the Engineer ] and all other staff, labour and other employees of the Engineer and of the Procuring Agency; and any other personnel notified to the Contractor, by the Procuring Agency or the Engineer, as Procuring Agency’s Personnel.

1.1.2.7 “Contractor’s Personnel” means the Contractor’s Representative and all personnel whom the Contractor utilizes on Site, who may include the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.

1.1.2.8 “Subcontractor” means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.

1.1.2.9 “DB” means the person or three persons appointed under Sub-Clause 20.2 [ Appointment of the Dispute Board ] or Sub-Clause 20.3 [ Failure to Agree on the Composition of the Dispute Board ].

1.1.2.10 “FIDIC” means the Fédération Internationale des Ingénieurs-Conseils, the international federation of consulting engineers.

1.1.2.11 “Bank” means the financing institution (if any) named in the Contract Data.

1.1.2.12 “Borrower” means the person (if any) named as the borrower in the Contract Data.

### 1.1.3 Dates, Tests, Periods and Completion

1.1.3.1 “Base Date” means the date 15 days prior to the latest date for submission and completion of the Tender.

1.1.3.2 “Commencement Date” means the date notified under Sub-Clause 8.1 [ Commencement of Works ].

1.1.3.3 “Time for Completion” means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [ Time for Completion ], as stated in the Contract Data (with any extension under Sub-Clause 8.4 [ Extension of Time for Completion ]), calculated from the Commencement Date.

1.1.3.4 “Tests on Completion” means the tests which are specified in the Contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [ Tests on Completion ] before the Works or a Section (as the case may be) are taken over by the Procuring Agency.

1.1.3.5 “Taking-Over Certificate” means a certificate issued under Clause 10 [Procuring Agency’s Taking Over ].

1.1.3.6 “Tests after Completion” means the tests (if any) which are specified in the Contract and which are carried out in accordance with the Specification after the Works or a Section (as the case may be) are taken over by the Procuring Agency.

1.1.3.7 “Defects Notification Period” means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 [ Completion of Outstanding Work and Remedying Defects ], which extends over twelve months except if otherwise stated in the Contract Data (with any extension under Sub-Clause 11.3 [Extension of Defects Notification Period ]), calculated from the date on which the Works or Section is completed as certified under Sub-Clause 10.1 [ Taking Over of the Works and Sections ].

1.1.3.8 “Performance Certificate” means the certificate issued under Sub-Clause 11.9 [ Performance Certificate ].

1.1.3.9 “day” means a calendar day and “year” means 365 days.

### 1.1.4 Money and Payments

1.1.4.1 “Accepted Contract Amount” means the amount accepted in the Letter of Acceptance for the execution and completion of the works and the remedying of any defects.

1.1.4.2 “Contract Price” means the price defined in Sub-Clause 14.1 [ The Contract Price ], and includes adjustments in accordance with the Contract.

1.1.4.3 “Cost” means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.

1.1.4.4 “Final Payment Certificate” means the payment certificate issued under Sub-Clause 14.13 [ Issue of Final Payment Certificate ].

1.1.4.5 “Final Statement” means the statement defined in Sub-Clause 14.11 [ Application for Final Payment Certificate ].

1.1.4.6 “Foreign Currency” means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.

1.1.4.7 “Interim Payment Certificate” means a payment certificate issued under Clause 14 [ Contract Price and Payment ], other than the Final Payment Certificate.

1.1.4.8 “Local Currency” means the currency of the Country.

1.1.4.9 “Payment Certificate” means a payment certificate issued under Clause 14 [ Contract Price and Payment ].

1.1.4.10 “Provisional Sum” means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [ Provisional Sums ].

1.1.4.11 “Retention Money” means the accumulated retention moneys which the Procuring Agency retains under Sub-Clause 14.3 [ Application for Interim Payment Certificates ] and pays under Sub-Clause 14.9 [ Payment of Retention Money ].

1.1.4.12 “Statement” means a statement submitted by the Contractor as part of an application, under Clause 14 [ Contract Price and Payment ], for a payment certificate.

#### 1.1.5 Works and Goods

1.1.5.1 “Contractor’s Equipment” means all apparatus, machinery, vehicles and other things required for the execution and completion of the Works and the remedying of any defects. However, Contractor’s Equipment excludes Temporary Works, Procuring Agency’s Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.

1.1.5.2 “Goods” means Contractor’s Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.

1.1.5.3 “Materials” means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.

1.1.5.4 “Permanent Works” means the permanent works to be executed by the Contractor under the Contract.

1.1.5.5 “Plant” means the apparatus, machinery and vehicles intended to form or forming part of the Permanent Works, including vehicles purchased for the Procuring Agency and relating to the construction or operation of the Works.

1.1.5.6 “Section” means a part of the Works specified in the Contract Data as a Section (if any).

1.1.5.7 “Temporary Works” means all temporary works of every kind (other than Contractor’s Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.

1.1.5.8 “Works” mean the Permanent Works and the Temporary Works, or either of them as appropriate.

#### 1.1.6 Other Definitions

1.1.6.1 “Contractor’s Documents” means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.

1.1.6.2 “Country” means the country in which the Site (or most of it) is located, where the Permanent Works are to be executed.

1.1.6.3 “Procuring Agency’s Equipment” means the apparatus, machinery and vehicles (if any) made available by the Employer for the use of the Contractor in the execution of the Works, as stated in the Specification; but does not include Plant which has not been taken over by the Employer.

1.1.6.4 “Force Majeure” is defined in Clause 19 [ Force Majeure ].

1.1.6.5 “Laws” means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.

1.1.6.6 “Performance Security” means the security (or securities, if any) under Sub-Clause 4.2 [ Performance Security ].

1.1.6.7 “Site” means the places where the Permanent Works are to be executed, including storage and working areas, and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.

1.1.6.8 “Unforeseeable” means not reasonably foreseeable by an experienced contractor by the Base Date.

1.1.6.9 “Variation” means any change to the Works, which is instructed or approved as a variation under Clause 13 [ Variations and Adjustments ].

#### 1.2 Interpretation

In the Contract, except where the context requires otherwise:

- (a) words indicating one gender include all genders;
- (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
- (c) provisions including the word “agree”, “agreed” or “agreement” require the agreement to be record in writing;
- (d) “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record; and
- (e) the word “tender” is synonymous with “bid”, and “tenderer” with “bidder” and the words “tender documents” with “bidding documents”.

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.



In these Conditions, provisions including the expression “Cost plus profit” require this profit to be one-twentieth (5%) of this Cost unless otherwise indicated in the Contract Data.

### 1.3 Communications

Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be:

- (a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Contract Data; and
- (b) delivered, sent or transmitted to the address for the recipient’s communications as stated in the Contract Data. However:
  - (i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and
  - (ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued. Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Engineer, a copy shall be sent to the Engineer or the other Party, as the case may be.

### 1.4 Law and Language

The Contract shall be governed by the law of the country or other jurisdiction stated in the Contract Data.

The ruling language of the Contract shall be that stated in the Contract Data.

The language for communications shall be that stated in the Contract Data. If no language is stated there, the language for communications shall be the ruling language of the Contract.

### 1.5 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- (a) the Contract Agreement (if any),
- (b) the Letter of Acceptance,
- (c) the Tender,
- (d) the Particular Conditions - Part A,
- (e) the Particular Conditions - Part B,
- (f) these General Conditions,
- (g) the Specification,
- (h) the Drawings, and

- (i) the Schedules and any other documents forming part of the Contract.

If an ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction.

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## **PART II - SPECIAL /PARTICULAR CONDITIONS OF CONTRACT**

### **1.1 Definitions**

1.1.1.4 “Form of Bid” is synonymous with “Letter of Tender”.

1.1.1.5 “Bid” is synonymous with “Tender”.

1.1.1.10 “Bidding” is synonymous with “contract”. *The following paragraph is added:*

1.1.1.11 “Programme” means the programme to be submitted by the contractor in accordance with Sub-Clause 8.3 and any approved revisions thereto.

1.1.2.2 “Procuring Agency” is synonymous with “Procuring Agency” 1.1.2.9 “DB” is synonymous with “Committee”. 1.1.3.1 Replace 28 days by 7 days in LCB and 15 days in ICB.

1.1.3.7 “Defects notification Period” is synonymous with “Defects liability Period”.

1.15 **Inspections and Audit by the Bank** Deleted *Procuring Agency can retain this clause with or without changes, in case of contracts under Project, Bank and donor’s programme.*

*Not Applicable.*

### **3.1 Engineer’s Duties and Authority.**

*The following paragraph is added after duties:*

Procuring agency shall ensure that the Engineer’s Representative/Staff is a professional engineer as defined in the Pakistan Engineering Council Act 1975 (V of 1976)

### **4.3 Contractor’s Representative**

*The following text is to be added after last line:*

The contractor’s authorized representative and his other professional engineers working at site shall register themselves with the Pakistan Engineering Council.

### **6.10 Records of Contractor’s Personnel and Equipment**

*The following paragraph is added:*

The Contractor shall, upon request by the Engineer at any time in relation to any item of hired Contractor’s Equipment, forthwith notify the Engineer in writing the name and address of the Owner of the equipment and shall certify that the agreement for the hire thereof contains a provision in accordance with the requirements set forth above.

*The following sub-clause 7.9 is added in (GCC):*

### **7.9 Use of Pakistani Materials and Services**

The contractor shall, so far as may be consistent with the contract, make the maximum use of materials, supplies, plant and equipment indigenous to or produced or fabricated in

Pakistan and services, available in Pakistan provided such materials, supplies, plant, equipment and services shall be of required standard.

### **8.1 Commencement of Works**

The last para is deleted and substituted with the following: The contractor shall commence the works on site within the period named in Appendix-A to Bid from the date of receipt by him from the Engineer of a written Notice to Commence. Thereafter, the contractor shall proceed with the works with due expedition and without delay.

### **8.2 Prolonged Suspension**

Replace 84 days by **120 days**.

### **8.3 Programme**

*The following text is to be added after [Commencement of Works]* The programme shall be submitted in the either form of Bar Chart identifying the critical activities.

### **13.1 Right to vary**

In the last line of Para, after the word "Variation", the word "in writing" is added.

### **13.3 Variation procedure**

In the tenth line, after the words "as soon as practicable" following is added: "and within a period not exceeding one-eighth of the completion time"

### **13.8 Adjustment for changes in cost**

*Not applicable*

Similarly reduction in the cost of these materials will also be recovered from the contractor accordingly

### **14.1 The Contract Price**

Sub-para (d) is deleted.

### **14.2 Advance Payment**

*See Special Conditions.*

### **Mobilization Advance/Advance Payment**

*See Special Conditions.*

### **14.5 Plants and Materials intended for Works**

*Add the following paragraph as sub-clause 14.5 (d) for Secured Advance on non – perishable materials and sub-clauses (a), (b) and (c) will be applicable for plants only :-*

- (I) The Contractor shall be entitled to receive from the procuring agency Secured Advance against an **INDENTURE BOND** in Public Works Account Form No.31 (Fin. R. Form No. 2) acceptable to the procuring agency of such sum as the Engineer may consider proper in respect of non-perishable materials brought at the site but not yet incorporated in the Permanent Works provided that:
  - (i) The materials are in accordance with the specifications for the permanent works;
  - (ii) Such materials have been delivered to the site and are properly stored and protected against loss or damage or deterioration to the satisfaction and verification of the Engineer/Assistant Engineer but at the risk and cost of the Contractor;
  - (iii) The Contractor's records of the requirements, orders, receipts and use of materials are kept in a form approved by the Engineer, and such records shall be available for inspection by the Engineer;
  - (iv) The Contractor shall submit with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Engineer for the purpose of valuation of materials and providing evidence of ownership and payment therefore;

# **BIDDING DATA**

## Contract/Bidding Data

The following specific data for the works to be tendered shall complement, amend, or supplement the provisions in the Instructions to Bidders. Wherever there is a conflict, the provisions herein shall prevail over those in the Instructions to Bidders.

### Instructions to Bidders

#### Clause Reference

1.1 Name and address of the procuring agency: **Mehran University of Engg. & Technology, Jamshoro.**

1.2 Name of the Project and Summary of the works: Internal/ External Electrification, Computer Networking And Air-Conditioning Works For Extension Of Academic Building Block-1 To Facilitate The Departments Of Mining, Industrial And Metallurgy Engineering, MUET, Jamshoro.

2.1 Name of the Borrower/Source of Financing/Funding Agency/Funding Source;

2.1 Amount and Type of Financing/Scheme Cost and Allocated Funds. 10.795 (M).

8.1 Time limit for clarification: **05 days.**

10.1 Bid language: **English**

11.1 (a) Prequalification Information to be updated (where applicable):

*Already pre qualified contractors at MUET, Jamshoro.*

11.1 (b) Furnish and Technical Proposal (*in case of two envelope method*) or Company Profile in single stage single envelope: N/A.

The bidder has to submit a technical proposal in sufficient detail to demonstrate the adequacy of the bid in meeting requirements for timely completion of the works.

*13.1 Bidders to quote entirely in Pak. rupees but specify the percentages of foreign currency they require, if applicable. N/A.*

14.1 Period of Bid Validity: **90 days.**

15.1 Amount of Bid Security: **10% (5% at the time of Bid Submission and 5% deductible from the running bills).**

17.1 Venue, time, and date of the pre-Bid meeting: N/A.

18.4 Number of copies of the bid to be completed and returned: N/A.

19.2 (a) Procuring Agency's address for the purpose of bid submission: Office of the Executive Engineer (Dev.), MUET, Jamshoro.

(b) Name and Identification Number of the Contract: Internal/ External Electrification, Computer Networking And Air-Conditioning Works For Extension Of Academic Building Block-1 To Facilitate The Departments Of Mining, Industrial And Metallurgy Engineering, MUET, Jamshoro.

20.1 (a) Deadline for submission of bids: 12-06-2018 upto 12.00 (Noon)

(b) Venue, time, and date of bid opening: **Office of the Executive Engineer (Dev.), MUET, Jamshoro on 12-06-2018 at 12.30 P.M.**

32.1 Standard form and amount of Performance Security 5% acceptable to the procuring agency: **Bank Guarantee.**

32.3 Stamp duty:  
**0.35%** or notified by the Govt. of Sindh, will be paid by successful bidder as stamp duty.



**FORM OF BID  
AND  
APPENDICES TO BID**

## FORM OF BID

Bid Reference No. **Internal/ External Electrification, Computer Networking And Air-Conditioning Works For Extension Of Academic Building Block-1 To Facilitate The Departments Of Mining, Industrial And Metallurgy Engineering, MUET, Jamshoro.**

To:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1. Having examined the bidding documents including Instructions to Bidders, Bidding Data, and Conditions of Contract, Specifications, Drawings and Bill of Quantities and Addenda Nos. \_\_\_\_\_ for the execution of the above-named work, we/I, the undersigned, offer to execute and complete the work and remedy any defects therein in conformity with the Conditions of Contract, Specifications, Drawings, Bill of Quantities and Addenda for the sum of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) or such other sum as may be ascertained in accordance with the said conditions.
2. We/I understand that all the Appendices attached hereto form part of this bid.
3. As security for due performance of the undertakings and obligations of this bid, we/I submit herewith a bid security in the amount of Rupees \_\_\_\_\_ (Rs. \_\_\_\_\_) drawn in your favour or made payable to procuring agency and valid for a period of \_\_\_\_\_ days beginning from the date, bid is opened.
4. We/I undertake, if our bid is accepted, to commence the works and to complete the whole of the works comprised in the contract within the time stated in Appendix-A to Bid.
5. We/I agree to abide by this bid for the period of \_\_\_\_\_ days from the date fixed for opening the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
6. Unless and until a formal Agreement is prepared and executed, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.
7. We do hereby declare that the bid is made without any collusion, comparison of figures or arrangement with any other bidder for the works.

We understand that you are not bound to accept the lowest or any bid you may receive.

9. We undertake, if our/my bid is accepted, to execute the Performance Security referred to in Clause 10 of Conditions of Contract for the due performance of the Contract.
10. We confirm, if our bid is accepted, that all partners of the joint venture shall be liable jointly and severally for the execution of the Contract and the composition or the constitution of the joint venture shall not be altered without the prior consent of the procuring agency. *(Please delete this in case of Bid form a single bidder)*

in the capacity of \_\_\_\_\_ duly authorized to sign Bids for and on behalf of

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_  
Signature: \_\_\_\_\_

\_\_\_\_\_  
(Name of Bidder in Block Capitals)  
(Seal)

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Witness:

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Occupation: \_\_\_\_\_

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**SPECIAL STIPULATIONS****Clause****Conditions of Contract**

1.	Engineer representing Consulting Firm hired by the procuring agency to issue variation in case of emergency.	3.1	<i>Up to 2% of the contract price stated in the Letter of Acceptance.</i>
2.	Amount of Performance Security	4.2	<i>Up to 10% of contract price.</i>
3.	Time for Furnishing Program	8.3	Within 07 days from the date of receipt of Letter of Acceptance.
4.	Minimum amount of Third Party Insurance	18.3	Rs. _____ per occurrence with number of occurrences unlimited. <b>N/A.</b>
5.	Time for Commencement	8.1	Within 07 days from the date of receipt of Engineer's Notice to Commence, this shall be issued within fourteen (14) days after signing of Contract Agreement.
6.	Time for Completion (works & sections)	8.2 & 10.2	12 Months from the date of receipt of Engineer's Notice to Commence.
7.	Amount of Liquidity Damages/Delay Damages/Penalties	8.7	<b>0.05%</b> Damages per day but total amount will not be more than 10% of contract Price.
8.	Defects Liability Period	11.1	<b>180</b> days from the effective date of Taking Over Certificate.
9.	Percentage of Retention Money	14.2	<b>5%</b> of the amount of Interim/Running Payment Certificate.
10.	Limit of Retention Money	14.2	<b>10%</b> of Contract Price stated in the Letter of Acceptance.
11.	Minimum amount of Interim/Running Payment Certificates	14.2	Rs. _____ <b>N/A.</b>
12.	Time of Payment from delivery of Engineer's Interim/Running Payment Certificate to the procuring agency.	14.7	<b>30</b> days.
13.	Mobilization Advance.	14.2	<b>10%</b> of Contract Price stated in the Letter of Acceptance.
14.	Escalation		Escalation shall be paid separately as per Notifications issued by Govt. of Sindh from time to time after the opening date.
15.	Action when whole of the security deposit is forfeited:	Clause- 1.	In any case in which under any clause or clauses of this contract the Contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit ( whether paid in one sum or deducting by installment) I or in the case of abandonment of the work owing to the serious illness or death of

			<p>the Contractor or any other case, the Executive Engineer (Dev.), on behalf of the Mehran University of Engineering, &amp; Technology, Jamshoro, shall have power to adopt any of the following courses, as he may deem best suited to the interests of University.</p> <p>(a) To rescind the contract ( of which rescission notice in writing to the contractor under the hand of the Executive Engineer (Dev.) shall be conclusive evidence ) and in that case the security deposit of the Contractor shall stand forfeited and absolutely at the disposal of University.</p> <p>(b) To employ labour paid by the University to carry out the work, or any part of the work, debiting the Contractor with the cost of the labour ( as to the correctness of which cost and price the certificate of Executive Engineer (Dev.) shall be final and conclusive against the Contractor) and crediting him with the value of the work done, in all respects in the same manner and at the same rates as if it had been carried out by the Contractor under the terms of his contract; and in that case the certificate of the Executive Engineer (Dev.) as to the value of the work done shall be final and conclusive against the Contractor.</p> <p>(c) To measure up the work of the Contractor and to take such part thereof as shall be unexpected out of his hands, and to give it to another Contractor to complete it, in which case any expenses which may be incurred in excess of the sum which would have been paid to the original Contractor if the whole work had been executed by him ( as to the amount of which excess expenses the certificates in writing of the Executive Engineer (Dev.) shall be final and conclusive ) shall be borne and paid by the original Contractor and shall be deducted from any money due to him by University under the contractor or otherwise or from his security deposit or the proceeds of sale thereof, or a sufficient part thereof.</p> <p>In the event of any of the above courses being adopted by the Executive Engineer (Dev.) Contractor shall have no claim to compensation for any loss sustained by him-by reason of his having purchased or procured any materials, or entered into any engagements, or made any advance on account of or with a view to the execution of the work or the performance of the contract. And in case the contract shall be rescinded under the provision aforesaid, the Contractor shall not be entitled to recover or be paid any sum for any work therefore actually performed by him under this contract unless and until the Executive Engineer (Dev.) shall have certified in writing the performance of such work and the amount payable in respect thereof, and he shall only be entitled to be paid the amount so certified.</p>
16	Action when the progress of any particular position of the work is unsatisfactory:	Clause-2	If the progress of any particular portion of the work is unsatisfactory. Executive Engineer (Dev.) on recommendation of Engineer, shall not withstanding that the general progress of the

			work is in accordance with the conditions, be entitled to take action under clause 1 (b) after giving the Contractor 10 days notice in writing. The Contractor will have no claim for compensation; for any loss sustained by him owing to such no claim for compensation, for any loss sustained by him owing to such action.
17	Contractor remains liable to pay compensation if action not taken under clause 3 and 4. power to take possession of or required removal of or sell contractor's plant	Clause-3	In any case in which any of the power conferred upon the Executive Engineer (Dev.) by clause 1 and 2 hereof shall have become exercisable and the same shall not have been exercised the non-exercised thereof shall not constitute a waiver of any of the conditions hereof and -such powers shall notwithstanding be exercisable in the event of any future case of default by the Contractor for which under any clause or clauses hereof he is declared liable to any compensation amounting if the whole of his security deposit and the liability of the Contractor for past and future compensation shall remain unaffected. In the event of the Executive Engineer (Dev.) taking action under sub-clause (a) or (c) of clause 1, he may, if he so desires, take possession of all or any tools, plant, materials and stores in or upon the works, of the site thereof or belonging to the Contractor or procured by him and intended to be used for the execution of the work or any part thereof, paying or allowing for the same in account at the contract rate, or in the case of contract not being applicable, at current market rates, to be certified by the Executive Engineer (Dev.) whose certificate thereof shall be final. In the alternative, the Executive Engineer (Dev.) may, after giving notice in writing to the Contractor or his clerk of the work foreman or other authorized agent, required him to remove such tools, plant materials, or stores from the premises within a time to be specified in such notice, and in the event of the Contractor is failing to comply with any such requisition, the Executive Engineer (Dev.) may remove them at the Contractor's expense or sell them by auction or private sale on account of the Contractor and at his risk in all respects, and the certificate of the Executive Engineer (Dev.) as to the expense of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the Contractor.
18	Extension Of Time	Clause-4	If the Contractor shall desire an extension of the time for completion of the work on the ground of his having been unavoidable hindered in its execution or on any other ground, he shall apply in writing to the Executive Engineer (Dev.) within 30 days from the date of which the execution of the work, was hindered as aforesaid or on which the ground for asking for extension arose and in any case before the date of completion of the work and the Executive Engineer (Dev.) may, if in his opinion, there are reasonable grounds for granting an extension, grant such extension as he thinks necessary or proper. The decision of the Executive Engineer (Dev.) in this matter shall be final. Provided that where the Contractor is hindered

			<p>in the execution of the work on account of any act or omission on the part of the University or its authorized officers, the Executive Engineer (Dev.) may at any time before the date of completion and on his own initiative extend the time for completion of the work for such period as he may think necessary or proper.</p> <p>Where time has been extended under this or any other clause of this agreement the date for completion of the work shall be the date fixed by the order giving the extension or by the aggregate of all such orders, made under this agreement.</p> <p>When time has been extended as aforesaid, it shall continue to be the essence of the contract and all clauses of the contract shall continue to be operative during the extended period.</p>
19	Final Certificate	Clause-5	<p>On completion of the work the Contractor shall be furnished with a certificate by the Engineer of such completion, but no such certificate shall be given nor shall the work be considered to be complete until the Contractor shall have removed from premises on which the work shall have been executed all scaffolding surplus materials and rubbish and shall have cleaned the site of work in and around the structures / works completed and shall have cleaned off the dirt from all woodwork, doors, windows, walls, floors, or other parts of any building in or upon which the work has been executed, or of which he may have had possession for the purpose of executing the work, nor until the work shall have been measured by the Engineer or where the measurements have been taken by his subordinate until they have received the approval of the Executive Engineer (Dev.), the said measurements being binding and conclusive against the Contractor. If the Contractor shall fail to comply with the requirements of this clause is to the removal of scaffolding, surplus materials and rubbish and shall have cleared the site of work in and around the structures/works completed and dispose of the same as he thinks fit and clean of such dirt as aforesaid; and the Contractor shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any such actually realized by the sale thereof.</p>
20	Payment Of Intermediate Certificate To Be Regarded As Advance	Clause-6	<p>No payment shall be made for any work, estimated to cost less than rupees <b>ten thousand</b> till after the whole of the work shall have been completed and a certificate of completion given. But in the case of work estimated to cost more than rupees ten thousands, the Contractor shall on submitting bill therefore, as provided in Clause-10 be entitled to receive payment proportionate to the part of the work then approved and passed by the Engineer and Executive Engineer (Dev.), whose certificate such approval and passing of the sum so payable shall be final and conclusive against the Contractor. All such intermediate payments shall be regarded as payments by way of advance against the final payments only and not as payment for work actually done and completed,</p>

			and .shall not preclude the Engineer and Executive Engineer (Dev.) from requiring any bad, unsound, imperfect or unskillful work to be removed or taken away and reconstructed, or re-erected, nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof in any respect or the occurring of any claims; nor shall it conclude, determine, or affect in any other way the powers of the Executive Engineer (Dev.) as to the final settlement and adjustment of the accounts or otherwise, or in any way vary or effect the contract. The final bill shall be submitted y the Contractor within one month of the date fixed for the completion of the work otherwise Engineers certificate of the measurements and of the total amount payable for the work shall be final and binding on all parties.
21	payment at reduced rates of account of item of work not accepted as completed to be at the discretion of the Executive Engineer (Dev.)	Caluse-7	The rates for several items of works estimated to cost more than 1,000.00, agreed to within shall be valid only when the item concerned is accepted as having been completed fully in accordance with the sanctioned specifications. In cases where the items of work are not accepted as so completed the Engineer may certify payment on account of such items at such reduced rates as he may consider reasonable in the preparation of final or on account bills.
22	Bills to be submitted monthly	Clause-8	A bill shall be submitted by the Contractor as frequently the progress of the work may justify for all the work executed and not included in any previous bill and the Engineer shall take or cause to be taken the; requisite measurements for the purpose of having the same verified and the claims, as far as admissible, adjusted, if possible before the expiry of 21 days from the presentation of the bill at any time depute a subordinate to measure up the said work in the presence of the Contractor or his authorized agent, whose counter signature to the measurement list will be sufficient warrant and the Executive Engineer (Dev.) may prepare a bill from such list which shall be binding on tilted Contractor in all respects. In case the Contractor or his authorized agent is not present at the site of work at the time fixed for recording measurements, or being present, does not counter sign the measurement list, the measurements recorded by the Engineer or his authorized subordinate shall be treated by the Engineer or his authorized subordinate shall be treated as correct and binding on the Contractor unless the Contractor within seven days of date of recording such measurements submit to the Executive Engineer (Dev.) a detailed letter pointing out the errors or omissions in the record measurements. In case of such disagreement, the Executive Engineer (Dev.) shall held or cause to be hold the site investigations and give his decision. The decision of the Executive Engineer (Dev.) shall be final.
23	Bills to Be Printed On Forms	Clause-9	The Contractor shall submit all bills on his own primed forms. The bills shall be submitted to the Engineer in triplicate who will then scrutinize



			these bills and forward two copies to the Executive Engineer (Dev.) and retain one copy in their office. The charges to be made in the bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions, and not mentioned or provided for in the tender at the rates hereinafter provided for such work.
24	Store Supplied By University	Clause-10	If the specification or estimate of the work provides for the use of an 'special description of materials to be supplied from the store of the University or if it is required that the Contractor shall use certain stores to be provided by the Executive Engineer (Dev.) such material and stores, and the prices to be charged therefore as hereinafter mentioned being so far as practicable for the convenience of the Contractor but not so as any way to control the meaning of effect of this contract specified in the schedule or memorandum hereto annexed, required from time to time to be used by him for the purpose of the contract only and the value of the full quantity of the materials and stores so supplied shall be sent off or deducted from any sums then due, or thereafter to become due to the Contractor under the contract, otherwise, or from the security deposits, or the proceed of sale thereof, if the security deposit as held in Government securities the same or a sufficient portion hereof shall in that case be sold for the absolute property of University and shall on no account remove from the site of the work, and shall at all times be open to inspection by the Executive Engineer (Dev.). Any such materials unused and perfectly good condition at the time of completion or determination of the contracts shall be returned to the University Stores, if the Executive Engineer (Dev.) so requires by a notice in writing under his hand, but the Contractor shall not be entitled to return any such materials except with the consent of the Executive Engineer (Dev.) and he shall have no claim for compensation on account of any such material supplied to him as aforesaid but remaining unused by him or for, any, wastage in or damage to any such materials.
25	Works to be executed in accordance with specifications. Drawings. Orders etc.	Clause-11	The Contractor shall execute the whole and every part of the work in he most substantial and workmanlike manner and both as regards materials and all other matters in strict accordance with the specifications lodged in the office of the Executive Engineer (Dev.) and initialed by the parties, the said specification being a part of the contract. The contractor shall also conform exactly, fully and faithfully to the designs, drawings and instruction in writing relating to the work signed by the Executive Engineer (Dev.) and lodged in his office and to which the Contractor shall be entitled to have access at such office or on the site of work for the purpose of inspection during office hours and the Contractor shall if he so requires, be entitled at his own expenses to make or cause to be made copies of the specifications, and of all such designs drawings and instructions as

			aforesaid
26	Alterations in specifications and design. Not to invalidate contracts	Clause-12	<p>The Executive Engineer (Dev.) on the recommendation of Engineer shall have power to make any alterations in, or additions to the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out of the work, in accordance with any instructions in this connection which may be given to him in writing by the Executive Engineer (Dev.) and such alterations shall, not invalidate the contract; and any altered or additional work which the Contractor may be directed to do in the mentioned above specified subject to the limit laid down in clause 37 below as part of the work shall be carried out by the Contractor on the same conditions in all respects on which he agreed to do the main work and at the same rate as re specified in the tender for the main work. The time for completion of the work shall be extended in the proportion that the additional work bears to the original contract work, and the certificate of the Executive Engineer (Dev.) as to such proportion shall be conclusive. And if the altered or additional work includes any class of work for which no rate is specified in its contract, then such class of work shall be paid for at (     ) percent below/above the rates shown for such work in the Government of Sind Schedule of rates 2004, as amended from time to time and if such last mentioned class of work is not entered in the Government of Sind Schedule of Rates 2004 as of the date of receipt by him of the order to carry out the work, inform the Executive Engineer (Dev.) through the Consultants of the rate which it is his intention to charge for such class of work, and if the Executive Engineer (Dev.) and the Consultants are satisfied with the rate analysis, then he shall allow him that rate, but if the Owner does not agree to this rate, he shall be notified in writing be at liberty to cancel his order to carry out such class of work, and arrange to carry it out in such manner as he may consider advisable, provided always that if the Contractor shall commence work or incur any expenditure in regard thereto before the rates shall have been detonated as lastly hereinbefore mentioned then in such case he shall only be entitled to be paid in respect of the work carried out for expenditure incurred by him prior the work carried out for expenditure incurred by him prior to the date of the determination of the rate as aforesaid according to such rate or rates as shall be fixed by the Owner. In the event of a dispute, the decision of the Project Director will be final, conclusive and binding.</p>
27	No Claim To Any Payment Or Compensation For Alteration In Or Restriction Of Work	Clause-13	<p>If at any time after the execution of the contract documents the Executive Engineer (Dev.) shall for any reason whatsoever in the tender to be carried out at all or carried out in part by the Contractor, he shall give notice in writing of the fact to the Contractor, who shall thereupon have</p>

			no claim to any payment of compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not so derive in consequence of the full amount of the work not having been carried out, neither shall he have any claim for compensation by reason of any alterations, having been made in the original specifications, drawings, designs, and instruction, which may involve any curtailment of the work as original contemplated. Where materials have already been collected at site of the work before the receipt of the said notice to stop or curtail the work, the Contractor shall be paid for such materials at the rates determined by the Executive Engineer (Dev.) provided they are not in excess of requirements and are of approved quality.
28	Time Limit for Unforeseen Claims	Clause-14	Under no circumstances whatsoever shall the contractor be entitled to any compensation from Authority on any account unless the Contractor shall have submitted a claim in writing to the Executive Engineer (Dev.) within one month of the cause of such claim occurring. The Contractor shall give full details of such claim, indicating the part of the work is the subject matter of such claim, the reasons giving rise to the said claim and submit as far as possible, documentary evidence in support of the reasons and the calculations for such claim. The claim shall not be considered as valid or payable unless it has been scrutinized & accepted by the Engineer and Executive Engineer (Dev.) & will become payable only to the extent upto which it has been accepted by the Project Director.
29	Action and Compensation In Case Of Bad Work	Clause-15	If at any time before the security deposit is refunded to the Contractor, it shall appear to the Executive Engineer (Dev.) or his subordinate-Incharge of the work, that any work lies been executed with unsound, imperfect or unskilled workmanship or with materials of inferior quality, or that any materials or articles provided by him for the execution office work are unsound, or of quality inferior to that contracted for, or are otherwise not in accordance with the contract, shall be lawful for the Executive Engineer (Dev.) to intimate this fact in writing to the Contractor and then notwithstanding the fact that the work, materials or articles complained of any have been inadvertently passed, certified and paid for the Contractor shall be bound forthwith to rectify or remove and reconstruct the work so specified in whole or in part, as the case may require, or if so required shall remove the materials or articles, and provide other proper and suitable materials or articles at his own proper charge and cost; and in the event of his failing to do so within a period to be specified by the Executive Engineer (Dev.) in the writing intimation aforesaid, the Contractor shall be liable to pay compensation at the rate of one percent, on the amount of the estimate for every day not exceeding ten days, during which the failure so continues, and in the

			case of any such failure the Executive Engineer (Dev.) may rectify or remove, and re-execute the work or remove and replace the materials or articles complained of as the case may be as the risk and expense in all respects of the Contractor. Should the Executive Engineer (Dev.) consider that any such inferior work or materials as described above may be accepted or made use of it shall be within the discretion to accept the same at such reduced rates as he may fix thereof.
30	Work To Be Open To Inspection Contractor Or Responsible Agent To Be Present	Clause-16	All works under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer and Executive Engineer (Dev.) or his subordinates, and the Contractor shall all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer and Executive Engineer (Dev.) or his subordinate to visit the work shall have been given to the Contractor, either himself be present to receive orders and instructions, or have responsible agent duly accredited in writing present for that purpose. Orders given to the Contractor's duly authorized agent shall be considered to have the same force and effect as if they had been given to the Contractor himself.
31	Notice To Be Given Before Work Is Covered Up	Clause-17	The Contractor shall give not less than five days notice in writing to the Engineer and Executive Engineer (Dev.) or his subordinate-in-charge of the work before covering up or otherwise placing beyond the reach of check, inspection & measurement any work in order that the same may be verified, checked, inspected and measured, and correct dimensions thereof taken before the same is so covered up or planned beyond the reach of verification check, inspection & measurement, and shall not cover up or place beyond the reach of verification, check, inspection and measurement any work without the consent in writing of the Engineer and Executive Engineer (Dev.) or his subordinate-Incharge of the work, and if any work shall be covered up or placed beyond the reach of verification, check, inspection & measurement any work without the consent in writing of the Executive Engineer (Dev.) or his subordinates Incharge of the work, and if any work shall be covered up or placed beyond the reach of verification, check inspection & measurement without such notice having been given to consent obtained, the same shall be uncovered at the Contractor's expense, and in default thereof no payment or allowance shall be made for such work, or for the materials with which the same was executed.
32	Contractor Liable For Damage Done And For Imperfections For Three Months After Certificate	Clause-18	If the Contractor or his workmen, or servants shall break, deface, destroy any part of a building in which they may be working, or any building, road, fence, enclosure or overhead or underground service lines of water supply, sewerage, electricity, telephone, gas etc. or grass land or cultivated ground continuous to the premises on which the work or any part thereof

			<p>is being executed, or if any damage shall be done to the work, while it is in progress from any cause whatever or if any part thereof in being executed, or if any damage shall be done to the work, while it is in progress from any cause whatever or if any imperfections become apparent in it within three months of the grant of a certificate of completion, final or otherwise, by the Executive Engineer (Dev.), the Contractor shall make good the same his own expense, or in default the Executive Engineer (Dev.) may cause the same to be made good by other workmen, and deduct the expenses of ( which the certificate of the Executive Engineer (Dev.) shall be final ) from any sums that may then be due or may thereafter become due to the Contractor, or from his security deposits or the proceeds of sale thereof, or of a sufficient portion thereof or any of his dues available against other works with the University or as arrears of land revenue in case no dues are available or the amount available falls short of the total recoveries.</p>
33	Contractor to supply plant ladders. Scaffolding etc. And is liable for damages arising on provision of lights. Fencing etc.	Clause-19	<p>The Contractor shall supply at his own cost all materials, plant, tools, appliances, implement, ladders, cordage, tackle, scaffolding and temporary work requisite or proper for the execution of the work, whether in the original, altered or substituted form, and whether included in the specification, or other documents, forming part of the contract or referred to in these conditions or not, and which may be necessary for the purpose of satisfying or complying with the requirements of the Executive Engineer (Dev.) as to any matters as to which under these conditions he is entitled to be satisfied or which he is entitled to require together with carriage therefore to and from the work. The Contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works, and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or the materials. Failing this the same may be provided by the Executive Engineer (Dev.) at the expense of the Contractor and the expenses may be deducted from any money due to the Contractor under the contract, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. The Contractor shall provide all necessary fencing and lights required to protect the public from accident, and shall also be bound to bear the expenses of defense of every suit, action or other legal proceedings, that may be brought by any person for injury sustained owing to neglect of the above; precautions, and to pay any damages and costs which maybe awarded in any such, suit action or proceeding to any such person, or which may with the consent of the Contractor be paid for comprising any claim by any such person.</p>
34	Measure For Prevention Of Fire	Clause-20	<p>The Contractor shall not set fire to any standing jungle, trees, bush-wood or grass without a</p>

			<p>written permit from the Executive Engineer (Dev.).</p> <p>When such permit is given, and also all cases when destroying cut or dug up trees, brushwood, grass etc., by fire; the Contractor shall take necessary measures to prevent such fire spreading to otherwise damaging surrounding property.</p> <p>The Contractor shall make his own arrangements at his cost and expense for providing drinking water and water for domestic use of his labour employed in connection with the execution of the works as also for the use of his labour employed in connection with the execution of the works as also for use on the works itself. However, in case the Contractor is not able to make his own arrangements for water, the same could at the discretion of the Executive Engineer (Dev.) be supplied by the owner in which case the recovery against the water charges at 2% of the cost of these items of work on which the water is used in the construction shall be made from the bills of the Contractor.</p>
35	Liability Of Contractor For Any Damage Done In Or Outside Work Area	Clause-21	<p>Compensation for all damage done intentionally or unintentionally by Contractor's labour whether in or beyond the limits of University property including any damage, caused by the spreading of fire mentioned in clause 22 shall be estimated by the Executive Engineer (Dev.) or such other officer as he may appoint and the estimates of the Executive Engineer (Dev.) shall be final and the Contractor shall be bound to pay the amount of the assessed compensation on demand failing which the same will be recovered from the Contractor as damages in the manner prescribed in clause 1 or deducted by the Executive Engineer (Dev.) from any sums that may be due or become due from University of the Contractor under this contract or otherwise.</p> <p>The Contractor shall bear the expenses of defending any action or other legal proceedings that maybe brought by any person, party or authority for injury sustained "by him owing to neglect of precaution to prevent the spread of fire and he shall pay any damages and cost that may be awarded by the court in consequence.</p>
36	Employment Of Female Labour	Clause-22	<p>The employment of female labour on works in the neighborhood of soldiers' barracks should be avoided as far as possible.</p>
37	Work On Sunday	Clause-23	<p>No work shall be done on a Sunday or a public holiday without the prior sanction in writing of the Executive Engineer (Dev.).</p>
38	Work not be sublet. Contractor may be rescinded & security deposit forfeited for subletting it without approval"	Clause-24	<p>The Contractor shall not be assigned or sub-let without the written approval of the Executive Engineer (Dev.). And if the Contractor shall assign or sublet his contract, or attempt to do, or become insolvent or make any composition with his creditors or attempt to do, the Executive Engineer (Dev.) may, by notice in writing rescind the contract.</p> <p>The Contractor shall keep full and true accounts in respect of the contract works in the regular course of business and shall whenever called upon by the Executive Engineer (Dev.) by notice</p>

			in writing, produce them for inspection by him or by any officer appointed by him in that behalf. Also if any bribe, gratuity, gifts, loan, reward or advantage pecuniary or otherwise, shall either directly or indirectly be given, promised or offered by the Contractor or any of his servants or agents to any public officer or person in the employment of University in any way relating to his office or employment or if any such officer or person shall become in any way directly or indirectly interested in the contract or if the Contractor does not keep account or fails to produce them as aforesaid, the Executive Engineer (Dev.) may give notice in writing rescind the contract. In the event of a Contract being rescinded the security deposit of the Contractor shall thereupon stand forfeited and be absolutely at the disposal of University and the same consequences shall ensure as if the contract had been rescind under clause 3 hereof and in addition the Contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.
39	Sum Payable By Way Of Compensation To Be Considered As Reasonable Compensation Without Reference To Actual Loss	Clause-25	All sums payable by a Contractor by way of compensation under any of these conditions shall be considered as a reasonable compensation to be applied to the use of University without reference to the actual loss or damage sustained and whether any damage has or has not been sustained.
40	Changes In The Constitution Of Firm To Be Notified	Clause-26	In the cases of a tender by partners any change in the constitution of a firm shall be forthwith notified by the Contractor to the Executive Engineer (Dev.) for his information.
41	Work To Be Under Direction Of Engineer, Consultant And Executive Engineer (Dev.)	Clause-27	All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer and Executive Engineer (Dev.) for the time being, who shall be entitled to direct at what point or points and in what-manner they are to be commenced, and from time to time carried on.
42	Decision Of Project Director To Be Final	Clause-28	Except where otherwise specified in the contract and subject to The powers delegated to him by authority under the Code rules then in force, the decision of the Project Director shall be final, conclusive, and binding on all parties to the contract upon all questions relating to the meaning of the specifications, design, drawings, and instructions hereinbefore mentioned and as to the quality of workmanship, or materials used on the work, or as to any other question claim, right, matter or the thing whatsoever in any way arising out of, or relating to the contract, design, drawings, specifications, estimates, instructions, orders of these conditions, or otherwise considering the works, or the execution, or failure to execute the same, whether arising, during the progress or the work, or after the completion on abandonment thereof.
43	Lump Sum In Estimates	Clause-29	When the estimate on which a tender is based includes one or more items with lump sum rates or lump sum amount the Contractor shall be entitled to payment in respect of such items on the rates entered in this contract with the detailed specifications and the analysis of the

			<p>rates on which the contract price is calculated. Where part of the work is done or the specifications are altered the Contractor will submit his own rate and payment shall be controlled in the same way as if the item of work was done outside the current Government Schedule of Rates applicable in the case in accordance with the procedure laid down in Clause 14.</p> <p>Provided always that in case of the percent Rate tenders, no premium as quoted for the main tender as also that quoted in clause 14 ( which will be the same premium as for the main tender) shall be payable for any items of work including the lump sum items or market rates which are outside the Current Government Schedule of Rates.</p>
44	Action Where No Specification	Clause-30	<p>In the case of any class of work for which there is no such specification as is mentioned in Rule I such work shall be carried out in accordance with the Sind P.W.D. specifications and in the event of there being no Sind P.W.D. specification, then in such case the work shall be carried out in all respects in accordance with the instructions and requirements of the Executive Engineer (Dev.). The payment for such items of work shall be made in accordance with the procedure laid down in Clause 14 for items of work outside the Current Government Schedule of Rates.</p>
45	Contractors Percentage Whether Applied To Net Or Gross Amount Of Bill	Clause-31	<p>The percentage referred to in the tender shall be deducted from/added to the gross amount of the bill before deduction the value of any stock issued.</p>
46	Refund Of Quarry Fees And Royalties	Clause-32	<p>All quarry fees; royalist, octroi, dues, ground rents, local and Government taxes and Rates etc. relating directly or indirectly to the execution of the works under this contract shall be paid by the contractor as a final charge and no refund on this account shall be allowed by the University.</p>
47	Compensation under the workmen's compensation act.	Clause-33	<p>The Contractor shall be responsible for and shall pay any compensation Act, 1923 (VIII of 1923), (hereinafter called the said Act) as amended upto date for injuries caused to the workmen. If such compensation is paid by University as principal under sub-section (1) of section 12 of the said Act on behalf of the Contractor; it shall be recoverable by University from the Contractor under sub-section (2) of the said section such, compensation shall be recovered in the manner laid down in Clause above. The contractor shall also discharge all other liabilities in relation to the current Government or local legislation with respect. to the Labour Laws and other Fringe benefits like Health and Insurance cover. Old Age Benefits etc. for all his labour including the administrative and supervisory staff.</p>
48	Claim For Quantities As Per Scope Of Work Shown On Drawings	Clause-34A	<p>The quantities of different items of work shown in the schedule B attached to this tender, are only approximate The actual quantities of different items as done at Site will be controlled by the detailed drawings and the actual requirements at site of work. No claim whatsoever will be entertained on account of</p>



			excess or reduction in the scope of work as shown on the drawings.
49	----- do-----	Clause-34B	Where due to the change of specification or scope or work or due to additions in size and quantum of the work the total cost of the work increases upto 30% at the cost as shown in the MEMORANDUM ( Excluding those case there the total cost the increased due to any claim of the contractor or the escalation in the rates/cost subject to its sanction ) the Contractor shall be bound to carry out the same at the same rates and under the same conditions as for the same at the same rates and under the same conditions as for the main tender. In case where the total cost is likely to increase beyond 30% of the amount shown in the MEMORANDUM it will be optional for the Contractor to decline to take up the additional work provided always that no work shall be left in incomplete or in unfinished shape irrespective of the total Cost of the work. Where, however, the Contractor agrees to take up the additional work, there shall be no financial limit to it and that the entire work shall be done at the same rates and under the same terms and conditions as the main tender.
50	Employment Of Feminine Labour	Clause-35	The Contractor shall employ any feminine; convict or other labour of a particular kind of class if ordered in writing to do so by the Executive Engineer (Dev.).
51	Claim For Compensation For Delay In The Execution Of Work	Clause-36	No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or, in the case of clearance works on account of any delay in accordance with the sanction to estimates.
52		Clause-37	No compensation shall be allowed for any delay in the execution of the work on account of water standing in borrow pits or compartments or on the land or the approach road etc. The rates are inclusive of hard or cracked soil, excavation mud, subsoil water or water standing in borrow pits and no claim for an extra rate shall be entertained, unless otherwise expressly specified.
53	Entering Upon Or Commencing Any Portion Of Work	Clasue-38	The Contractor shall not enter upon or commence any portion of work except with the written authority and instructions of the Executive Engineer (Dev.) or of his subordinate-Incharge of the work. Failing such authority the contractor shall have not claim to ask for measurements of or payment for work.
54	Minimum age of persons employed. The employment of donkeys or other animals	Clasue-39	<p>(i) No contractor shall employ any person who is under the .age of 12 years.</p> <p>(ii) No contractor shall employ donkeys or other animals with breeching of string or thin rope. The breeching must be at least thread should be of tape (Nawar).</p> <p>(iii) No animal suffering from sores, lameness or emaciation or which is immature shall be employed or the work.</p> <p>(iv) The Contractor shall not employ any labour who has any contagious disease or is a habitual narcotic user or is as sick and unfit for manual labour as to create a hazard for his health or life.</p> <p>(v) The Executive Engineer (Dev.) or his</p>

			subordinate is authorized to remove from the work any person or animal found working which does not satisfy these conditions and no responsibility shall be accepted by the University for any delay caused in the completion of the work by such removal. Any Contractor who does not accept these conditions shall not be allowed to tender for works and his name shall be removed from the list of Contractors.
54	Pakistan Timber To Be Used	Clause-40	As far as possible Pakistan Timbers shall be used and where for any reason this is not practicable preference shall be given to imported timber of approved origin and quality.
55	Certificate For Concessionary Freight Of Charges From The Railway	Clause-41	If any materials are required to be conveyed by rail, the Contractors will be granted certificates by the Executive Engineer (Dev.) to the effect that the materials are required for University works thereby enabling them to have the benefit as allowed under the rules from the railway. In case, however, such a concession is withdrawn by the railway at any time, no claim shall be made against University on this account.
56	Recovery Of Dues From Contractor As Arrears Of As Land Revenue	Clause-42	Any sum due to the University by the Contractor shall be liable for recovery as arrears of Land Revenue.
57	Partnership Of M.L.As Is Forbidden	Clause-43	The Contractor shall certify that no member of Legislative Assembly is in partnership with him and that University will have the right to terminate the contract at any stage if it is discovered that a member of Legislative Assembly or Parliament is a partner in the Contract.
58	Payment Of Taxes	Clause-44	The contractor firmly holds himself responsible to get himself registered under Income Tax and Sales Tax Rules and to pay these and all other Government and local taxes due to him from time to time in accordance with the Government instructions.
59	Interest Or Share Of University Servant In The Work	Clause-45	The Contractor shall certify that no University Servant, Government servants or a servant of a Corporate Body directly controlled by the Government has directly or indirectly any share or interest in this work.
60		Clause-46	The Contractor will not be allowed to withdraw his tender and ask for the return of earnest money before expiry of the period of three months, commencing from the date of opening of the tender and that if it is withdrawn in violation of this condition earnest money shall be forfeited.
61		Clause-47	Notwithstanding anything contained in any clause of this contract and further notwithstanding the fact that the final completion Certificate has been awarded to the Contractor and his 50% Security deposit refunded, the liability of the Contractor for the purpose of "Defect Liability" shall extend for the period of 12 months from the date of issue of the completion Certificate for removal including replacement of any defect found in the works due to construction or any other cause directly attributed to and a result of defective work or negligence in carrying out the work. The

			remaining 50% security deposit will be refunded after 12 months after removal of defects, if any.
62		Clause-48	<p>The Contractor shall employ at his cost at the site of work for effective planning, supervision and control of the work, adequate, full time Project Director Engineering staff and trained and experience licensed electricians and mechanics of respective trade in addition to the usual team of following scales:</p> <p>Work costing upto Rs. 15.0 lacs : A Diploma holder.</p> <p>Work costing over Rs. 15.0 Lacs : A Professional Engineer Registered with Pakistan Engineering Council.</p> <p>Such persons work on the job shall be deemed to the authorized agents at site of the Contractor and shall receive all orders &amp; instructions of the Executive Engineer (Dev.), Engineer and Consultants or their authorized representatives and shall also be responsible to maintain a work-order book and other registers at Site and shall forth with take actions to carry out the orders and instructions.</p>
63		Clause-49	<p>If any question, difference or objection whatsoever shall arise in any way contracted with or arising out of this instrument or the meaning or objections of any part thereof, the rights, duties or liabilities of either party, then save in so far as the decision of any such matter is hereinbefore provide for as has been so decided, every such matter including whether its decisions has been otherwise provided for and or regards the right of and obligations of the parties as the result of such termination shall be referred for arbitration to such person or a board with the mutual consent of the Executive Engineer (Dev.) and the Contractor and his decision shall be final and binding and where the matter involves a claim for or the payment recovery or deduction of money, only the amount, if any awarded in such arbitration shall be payable or recoverable in respect of the matter so referred.</p>
64	Force Majeure	Clause-50	<p>The parties shall not be considered to be at default in the execution of their contractual obligations or any of them to the extent that the execution of such obligations or any of them is delayed or omitted by cause of force Majeure. Each part will advise the other party by written notice within 30 days of the occurrence of any such case force Majeure employed therein shall mean acts of the Public enemy wars (whether declared or not) hostilities, revolutions, civil disturbances, epidemics, fires, floods, earth quakes, weather causes of similarly nature which render the performance of this agreement unfeasible and inspite of the exercise is unable to overcome.</p>
65	Mobilization Advance	Clause-51	<p>Mobilization Advance up to 10 % of the Contract Price stated in the Letter of Acceptance shall be paid by the Procuring Agency to the Contractor on the on following conditions:</p> <p>(i) on submission by the Contractor of a Mobilization Advance Guarantee</p>

			<p>for the full amount of the Advance in the specified form from a Scheduled Bank in Pakistan to the Procuring Agency;</p> <p>(ii) Contractor will pay interest on the mobilization advance at the rate of 10% per annum on the advance; and</p> <p>(iii) This Advance including the interest shall be recovered in 5 equal installments from the five (05) R.A bills and in case the number of bills is less than five (05) then 1/5th of the advance inclusive of the interest thereon shall be recovered from each bill and the balance together with interest be recovered from the final bill. It may be insured that there is sufficient amount in the final bill to enable recovery of the Mobilization Advance.</p>
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## **CLAUSE - 52**

### **Environmental Health & Safety/ Construction Safety**

Construction and renovation activities that could be classified as construction include building renovations, excavation and trenching operations, painting, masonry, and certain activities associated with building systems such as HVAC, plumbing, and electrical supply.

Construction work can be particularly hazardous. The use of personal protective equipment, fall protection, fire safety, electrical safety, and other precautions are essential for safe construction work.

The following rules apply to construction sites:

- Heed all warning signs that have been posted.
- Do not walk, stand, or work under suspended loads. If you raise the load, be sure to crib, block, or otherwise secure the load as soon as possible.
- Avoid placing unusual strain on equipment or materials.
- Be prepared for unexpected hazards. BE ALERT!
- Fatigue is a serious risk on the job. If you are tired, slow down, get help, or switch to a task that doesn't require as much precision. Never let too little sleep jeopardize your safety.
- If you are not sure what to do or how to do it, ask. Never go ahead on a job unless you know what you are doing, what the risks are, and how to protect yourself.
- Think of safety as one of your most important job responsibilities. Before starting each job, plan it out. Think about tools, materials, and protective equipment you will need and the procedures you will follow.
- Keep your work area clear of potential hazards such as items that you could trip over or bump into, materials that could catch fire, or chemicals that could spill.
- Never ignore a safety hazard. Either fix it or report it.
- Report all incidents and near misses to your supervisor and the Office of Safety.
- Know what to do in an emergency. There isn't time to review procedures when an emergency situation occurs. If you are unsure, ask your supervisor before you begin the job.

**CLAUSE - 53**

The cost difference in the prices specified in the schedule of rates for following items shall be paid separately and as per actual consumption / quantities executed and in accordance with Notifications issued by Standing Rates Committee, Government of Sindh from time to time.

Item	Rate provided in Schedule of Rates	Unit	Rate Allowed w.e.f 01-07-2011	Cost Difference payable/ recoverable w.e.f.	Remarks
M.S. Bars (Tor)					
Cement (OPC)					
Bricks 9"x4 1/2"x3" (First Class)					
Deodar Wood (First Quality)					
Partal Wood					
Bitumen					
Any other item if notified by Standing Rates Committee, Government of Sindh					

Any change in the above price by Standing Rates Committee Government of Sindh during the currency of contract, the difference will be payable to or, as the case may be recoverable from the contractor. The effect of the revision of the prices will be confined to the quantity of the items which is actually consumed after the date of such revision.

**Not Applicable (N/A)**

**CLAUSE - 54**

The electric and water connection will be provided at one point respectively near the site of work. The Contractor will be responsible for further distribution where ever required including making complete arrangements for shortage of water. The cost of electric energy consumed as per prevailing tariff including service charges of WAPDA will be paid by the contractor. The cost of water consumed in the work will be recovered from the bills of the contractor at 2% (two percent) of the cost of these items of works on which water is used.

**CONTRACTOR.**

**ENGINEER.**

**Witness.**

**Witness**

1. \_\_\_\_\_  
2. \_\_\_\_\_

1. \_\_\_\_\_  
2. \_\_\_\_\_

**Executive Engineer (Dev.)**

Certified that the Tender/Agreement has been prepared/executed under our supervision and we are satisfied that it has been correctly prepared/executed.

## **BILL OF QUANTITIES**

**BILL OF QUANTITIES**

**MEHRAN UNIVERSITY OF ENGINEERING & TECHNOLOGY, JAMSHORO**

**INTERNAL/ EXTERNAL ELECTRIFICATION, COMPUTER NETWORKING AND AIR-CONDITIONING  
WORKS FOR EXTENSION OF ACADEMIC BUILDING BLOCK-1 TO FACILITATE THE DEPARTMENTS  
OF MINING, INDUSTRIAL AND METALLURGY ENGINEERING, MUET, JAMSHORO.**

**SCHEDULE-B**

**SUMMARY OF COST FOR ELECTRICAL WORKS**

S.#	Description	Amount in Rs.
1.	<u>A. Schedule Items</u>	
2.	<u>B. Non Schedule Items</u>	
	<b>Grand Total Cost (A+B)</b>	

**Executive Engineer (Development)**

**Contractor**

**BILL OF QUANTITIES**

**MEHRAN UNIVERSITY OF ENGINEERING & TECHNOLOGY, JAMSHORO**

**INTERNAL/ EXTERNAL ELECTRIFICATION, COMPUTER NETWORKING AND AIR-CONDITIONING WORKS FOR EXTENSION OF ACADEMIC BUILDING BLOCK-1 TO FACILITATE THE DEPARTMENTS OF MINING, INDUSTRIAL AND METALLURGY ENGINEERING, MUET, JAMSHORO.**

**SCHEDULE-B**

**SUMMARY OF COST FOR ELECTRICAL WORKS**

<b>A</b>	<b>Scheduled Items</b>		
1.	Section "A" Internal Electrification	Rs.	
2.	Section "B" Light Fittings & Fixtures	Rs.	
3.	Section "C" Distribution Boards & Feeders	Rs.	
4.	Section "D" Main & Sub-Main Cables	Rs.	
5.	Section "E" Voice System	Rs.	
<b>Cost of Schedule Items "A"</b>		Rs.	
<b>B</b>	<b>Non-Scheduled Items</b>		
6.	Section "F" Light Fittings & Fixtures	Rs.	
7.	Section "G" Distribution Boards & Feeders	Rs.	
8.	Section "H" Earthing	Rs.	
9.	Section "I" Cable Containment	Rs.	
10.	Section "J" Fire Alarm System Installation	Rs.	
11.	Section "K": ICT Security System (CCTV System)	Rs.	
12.	Section "L": Installation & Wiring of Computer Power System Multi-Outlet Boxes	Rs.	
13.	Section "M": Computer Data System	Rs.	
14.	Section "N" Voice System	Rs.	
<b>Cost of Non-Schedule Items "B"</b>		Rs.	
<b>Overall Cost of (A+B)</b>		Rs.	

**Executive Engineer (Development)**

**Contractor**



**BILL OF QUANTITIES**

**MEHRAN UNIVERSITY OF ENGINEERING & TECHNOLOGY, JAMSHORO**

**INTERNAL/ EXTERNAL ELECTRIFICATION, COMPUTER NETWORKING AND AIR-CONDITIONING  
WORKS FOR EXTENSION OF ACADEMIC BUILDING BLOCK-1 TO FACILITATE THE DEPARTMENTS OF  
MINING, INDUSTRIAL AND METALLURGY ENGINEERING, MUET, JAMSHORO.**

**SCHEDULE-B**

**SCHEDULE ITEMS**

**Section "A" Internal Electrification Schedule Items**

<b>S.No.</b>	<b>ITEM DESCRIPTION</b>	<b>QTY</b>	<b>UNIT</b>	<b>RATE (RS.)</b>	<b>TOTAL AMOUNT (RS.)</b>
1	Providing & Laying of wiring for light or fan point with 2-3/0.029 PVC insulated cable in 20mm dia (3/4") PVC conduit recessed in wall or column as required. (ESI # 124 Page #15).	500	P. Point	1,130.00	565,000.00
2	Providing & Laying of wiring for plug point with 2-3/0.029 S/C, PVC insulated cable in 20mm dia (3/4") PVC conduit recessed in the wall or column as required. (ESI # 126 Page # 15)	230	P. Point	985.00	226,550.00
3	Providing & Laying (Mains or Sub-Mains) PVC Insulated with size 2-7/0.029 wire copper conductor in (3/4" dia) PVC Conduit recessed in wall or column as required. (Lighting Circuit), (ESI#10, P#2)	436	Mtr.	222.00	96,792.00
4	Providing & Laying (Mains or Sub-Mains) PVC Insulated with size 2-7/0.036 wire copper conductor in (3/4" dia) PVC Conduit recessed in wall or column as required. (Power A/C Circuit), (ESI # 11, P # 2)	330	Mtr.	252.00	83,160.00
5	Providing & Laying (Mains or Sub-Mains) PVC Insulated with size 2-7/0.044 (6mm <sup>2</sup> ) wire copper conductor in (3/4" dia) PVC Conduit recessed in wall or column as required. (2TN AC Circuit), (ESI#12, P#2)	570	Mtr.	341.00	194,370.00
6	Providing and fixing of flush type, 2/3 pin, 5 Amps, S.P, plug socket, switch. (ESI # 226 Page # 33).	212	No.	151.00	32,012.00
7	Providing and fixing of flush type, 3 pin, 15 Amps, S.P, plug socket, switch. (ESI # 227 Page # 33).	15	No.	162.00	2,430.00
<b>COST OF SECTION "A "</b>					<b>1,200,314.00</b>
<b>Premium Above/ Below</b>					
<b>Total</b>					

**SCHEDULE ITEMS****Section "B" Light Fittings & Fixtures**

<b>S. No.</b>	<b>DESCRIPTION</b>	<b>QTY</b>	<b>UNIT</b>	<b>RATE (Rs.)</b>	<b>AMOUNT (Rs.)</b>
1	Providing installing and connecting of Millat/Asia/Pak Fan make (or to be approved by EI), 56" sweep ceiling fan complete with fan dimer, canopy, down rod, etc. including fixing of fan dimmers in the given and making holes on both side of down rod and wiring it with 1.5 mm twin core., 450/750 V grade pvc/pvc + 1-1.5mm ECC and also providing of 16 mm dia mild steel fan hook on R.C.C roof or beam as required. Complete in all respect with all accessories (ESI # 235, P # 34)	66	No.	3,185.00	210,210.00
2	Providing & fixing Bakelite ceiling rose with two terminals. (ESI # 228, P # 33)	66	No.	72.00	4,752.00
3	Providing installing of 60W wall bracket fan ESI# 236, P#34	18	No.	2,791.00	50,238.00
4	Providing and fixing of SP 10 A Switches with fancy sheets to house plug-socket, switch or regulator etc. on a given prepared board (Approx. Quantity) (ESI#219, P#33)				
	Size 78 mm x 83 mm x 56 mm (LxWxD)	745	No.	54	40,230.00
<b>COST OF SECTION "B"</b>					<b>305,430.00</b>
<b>Premium Above/ Below</b>					
<b>Total</b>					

## SCHEDULE ITEMS

### Section "C" Distribution Boards & Feeders

S. No.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	Providing, installing connecting & commissioning of the following Distribution Boards (DBs) fabricated of 14 SWG steel clad, cubical design with hinged door cover, wall (recessed) mounted, factory assembled, suitable for 3 phase, 4 wire, 500 volts, 50 Hz A.C Power Supply Complete with copper cable lugs, glands, neutral link, earth block, terminal block etc. & having following configurations. (All equipment rated to 5 kA short circuit rating and 50 °C ambient temperature at 415V). Panel enclosure to comply with IP-50.				
1.1	<b>LPDB-GF1,GF2,FF2</b> <b>Incoming</b> 01 - 60 A, T.P M.C.C.B (XS-100NS) (ESI # 207, P # 31).	3	No.	9,261.00	27,783.00
	01-Providing & fixing digital voltmeter size 96/96mm 500 V as required & as per instruction of Engineer Incharge (EI) (ESI # 285, P # 41)	3	No.	999.00	2,997.00
	<b>Outgoing</b> 6 - 15 A, S.P, M.C.Bs (ESI # 203, P # 31)	18	No.	916.00	16,488.00
	36- 10 A, S.P, M.C.Bs (ESI # 203, P # 31)	108	No.	916.00	98,928.00
1.2	<b>LPDB-FF1</b> <b>Incoming</b> 01 - 60 A, T.P M.C.C.B (XS-100NS) (ESI # 207, P # 31).	1	No.	9,261.00	9,261.00
	01-Providing & fixing digital voltmeter size 96/96mm 500 V as required & as per instruction of Engineer Incharge (EI) (ESI # 285, P # 41)	1	No.	999.00	999.00
	<b>Outgoing</b> 24 - 10 A, S.P, M.C.Bs (ESI # 203, P # 31)	24	No.	916.00	21,984.00
	06- 16 A, S.P, M.C.B (ESI # 203, P # 31)	6	No.	916.00	5,496.00
1.3	<b>CDB-GF1,FF1</b> <b>Incoming</b> 01 - 25 A, T.P M.C.C.B (XS-100NS) (ESI # 207, P # 31).	2	No.	9,261.00	18,522.00
	<b>Outgoing</b> 18-16A, SP M.C.BS (ESI # 203, P # 31)	36	No.	916.00	32,976.00
	<b>CDB-GF2,FF2</b> <b>Incoming</b> 01 -32 A, T.P M.C.C.B (XS-100NS) (ESI # 207, P # 31).	2	No.	9,261.00	18,522.00
	<b>Outgoing</b> 30-16A, SP M.C.BS (ESI # 203, P # 31)	60	No.	916.00	54,960.00
1.4	<b>PDB-AC GF1,GF2</b> <b>Incoming</b> 01 - 100 A, T.P M.C.C.B (XS-100NS) (ESI # 207, P # 31).	2	No.	9,261.00	18,522.00

	<b>Outgoing</b>				
	12- 20A, SP M.C.B (ESI # 203, P # 31)	24	No.	916.00	21,984.00
	12- 16A, SP M.C.B (ESI # 203, P # 31)	24	No.	916.00	21,984.00
	<b>PDB-AC FF1</b>				
	<b>Incoming</b>				
	01 - 63 A, T.P M.C.C.B (XS-100NS) (ESI # 207, P # 31).	1	No.	9,261.00	9,261.00
	<b>Outgoing</b>				
	9- 20A, SP M.C.B (ESI # 203, P # 31)	9	No.	916.00	8,244.00
	6- 16A, SP M.C.B (ESI # 203, P # 31)	6	No.	916.00	5,496.00
	<b>PDB-AC FF2</b>				
	<b>Incoming</b>				
	01 - 125 A, T.P M.C.C.B (XS-100NS) (ESI # 207, P # 31).	1	No.	9,261.00	9,261.00
	<b>Outgoing</b>				
	24- 20A, SP M.C.B (ESI # 203, P # 31)	24	No.	916.00	21,984.00
1.14	<b>MAIN DISTRIBUTION BOARD</b>				
	<b>Incoming</b>				
	01- 800A, TP M.C.C.B (ESI#212, P# 31)	1	No.	90,956.00	90,956.00
	01- Volt meter 500V with (VSS) (ESI#285, P#41)	1	No.	999.00	999.00
	01- Amp meter 1000A +ASS (ESI#284, P#41)	1	No.	1,054.00	1,054.00
	03- Indication lights	3	No.	789.00	2,367.00
	03- CT (Current Transformer) (ESI#271, P#39)	3	No.	1,411.00	4,233.00
	Surge Protector	1	JOB.		
	<b>Outgoing</b>				
	03- 100A, TP MCCB 15KA (XS-100NS) (ESI # 207, P # 31).	3	No.	9,261.00	27,783.00
	06- 60A, TP MCCB (XS-100NS) (ESI # 207, P # 31).	6	No.	9,261.00	55,566.00
	05- 25A, TP MCCB (XS-100NS) (ESI # 207, P # 31).	5	No.	9,261.00	46,305.00
	01- 40A, TP MCCB (XS-100NS) (ESI # 207, P # 31).	1	No.	9,261.00	9,261.00
	Power Factor Improvement plant (PFI) 250 KVAR (N.S.I)	1	JOB.	275,000.00	275,000.00
	4 NOS. 800AMP Copper Bus Bar For Main LT Panel (N.S.I)	1	SET.	80,000.00	80,000.00
<b>COST OF SECTION "C "</b>					<b>1,019,176.00</b>
<b>Premium Above/ Below</b>					
<b>Total</b>					

## SCHEDULE ITEMS

### SECTION "D" MAIN & SUB-MAIN CABLES

S. No.	DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	providing & laying (main OR sub-main cable) pvc insulated & PVC sheathed with 4-core copper conductor 300/500 volts size 6mm <sup>2</sup> (ESI#100, p#12)	0	MTR.	500.00	-
1.1	providing & laying (main & sub-main cable) pvc insulated & PVC sheathed with 4-core copper conductor 300/500 volts size 10mm <sup>2</sup> (ESI#101, p#12)	60	MTR.	742.00	44,520.00
1.2	providing & laying (main & sub-main cable) pvc insulated & PVC sheathed with 4-core copper conductor 600/1000 volts size 16mm <sup>2</sup> (ESI#102, p#12)	80	MTR.	1,300.00	104,000.00
1.3	providing & laying (main & sub-main cable) pvc insulated & PVC sheathed with 4-core copper conductor 600/1000 volts size 25mm <sup>2</sup> (ESI#103, p#12)	30	MTR.	1,909.00	57,270.00
1.4	providing & laying (main & sub-main cable) pvc insulated & PVC sheathed with 4-core copper conductor 600/1000 volts size 35mm <sup>2</sup> (ESI#104, p#12)	80	MTR.	2,529.00	202,320.00
2	Providing laying & connecting of hard drawn Copper wire from Main LT Panel to the Distribution Boards (DBs) in PVC conduit a detail below recessed in the RCC or on surface / concealed in wall or column as required, complete in all respect and entire satisfaction of consultant / owner.				
2.1	<b>LPDB-GF1,FF1,GF2,FF2</b>				
	Providing & laying of PVC copper conductor size 2-10 mm <sup>2</sup> as E.C.C with wiring of already laid conduit recessed in wall/ground/floor as required. (ESI#12, P#2)	200	Meter	341.00	68,200.00
2.3	<b>PDB-A/C- GF1,FF1,GF2,FF2</b>				
	Providing & laying of hard drawn bare copper conductor size 16 mm <sup>2</sup> as E.C.C with wiring of DB-A/C in 3" dia rigid PVC conduit recessed in wall/ground/floor as required. (ESI#14, P#2)	250	Meter	641.00	160,250.00
2.4	<b>PDB (General Power)</b>				
	Providing & laying of stranded bare copper conductor size 2-70 mm <sup>2</sup> as E.C.C.	100	Meter	2,450.00	245,000.00
<b>COST OF SECTION "D "</b>					<b>881,560.00</b>
<b>Premium Above/ Below</b>					
<b>Total</b>					

**SCHEDULE ITEMS****SECTION "E" : VOICE SYSTEM**

S. No.	ITEM DESCRIPTION	QTY	UNIT	RATE (Rs.)	AMOUNT (Rs.)
1	Providing & fixing channel patti 1" required as per instruction of E.I (from the switch or patch panel to computer outlets) (ESI#296, P#43)	1600	rft.	40.00	64,000.00
<b>COST OF SECTION "E"</b>					<b>64,000.00</b>
<b>Premium Above/ Below</b>					
<b>Total</b>					

**NON SCHEDULE ITEMS**

<b>Section "F" Light Fittings &amp; Fixtures</b>					
S.No.	ITEM DESCRIPTION	QTY	UNIT	RATE (RS.)	TOTAL AMOUNT (RS.)
1.	Providing, installing, fixing and connecting of following light fixtures with lamps, chokes, starters, capacitors etc, complete with all internal connections and all fixing and mounting accessories. Jobs includes rod and wiring as given in drawing.				
1.1	Supply & installation of 8W LED DOWN lighter (N.S.I)	44	No.		
1.2	Supply & installation of 14W LED lamp mirror light (N.S.I)	19	No.		
1.3	Philips Make DN - 024B, 20W LED, recessed/ Surface square shape or equivalent quality, as approved by Engineer Incharge.( 2'x2' Light Panel)	50	No.		
1.4	Supply & installation of 10W LED DOWN lighter (N.S.I)	66	No.		
	Supply & installation of 18W wall mounted wall bracket light (N.S.I)	6	No.		
1.5	Supply & installation of 12 nos chandelier with 18W lamps approved by consultant engineer incharge (Basic price RS.25000.00)	0	No.		
1.6	Supply & installation of Surface Square Shape light 12W 1'x1' LED light	52	No.		
1.7	Supply & installation of 23W of bulk head light (N.S.I)	26	No.		
1.8	Millat/Wahid/Pak Fan make or equivalent quality, as approved by Engineer Incharge 8" sweep capacitor with shutter, 2 way option plastic exhaust fan complete with capacitors including making of hole in wall to accommodate the fan & repairing good the damages.	9	Nos.		
1.9	Providing & installing of plastic Fan Box for ceiling fan and its wiring complete in all respect and accessories including steel hook for supporting the ceiling fan & plastic cover to cover the fan box.	66	Nos.		
<b>TOTAL COST OF SECTION "F"</b>				<b>(Rs.)</b>	

Section "G" Distribution Boards & Feeders					
1.	Providing, installing connecting & commissioning of the following items on Distribution Boards (DBs) fabricated of 14 SWG steel clad, cubical design with hinged door cover, wall (recessed) mounted, factory assembled, suitable for 3 phase, 4 wire, 500 volts, 50 Hz A.C power supply complete with copper cable lugs, glands, neutral link, earth block, terminal block etc. & having following configuration. (All equipment rated to 5 KA short circuit rating and 50 °C ambient temperature at 415V). Panel enclosure to comply with IP-50				
1.1	<b>LPDB-GF1,GF2</b>	2	No		
	<b>Incoming</b>				
	03-Phase (R.Y.B) indication lamps 220V Model 8LP2T1LM, Make Lovato (Italy) or equivalent quality, as approved by Engineer Incharge.	6	No.		
	03-Control fuse with base 2A Model VLC-10 ETI Slovenai or equivalent quality, as approved by Engineer Incharge.	6	No.		
	<b>LPDB-FF1,FF2</b>	2	No		
	<b>Incoming</b>				
	03-Phase (R.Y.B) indication lamps 220V Model 8LP2T1LM, Make Lovato (Italy) or equivalent quality, as approved by Engineer Incharge.	6	No.		
	03-Control fuse with base 2A Model VLC-10 ETI Slovenai or equivalent quality, as approved by Engineer Incharge.	6	No.		
1.2	<b>CDB-GF1,GF2</b>	2	No		
	<b>Incoming</b>				
	03-Phase (R.Y.B) indication lamps 220V Model 8LP2T1LM, Make Lovato (Italy) or equivalent quality, as approved by Engineer Incharge.	6	No.		
	03-Control fuse with base 2A Model CH-10 ETI Slovenai or equivalent quality, as approved by Engineer Incharge.	6	No.		
	<b>CDB-FF1,FF2</b>	2	No		
	<b>Incoming</b>				
	03-Phase (R.Y.B) indication lamps 220V Model 8LP2T1LM, Make Lovato (Italy) or equivalent quality, as approved by Engineer Incharge.	6	No.		
	03-Control fuse with base 2A Model CH-10 ETI Slovenai or equivalent quality, as approved by Engineer Incharge.	6	No.		
1.3	<b>DB-A/C GF1,GF2</b>	2	No		
	<b>Incoming</b>				
	03-Phase (R.Y.B) indication lamps 220V Model 8LP2T1LM, Make Lovato (Italy) or equivalent quality, as approved by Engineer Incharge.	6	No.		
	03-Control fuse with base 2A Model CH-10 ETI Slovenai or equivalent quality, as approved by Engineer Incharge.	6	No.		
	<b>DB-A/C FF1,FF2</b>	2	No		
	<b>Incoming</b>				
	03-Phase (R.Y.B) indication lamps 220V Model 8LP2T1LM, Make Lovato (Italy) or equivalent quality, as approved by Engineer Incharge.	6	No.		

	03-Control fuse with base 2A Model CH-10 ETI Slovenai or equivalent quality, as approved by Engineer Incharge.	6	No.		
2	Providing of Main Distribution Board (MLT) fabricated of 14 SWG sheet steel clad, free standing, floor mounting type for 3 phase, 500 volts, 50 Hz, A.C Power supply and having the following configurations. (All equipment to be rated minimum 25 kA short circuit).	1	No.		
2.1	Fabrication of LPDB'S, DB-AC'S CDB'S fabricated of 14 SWG sheet steel clad, wall mounting type for 3 phase, 500 volts, 50 Hz, A.C Power supply and having the following configurations.	12	No.		
<b>TOTAL COST OF SECTION "G" (Rs).</b>					
<b>Section "H" Earthing</b>					
1.	Providing, marking and testing of earth points with 2' x 2' x 1/8" thick copper plate buried 5 meter deep or to the depth of permanent water level whichever is less covered with charcoal and lime in specified ratio confirming to specification and drawing.	4	Job		
2.	Providing drawing, connecting & testing of 2-70mm <sup>2</sup> bare copper conductor as earthing leads in 32 mm dia G.I pipe buried in ground or connected in R.C.C or masonry as required from Panel Board to the earth plate including making of 18"x18" cement concrete chamber duly plastered and cover with R.C.C Slab, including, providing & fixing of plug for watering, complete with all accessories and fasteners and as per drawing & specification.	4	Job		
3.	Providing fixing and connecting of 50x5x1200 mm thick copper earth terminal blocks.	4	Job		
4.	Providing and fixing of bare copper conductor size 1-1.5mm <sup>2</sup> as Earth Continuity Conductor (ECC) with any given mains or sub-mains in all system of wiring including metallic electrical accessories. (Approx. length)	4700	Meter		
5.	Providing and fixing of bare copper conductor size 1-2.5mm <sup>2</sup> as Earth Continuity Conductor (ECC) with any given mains or sub-mains in all system of wiring including metallic electrical accessories. (Approx. length)	1,560	Meter		
6.	Providing and fixing of bare copper conductor size 1-4mm <sup>2</sup> as Earth Continuity Conductor (ECC) with any given mains or sub-mains in all system of wiring including metallic electrical accessories. (Approx. length)	310	Meter		
7	Providing and fixing of bare copper conductor size 1-6mm <sup>2</sup> as Earth Continuity Conductor (ECC) with any given mains or sub-mains in all system of wiring including metallic electrical accessories. (Approx. length)	435	Meter		
<b>TOTAL COST OF SECTION "H" (Rs.)</b>					
<b>Section "T" Cable Containment</b>					



1	Supply and Installation of medium duty G.I cable tray with elbows Tee and all fixing accessories (Z-Channel, Iron Bracket, nut and bolts etc.) as per drawings and specifications complete in all respects.	1	No.		
a)	16 SWG perforated cable tray 2 Compartments with 18 SWG solid cover 300x100 mm Cable tray.	300	Rft		
<b>TOTAL COST OF SECTION "I"</b>				<b>(Rs).</b>	
<b>Section "J" FIRE ALARM SYSTEM INSTALLATION</b>					
1.	Supply, Testing & Commissioning of Fire Alarm Panel with built-in Power Supply and battery backup. Complete in all respect with all accessories (Make MANVIER Fire control panel(1-loop) or equivalent as approved by Engineer Incharge).	1	No.		
2.	Supply, Testing & Commissioning of Optical Smoke Detector with base. Complete in all respect with all accessories (Make MANVIER or equivalent as approved by Engineer Incharge).	59	No.		
3	Supply, Testing & Commissioning of Heat Detector (ASA) with base. Complete in all respect with all accessories (Make MANVIER or equivalent as approved by Engineer Incharge).	2	No.		
4	Supply, Testing & Commissioning of Sounder Beacon with base. Complete in all respect with all accessories (Make MANVIER or equivalent as approved by Engineer Incharge).	8	No.		
5	Supply, Testing & Commissioning of Manual Call points (Housing Red). Complete in all respect with all accessories (Make MANVIER or equivalent as approved by Engineer Incharge).	8	Nos.		
6	Supply, Testing & Commissioning of Fire 2X1.5 mmsq PVC/Shielded Fire rated (BELDON UK) System Cable. Complete in all respect.	1020	Mtr.		
7	Testing & Commissioning of Fire Alarm System.	1	Job		
<b>TOTAL COST OF SECTION "J"</b>				<b>(Rs.)</b>	
<b>SECTION "K": ICT SECURITY SYSTEM (CCTV SYSTEM)</b>					
1	Indoor IPS Cameras	6	Nos		
2	Mount	6	Nos		
3	Outdoor IP Cameras	5	Nos		
4	Mount	5	Nos		
5	Power Supply	11	Nos		
6	DVR 24 Hour Recording Complete With All Accessories	1	Job		
7	LED 55" Screen With HDMI & VGA Inputs	2	Nos		
<b>TOTAL COST OF SECTION "K"</b>					
<b>SECTION "L": INSTALLATION &amp; WIRING OF COMPUTER POWER SYSTEM MULTI OUTLET BOXES</b>					
1	Providing and fixing of copper conductor size 1-1.5 mm2 copper conductor as earth continuity conductor (ECC) with any given main or sub-mains in all system of wiring including metallic electrical accessories (Approx. length)	1,500	MTR.		
2	supply and installation of OEM 6U wall mounted communication rack	1	NO.		

3	supply and installation of Schneider actassi 1U front cable organizer	1	NO.		
4	Network Switch With All Accessories Approves by Engineer.	6	No.		
<b>COST OF SECTION "L"</b>					
<b>SECTION "M": COMPUTER DATA SYSTEM</b>					
1	Providing & laying copper 1.5 mm2 copper conductor as ECC with wiring of Multi-outlet boxes as required. Complete in all respects.	1,500.00	MTR.		
2	providing & installing & connection WI-FI router, speed of up to 300 Mbps in 2.4 GHZ with 100+ concurrent users capacity. Make: UBIQUITI, model:Unifi-AP UBNT or equivalent as approved by E.I complete in all respects & accessories including mounting kits, power supply 24V 1A POE adapter etc.	1	No.		
3	Supply and installing of arkite 15U 19" communication rack 780x600x500 mm with PDU, complete in all respect.	1	No.		
4	Supply and installing of schneider actassi front cable organizer.	1	No.		
5	Supply and installation of CAT-6 (AT&T/IBM compatible) cable in already laid in channel patti on surface from switch / patch panel to the respective outlet boxes, including termination of CAT-6 cable complete in all respects.	3,260.00	MTR.		
6	Providing and laying of the 3" dia PVC conduit in ground before final flooring for main fiber cable from switch/ patch panel to the respective outlet boxes, including termination of CAT-6 cable, complete respects.	20	MTR.		
7	Providing and installing of following Multi-outlet boxes on floor/wall/column of appropriate.				
	a) multi-outlet box wall mounted	100	No.		
	b) multi-outlet box "floor	72	No.		
8	providing and fixing of plastic board to accommodate multi-outlet boxes for power, voice and data outlet, recessed in the wall, as required				
	a)size 145mm x83mm x56mm (LxWxD)	0	No.		
	b)size 78mmx 83mm x 56mm (LxWxD)	624	No.		
<b>COST OF SECTION "M"</b>					
<b>RS.</b>					
<b>SECTION "N": VOICE SYSTEM</b>					
1	Providing installing & connection of RG 45 IU With Phase Plate telephone socket outlet with back box recessed on wall complete with all accessories ( <b><i>COST OF VOICE POINT OUTLET IS COVERED WITH MULTI-OUTLET BOX IN THE COMPUTER DATA SYSTEM</i></b> )	156	No.		
1.1	Make Schneider actaasi / 3m. 4-pair CAT-5 UTP cable. Or equivalent as approved by engineer Incharge.	3,260.00	MTR.		
1.2	Providing and lying of the 3" dia PVC conduit concealed in ground before final flooring from main gate to main TJB. Complete in all respect with all required accessories	10	MTR.		
1.3	Providing and installing telephone junction box 25 pair with krone strips	4	No.		

1.4	Providing and connecting voice patch cords 3 meter long	60	No.		
1.4	Providing and connecting voice patch cords 1 meter long	80	No.		
<b>COST OF SECTION "N"</b>				<b>RS.</b>	

Contractor

Executive Engineer (Development)