



JINNAH SINDH MEDICAL UNIVERSITY, KARACHI

REPAIR AND RENOVATION OF LECTURE HALLS OF GROUND AND FOURTH FLOOR AT JSMU, KARACHI

BIDDING AND CONTRACT DOCUMENTS

VOLUME - I

INVITATION FOR BIDS
INSTRUCTIONS TO BIDDERS & BIDDING DATA
FORM OF BID & SCHEDULES TO BID
CONDITIONS OF CONTRACT & CONTRACT DATA
STANDARD FORMS
SPECIFICATIONS
DRAWINGS

JANUARY – 2019



**NATIONAL ENGINEERING SERVICES PAKISTAN (Pvt.) LTD.
ARCHITECTURE & PLANNING DIVISION**

4th Floor, N.I.C.L. Building, Abbasi Shaheed Road, Karachi, Tel: 99225430-34

TABLE OF CONTENTS

Description	Page No.
INVITATION FOR BIDS	1
Form	2
INSTRUCTIONS TO BIDDERS	3
A. General	
IB.1 Scope of Bid	4
IB.2 Source of Funds	4
IB.3 Eligible Bidders	4
IB.4 One Bid Per Bidder	5
IB.5 Cost of Bidding	5
IB.6 Site Visit	5
B. Bidding Documents	
IB.7 Contents of Bidding Documents	5
IB.8 Clarification of Bidding Documents	6
IB.9 Amendment of Bidding Documents	6
C. Preparation of Bids	
IB.10. Language of Bid	6
IB.11 Documents Accompanying the Bid	6
IB.12 Bid Prices	8
IB.13 Currencies of Bid and Payment	9
IB.14 Bid Validity	9
IB.15 Bid Security	9
IB.16 Alternate Proposals by Bidder	10
IB.17 Pre-Bid Meeting	10
IB.18 Format and Signing of Bid	11
D. Submission of Bids	
IB.19 Sealing and Marking of Bids	11
IB.20 Deadline for Submission of Bids	12
IB.21 Late Bids	12
IB.22 Modification, Substitution and Withdrawal of Bids	12
E. Bid Opening and Evaluation	
IB.23 Bid Opening	13
IB.24 Process to be Confidential	13
IB.25 Clarification of Bids	14
IB.26 Examination of Bids and Determination of Responsiveness	14
IB.27 Correction of Errors	15
IB.28 Evaluation and Comparison of Bids	15



F.	Award of Contract	
IB.29	Award	17
IB.30	Procuring Agency's Right to Accept any Bid and to Reject any or all Bids	17
IB.31	Notification of Award	18
IB.32	Performance Security	18
IB.33	Signing of Contract Agreement	19
IB.34	General Performance of the Bidders	19
IB.35	Integrity Pact	19
IB.36	Instructions Not Part of Contract	19
IB.37	Arbitration	20
	BIDDING DATA	21
	BUILDINGS LOCATION PLANS	25
	FORM OF BID AND APPENDICES TO BID	27
	FORM OF BID	27
Appendix-A to Bid	: Special Stipulations	29
Appendix-B to Bid	: Foreign Currency Requirements	30
Appendix-C to Bid	: Price Adjustment (Under Clause 13.8)	31
Appendix-D to Bid	: Bill of Quantities	32
Appendix-E to Bid	: Proposed Construction Schedule	33
Appendix-F to Bid	: Method of Performing the Work	35
Appendix-G to Bid	: List of Major Equipment – Related Items	36
Appendix-H to Bid	: Construction Camp and Housing Facilities	38
Appendix-I to Bid	: List of Subcontractors	39
Appendix-J to Bid	: Estimated Progress Payments	40
Appendix-K to Bid	: Organization Chart of the Supervisory Staff and Labour	41
Appendix-L to Bid	: Integrity Pact	42
	FORMS	
	BID SECURITY	44
	PERFORMANCE SECURITY	46
	CONTRACT AGREEMENT	48
	MOBILIZATION ADVANCE GUARANTEE/BOND	50
	INDENTURE FOR SECURED ADVANCES	52
	GENERAL CONDITIONS OF CONTRACT PART-I	56
	SPECIAL/PARTICULAR CONDITIONS OF CONTRACT PART-II	63



**INVITATION
FOR BIDS**



INVITATION FOR BID

Refer Newspaper



**INSTRUCTIONS
TO
BIDDERS**



INSTRUCTIONS TO BIDDERS

(Note: These Instructions to Bidders along with Bidding Data will not be part of the Contract and will cease to have effect once the contract is signed.)

A. GENERAL

IB.1 Scope of Bid

- 1.1 The Procuring Agency as defined in the Bidding Data hereinafter called “the Procuring Agency” wishes to receive bids for the construction and completion of works as described in these Bidding Documents, and summarised in the Bidding Data hereinafter referred to as the “Works”.
- 1.2 The successful bidder will be expected to complete the Works within the time specified in Appendix-A to Bid.

IB.2 Source of Funds

- 2.1 The Procuring Agency has received/allocated/applied for loan/grant/Federal/ Provincial/Local Government funds from the source(s) indicated in the bidding data in various currencies towards the cost of the project /scheme specified in the bidding data, and it is intended that part of the proceeds of this loan/grant/funds will be applied to eligible payments under the Contract for which these Bidding Documents are issued.

IB.3 Eligible Bidders

- 3.1 This Invitation for Bids is open to all interested bidders who are eligible under provisions of Sindh Public Procurement Rules as mentioned below and the criteria given in the Notice Inviting Tender (NIT)/ Bidding Document.

Firms and individuals, national or international, may be allowed to bid for any project where international competitive bidding is feasible. Any conditions for participation shall be limited to those that are essential to ensure the bidder’s capability to fulfill the contract in question.:

- a) Bidders may be excluded if;
 - (i) as a matter of law or official regulations, commercial relations are prohibited with the bidder’s country by the federal government in case of ICB, or
 - (ii) a firm is blacklisted/ debarred by the procuring agency and the matter has been reported to the Authority, subject to Rule 30 of Sindh Public Procurement Rules 2010.
- b) Government-owned enterprises or institutions may participate only if they can establish that they are;
 - (i) legally and financially autonomous, and
 - (ii) operate under commercial law.

Provided that where government-owned universities or research centers in the country are of a unique and exceptional nature, and their participation is critical to project implementation, they may be allowed to participate; and;



Bidders shall include all those contractors who are registered or incorporated in Pakistan, irrespective of the nationality of their owners and professional staff, or

- (c) Bidders are:-
- (i) Registered with Pakistan Engineering Council in particular category C3 or above with Specialization Code CE10
 - (ii) registered with relevant tax authorities (income/sales tax, wherever applicable)
 - (iii) duly pass the Criteria listed in Post Qualification Document.

IB.4 One Bid per Bidder

- 4.1 Each bidder shall submit only one bid either by himself, or as a partner in a joint venture. A bidder who submits or participates in more than one bid (other than alternatives pursuant to Clause IB.16) will be disqualified.

IB.5 Cost of Bidding

- 5.1 The bidders shall bear all costs associated with the preparation and submission of their respective bids and the Procuring Agency will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

IB.6 Site Visit

- 6.1 The bidders are advised to visit and examine the Site of Works and its surroundings and obtain for themselves on their own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. All cost in this respect shall be at the bidder's own expense.
- 6.2 The bidders and any of their personnel or agents will be granted permission by the Procuring Agency to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the bidders, their personnel and agents, will release and indemnify the Procuring Agency, his personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of such inspection.

B. BIDDING DOCUMENTS

IB.7 Contents of Bidding Documents (SSP RULE 21)

- 7.1 The Bidding Documents, in addition to invitation for bids, are those stated below and should be read in conjunction with any Addenda issued in accordance with Clause IB.9.
1. Instructions to Bidders.
 2. Bidding Data.
 3. General Conditions of Contract, Part-I (GCC).
 4. Special Conditions of Contract, Part-II (PCC).
 5. Specifications – Special Provisions.
 6. Specifications - Technical Provisions.
 7. Form of Bid & Appendices to Bid.
 8. Bill of Quantities (Appendix-D to Bid).
 9. Form of Bid Security.



10. Form of Contract Agreement.
11. Forms of Performance Security and Mobilization Advance Guarantee, Integrity Pact and Indenture bond for secured advance.
12. Drawings.
13. **Post Qualification Document (for Technical Qualification of firms/Constructors)**

7.2 The bidders are expected to examine carefully the contents of all the above documents. Failure to comply with the requirements of bid submission will be at the Bidder's own risk. Pursuant to Clause IB.26, bids which are not substantially responsive to the requirements of the Bidding Documents will be rejected.

IB.8 Clarification of Bidding Documents (SSP RULE 23(1)):

8.1 Any interested bidder requiring any clarification (s) in respect of the Bidding Documents may notify the Procuring Agency in writing at the Procuring Agency's address indicated in the Invitation for Bids/NIT. The Procuring Agency will respond to any request for clarification provided they are received at least five calendar days prior to the date of opening of bid, provided that any clarification in response to query by any bidder; shall be communicated to all parties who have obtained bidding documents, but without identifying its source.

IB.9 Amendment of Bidding Documents

9.1 At any time prior to the deadline for submission of bids, the Procuring Agency may, for any reason, whether at his own initiative or in response to a clarification requested by a interested bidder, modify the Bidding Documents by issuing addendum.

9.2 Any addendum thus issued shall be part of the Bidding Documents pursuant to Sub-Clause 7.1 hereof and shall be communicated in writing to all the bidders. Interested bidders shall acknowledge receipt of each addendum in writing to the Procuring Agency.

9.3 To afford bidders reasonable time in which to take an addendum into account in preparing their bids, the Procuring Agency may extend the deadline for submission of bids in accordance with Clause IB.20

C. PREPARATION OF BIDS

IB.10 Language of Bid

10.1 The bid and all correspondence and documents related to the bid exchanged by a bidder and the Procuring Agency shall be in the language stipulated in the Bidding Data and Special Conditions of Contract. Supporting documents and printed literature furnished by the bidders may be in any other language provided the same are accompanied by an accurate translation of the relevant parts in the bid language, in which case, for purposes of evaluation of the bid, the translation in bid language shall prevail.

IB.11 Documents Accompanying the Bid

11.1 Each bidder shall:

- (a) submit a written authorization on the letterhead of the bidding firm authorizing the signatory of the bid to act for and on behalf of the bidder;



- (b) update the information indicated and listed in the Bidding Data and previously submitted with the application for post qualification, and continue to meet the minimum criteria set out in the post qualification documents which as a minimum, would include the following :
- (i) Evidence of access to financial resources along with average annual construction turnover;
 - (ii) Financial predictions for the current year and the two following years including the effect of known commitments;
 - (iii) Work commitments since prequalification;
 - (iv) Current litigation information; and
 - (v) Availability of critical equipment.

and

- (c) furnish various Appendices to Bid specially the following:
- | | |
|-------------------|--|
| Appendix-E to Bid | Proposed Construction Schedule |
| Appendix-F to Bid | Method of Performing the Work |
| Appendix-G to Bid | List of Major Equipment |
| Appendix-K to Bid | Organization Chart for Supervisory Staff |
- and other pertinent information such as mobilization programme etc;

11.2 Bids submitted by a joint venture of two (2) or more firms shall comply with the following requirements:

- (a) one of the joint venture partners shall be nominated as being in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the joint venture partners;
- (b) the bid and in case of a successful bid, the Form of Contract Agreement shall be signed so as to be legally binding on all partners;
- (c) the partner-in-charge shall always be duly authorized to deal with the Procuring Agency regarding all matters related with and/or incidental to the execution of Works as per the terms and Conditions of Contract and in this regard to incur any and all liabilities, receive instructions, give binding undertakings and receive payments on behalf of the joint venture;
- (d) all partners of the joint venture shall at all times and under all circumstances be liable jointly and severally for the execution of the Contract in accordance with the Contract terms and a statement to this effect shall be included in the authorization mentioned under Sub-Para(a) above as well as in the Form of Bid and in the Form of Contract Agreement (in case of a successful bid); and



- (e) a copy of the agreement entered into by the joint venture partners shall be submitted with the bid stating the conditions under which it will function, its period of duration, the persons authorized to represent and obligate it and which persons will be directly responsible for due performance of the Contract and can give valid receipts on behalf of the joint venture, the proportionate participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. No amendments / modifications whatsoever in the joint venture agreement shall be agreed to between the joint venture partner without prior written consent of the Procuring Agency.

11.3 Bidders shall also submit proposals of work methods and schedule, in sufficient detail to demonstrate the adequacy of the Bidders' proposals to meet the technical specifications and the completion time referred to in Sub-Clause 1.2 hereof.

IB.12 Bid Prices

12.1 Unless stated otherwise in the Bidding Documents, the Contract shall be for the whole of the Works as described in Sub-Clause 1.1 hereof, based on the unit rates and / or prices submitted by the bidder or percentage quoted above or below on the rates of Composite Schedule of Rates (CSR), as the case may be.

12.2 The bidders shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by a bidder will not be paid for by the Procuring Agency when executed and shall be deemed covered by rates and prices for other items in the Bill of Quantities. In case of Composite Schedule of Rates, if the bidder fails to mention the percentage above or below, it shall be deemed to be at par with the rates of Composite Schedule of Rates.

12.3 The bid price submitted by the contractor shall include all rates and prices including the taxes. All duties, taxes and other levies payable by the contractor under the contract, or for any other cause during the currency of the execution of the work or otherwise specified in the contract as on the date seven days prior to the deadline for submission of bids.

Additional / reduced duties, taxes and levies due to subsequent additions or changes in legislation shall be reimbursed / deducted as per Sub-Clause 13.7 of the General Conditions of Contract Part-I.

12.4 The rates and prices quoted by the bidders are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 13.7 of the Conditions of Contract. The bidders shall furnish the prescribed information for the price adjustment formulae in Appendix-C to Bid, and shall submit with their bids such other supporting information as required under the said Clause. Adjustment in prices quoted by bidders shall be allowed as per Sub-Para 4(ii) of Section C of Instructions to bidders and bidding data.



IB.13 Currencies of Bid and Payment

- 13.1 The unit rates and the prices shall be quoted by the bidder entirely in Pak rupees. A bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Procuring Agency's country (referred to as the "Foreign Currency Requirements") shall indicate the same in Appendix-B to Bid. The proportion of the Bid Price (excluding Provisional Sums) needed by him for the payment of such Foreign Currency Requirements either (i) entirely in the currency of the Bidder's home country or, (ii) at the bidder's option, entirely in Pak rupees provided always that a bidder expecting to incur expenditures in a currency or currencies other than those stated in (i) and (ii) above for a portion of the foreign currency requirements, and wishing to be paid accordingly, shall indicate the respective portions in his bid.
- 13.2 The rates of exchange to be used by the bidder for currency conversion shall be the selling rates published and authorized by the State Bank of Pakistan prevailing on the date, 07 (seven) days prior to the deadline for submission of bids. For the purpose of payments, the exchange rates used in bid preparation shall apply for the duration of the contract.

IB.14 Bid Validity

- 14.1 Bids shall remain valid for the period stipulated in the Bidding Data after the Date of Bid Opening specified in Clause IB.23.
- 14.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Procuring Agency may request that the bidders extend the period of validity for a specified additional period which shall in no case be more than the original bid validity period. The request and the responses thereto shall be made in writing. A bidder may refuse the request without forfeiting his Bid Security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his Bid Security for the period of the extension, and in compliance with Clause IB.15 in all respects.

IB.15 Bid Security

- 15.1 Each bidder shall furnish, as part of his bid, a Bid Security in the amount stipulated in the Bidding Data in Pak Rupees or an equivalent amount in a freely convertible currency.
- 15.2 The Bid Security shall be, at the option of the bidder, in the form of Deposit at Call or a Bank Guarantee issued by a Scheduled Bank in Pakistan or from a foreign bank duly counter guaranteed by a Scheduled Bank in Pakistan in favour of the Procuring Agency which should commensurate with the bid validity period. The bank guarantee for bid security shall be acceptable in the manner as provided at Annexure BS-1.
- 15.3 Any bid not accompanied by an acceptable Bid Security shall be rejected by the Procuring Agency as non-responsive.
- 15.4 Bid security shall be released to the unsuccessful bidders once the contract has been signed with the successful bidder or the validity period has expired.



- 15.5 The Bid Security of the successful bidder will be returned when the bidder has furnished the required Performance Security and signed the Contract Agreement.
- 15.6 The Bid Security may be forfeited:
- (a) if the bidder withdraws his bid except as provided in Sub-Clause 22.1;
 - (b) if the bidder does not accept the correction of his Bid Price pursuant to Sub-Clause 27.2 hereof; or
 - (c) In the case of successful bidder, if he fails within the specified time limit to:
 - (i) furnish the required Performance Security; or
 - (ii) sign the Contract Agreement.

IB.16 Alternate Proposals by Bidder

- 16.1 Each bidder shall submit only one bid either by himself, or as a member of a joint venture, until and unless they have been requested or permitted for alternative bid, then he has to purchase separate bidding documents and alternate bid shall be treated as separate bid.
- 16.2 Alternate proposals are allowed only for procurement of works where technical complexity is involved and more than one designs or technical solutions are being offered. Two stage two envelope bidding procedure will be appropriate when alternate proposal is required.
- 16.3 Alternate bid(s) shall contain (a) relevant design calculations; (b) technical specifications; (c) proposed construction methodology; and (d) any other relevant details / conditions, provided that the total sum entered on the Form of Bid shall be that which represents complete compliance with the bidding documents.

IB.17 Pre-Bid Meeting

- 17.1 The Procuring Agency may, on his own motion or at the request of any bidder(s), hold a pre-bid meeting to clarify issues and to answer any questions on matters related to the Bidding Documents. The date, time and venue of pre-bid meeting, if convened, shall be communicated to all bidders. All bidders or their authorized representatives shall be invited to attend such a pre-bid meeting at their own expense.
- 17.2 The bidders are requested to submit questions, if any, in writing so as to reach the Procuring Agency not later than seven (7) days before the proposed pre-bid meeting.
- 17.3 Minutes of the pre-bid meeting, including the text of the questions raised and the replies given, will be transmitted without delay to all purchasers of the Bidding Documents. Any modification of the Bidding Documents listed in Sub-Clause 7.1 hereof which may become necessary as a result of the pre-bid meeting shall be made by the Procuring Agency exclusively through the issue of an Addendum pursuant to Clause IB.9 and not through the minutes of the pre-bid meeting.
- 17.4 Absence at the pre-bid meeting will not be a cause for disqualification of a bidder.



IB.18 Format and Signing of Bid

- 18.1 Bidders are particularly directed that the amount entered on the Form of Bid shall be for performing the Contract strictly in accordance with the Bidding Documents.
- 18.2 All appendices to Bid are to be properly completed and signed.
- 18.3 Alteration is not to be made in the Form of Bid nor in the Appendices thereto except in filling up the blanks as directed. If any such alterations be made or if these instructions be not fully complied with, the bid may be rejected.
- 18.4 Each bidder shall prepare by filling out the forms completely and without alterations and shall provide an original copy along with photocopies as per the requirement of the procuring agency specified in the bidding data. The original as well as copies of the document shall be clearly marked as “ORIGINAL” and „COPY”, as the case may be. If there is any discrepancy between original and copy (ies) then the original shall prevail.
- 18.5 The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, Photostats are also acceptable) and shall be signed by a person or persons duly authorized to sign on behalf of the bidder pursuant to Sub- Clause 11.1(a) hereof. All pages of the bid shall be initialled and stamped by the person or persons signing the bid.
- 18.6 The bid shall contain no alterations, omissions or additions, except to comply with instructions issued by the Procuring Agency, or as are necessary to correct errors made by the bidder. Such corrections shall be initialled by the person (s) signing the bid.
- 18.7 Bidders shall indicate in the space provided in the Form of Bid their full and proper addresses at which notices may be legally served on them and to which all correspondence in connection with their bids and the Contract is to be sent.
- 18.8 Bidders should retain a copy of the Bidding Documents as their file copy.

D. SUBMISSION OF BIDS**IB.19 Sealing and Marking of Bids**

- 19.1 Single stage – two envelope procedure
- (a) bid shall comprise a single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal;
 - (b) envelopes shall be marked as “FINANCIAL PROPOSAL” and “TECHNICAL PROPOSAL” in bold and legible letters to avoid confusion;
 - (c) initially, only the envelope marked “TECHNICAL PROPOSAL” shall be opened. The Technical Proposal should be prepared as per the Evaluation Criteria Documents provided with the Tender Documents.
 - (d) envelope marked as “FINANCIAL PROPOSAL” shall be retained in the custody of the procuring agency without being opened;
 - (e) procuring agency shall evaluate the technical proposal in a manner prescribed in advance in the Post Qualification Document, without



reference

I-9

to the price and reject any proposal which does not conform to the specified requirements;

- (f) no amendments in the technical proposal shall be permitted during the technical evaluation;
- (g) financial proposals of technically qualified bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
- (h) financial proposal of bids found technically non-responsive shall be returned un-opened to the respective bidders; and
- (j) bid found to be the lowest evaluated or best evaluated bid shall be accepted. Each bidder shall submit his bid as under:
 - (a) ORIGINAL and one copy of the Bid shall be separately sealed and put in separate envelopes and marked as such.
 - (b) The envelopes containing the ORIGINAL and 01 COPY of Technical Bids shall be put in one sealed envelope and addressed as given in Sub- Clause 19.2 hereof.

19.2 The inner and outer envelopes shall:

- (a) be addressed at the address provided in the Bidding Data;
- (b) bear the name and identification number of the contract as defined in the Bidding Data; and
- (c) provide a warning not to open before the time and date for bid opening, as specified in the Bidding Data.

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

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

IB.20 Deadline for Submission of Bids

- 20.1 (a) Bids must be received by the Procuring Agency at the address specified no later than the time and date stipulated in the Bidding Data.
- (b) Bids with charges payable will not be accepted, nor will arrangements be undertaken to collect the bids from any delivery point other than that specified above. Bidders shall bear all expenses incurred in the preparation and delivery of bids. No claims will be entertained for refund of such expenses.
- (c) Where delivery of a bid is by mail and the bidder wishes to receive an acknowledgment of receipt of such bid, he shall make a request for such acknowledgment in a separate letter attached to but not included in the sealed bid package.
- (d) Upon request, acknowledgment of receipt of bids will be provided to



those making delivery in person or by messenger.

I-10

- 20.2 The Procuring Agency may, at his discretion, extend the deadline for submission of bids by issuing an amendment in accordance with Clause IB.9, in which case all rights and obligations of the Procuring Agency and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

IB.21 Late Bids

- 21.1 (a) Any bid received by the Procuring Agency after the deadline for submission of bids prescribed in Clause IB.20 will be returned unopened to such bidder.
- (b) Delays in the mail, delays of person in transit, or delivery of a bid to the wrong office shall not be accepted as an excuse for failure to deliver a bid at the proper place and time. It shall be the bidder's responsibility to submit the bid in time.

IB.22 Modification, Substitution and Withdrawal of Bids

- 22.1 Any bidder may modify, substitute or withdraw his bid after bid submission provided that the modification, substitution or written notice of withdrawal is received by the Procuring Agency prior to the deadline for submission of bids.
- 22.2 The modification, substitution, or notice for withdrawal of any bid shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause IB.19 with the outer and inner envelopes additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" as appropriate.
- 22.3 No bid may be modified by a bidder after the deadline for submission of bids except in accordance with Sub-Clauses 22.1 and 27.2.
- 22.4 Withdrawal of a bid during the interval between the deadline for submission of bids and the expiration of the period of bid validity specified in the Form of Bid may result in forfeiture of the Bid Security in pursuance to Clause IB.15.

E. BID OPENING AND EVALUATION

IB.23 Bid Opening

- 23.1 The Procuring Agency will open the bids, including withdrawals, substitution and modifications made pursuant to Clause IB.22, in the presence of bidders' representatives who choose to attend, at the time, date and location stipulated in the Bidding Data. The bidders or their representatives who are present shall sign an attendance sheet.
- 23.2 Envelopes marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause IB.22 shall not be opened.
- 23.3 Procuring agency shall read aloud the name of the bidder, total bid price and price of any Alternate Proposal(s), if any, discounts, bid modifications, substitution and withdrawals, the presence or absence of bid security, and such other details as the procuring agency may consider appropriate, and total amount of each bid, and of any alternative bids if they have been requested or permitted, shall be read aloud



and recorded when opened.

I-11

- 23.4 Procuring Agency shall prepare minutes of the bid opening, including the information disclosed to those present in accordance with the Sub-Clause 23.3.

IB.24 Process to be Confidential (SPP Rule 53)

- 24.1 Information relating to the examination, clarification, evaluation and comparison of bid and recommendations for the award of a contract shall not be disclosed to bidders or any other person not officially concerned with such process before the announcement of bid evaluation report in accordance with the requirements of Rule 45, which states that Procuring agencies shall announce the results of bid evaluation in the form of a report giving reasons for acceptance or rejection of bids. The report shall be hoisted on website of authority and that of procuring agency if its website exists and intimated to all bidders at least seven (7) days prior to the award of contract. The announcement to all bidders will include table(s) comprising read out prices, discounted prices, price adjustments made, final evaluated prices and recommendations against all the bids evaluated. Any effort by a bidder to influence the procuring agency's processing of bids or award decisions may result in the rejection of such bidder's bid. Whereas, any bidder feeling aggrieved, may lodge a written complaint as per Rule 31; however mere fact of lodging a complaint shall not warrant suspension of the procurement process.

IB.25 Clarification of Bids (SPP Rule 43)

- 25.1 To assist in the examination, evaluation and comparison of bids, the Procuring Agency may, at its discretion, ask any bidder for clarification of the bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Procuring Agency in the evaluation of the bids in accordance with Clause IB.28.

IB.26 Examination of Bids and Determination of Responsiveness

- 26.1 Prior to the detailed evaluation of bids, the procuring agency will determine whether the bidder fulfills all codal requirements of eligibility criteria given in the tender notice such as registration with tax authorities, registration with PEC (where applicable), turnover statement, experience statement, and any other condition mentioned in the NIT and bidding document. If the bidder does not fulfill any of these conditions, it shall not be evaluated further.
- 26.2 Once found to be fulfilling the eligibility criteria, as mentioned in sub-clause 26.1, the bids of eligible bidders will be evaluated for technical responsiveness as per specification and criteria given in the bidding documents. Technical and financial evaluations may be carried out in accordance with single stage-one envelope, single stage-two envelopes, or two stage-two envelopes bidding procedures, depending on the selection procedure adopted by the procuring agency.
- 26.3 A bid will be considered technically responsive if it (i) has been properly signed; (ii) is accompanied by the required bid security; and (iii) conforms to all the terms, conditions and specifications of the bidding documents, without material deviation or reservation. A material deviation or reservation is one (i) which affects in any substantial way the scope, quality or performance of the works; (ii) which limits in any substantial way, inconsistent with the bidding documents, the procuring



agency's rights or the bidder's obligations under the contract; or (iii) adoption/rectification

I-12

whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

26.4 If a bid has major deviations to the commercial requirements and technical specifications will be considered technically non responsive. As a general rule, major deviations are those that if accepted, would not fulfill the purposes for which the bid is requested, or would prevent a fair comparison or affect the ranking of the bids that are compliant with the bidding documents.

(A). Major (material) Deviations include:-

- (i) has not been properly signed;
- (ii) is not accompanied by the bid security of required amount and manner;
- (iii) stipulating price adjustment when fixed price bids were called for;
- (iv) failing to respond to specifications;
- (v) failing to comply with Mile-stones/Critical dates provided in Bidding Documents;
- (vi) sub-contracting contrary to the Conditions of Contract specified in Bidding Documents;
- (vii) refusing to bear important responsibilities and liabilities allocated in the Bidding Documents, such as performance guarantees and insurance coverage;
- (viii) taking exception to critical provisions such as applicable law, taxes and duties and dispute resolution procedures;
- (ix) a material deviation or reservation is one :
 - (a) which affect in any substantial way the scope, quality or performance of the works;
 - (b) adoption/rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

(B) Minor Deviations

- (i) Bids that offer deviations acceptable to the Procuring Agency and which can be assigned a monetary value may be considered substantially responsive at least as to the issue of fairness. This value would however be added as an adjustment for evaluation purposes only during the detailed evaluation process.

26.5 If a bid is not substantially responsive, it will be rejected by the procuring agency, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

IB.27 Correction of Errors

27.1 Bids determined to be substantially responsive will be checked by the Procuring Agency for any arithmetic errors. Errors will be corrected by the Procuring Agency as follows:

- (a) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern; and
- (b) where there is a discrepancy between the unit rate and the line item total



resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern, unless in the opinion of the Procuring Agency there is an

I-13

obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted will govern and the unit rate will be corrected.

- 27.2 The amount stated in the Form of Bid will be adjusted by the Procuring Agency in accordance with the above procedure for the correction of errors and with the concurrence of the bidders, The amount thus corrected shall be considered as binding upon the bidder. If the bidder does not accept the corrected bid price, his bid will be rejected, and the bid security shall be forfeited in accordance with sub- clause IB 15.6(b) hereof.

IB.28 Evaluation and Comparison of Bids

- 28.1 The Procuring Agency will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause IB.26.
- 28.2 In evaluating the Bids, the Procuring Agency will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
- (a) making any correction for errors pursuant to Clause IB.27;
 - (b) excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including competitively priced Daywork; and
 - (c) making an appropriate adjustment for any other acceptable variation or deviation.
- 28.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
- 28.4 If the bid of the successful bidder is seriously unbalanced in relation to the procuring agency's estimate of the cost of work to be performed under the contract, the procuring agency may require the bidder to produce detailed price analyses for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the procuring agency may require that the amount of the Performance Security set forth in clause IB.32 be increased at the expense of the successful bidder to a level sufficient to protect the procuring agency against financial loss in the event of default of the successful bidder under the contract.
- 28.5 **“Corrupt and Fraudulent Practices”**: Bidders may be excluded if involved in means either one or any combination of the practices given below SPP Rule2(q);
- (i) **“ Coercive Practice ”** means any impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence the actions of a party to achieve a wrongful gain or to cause a wrongful loss to another party;
 - (ii) **“ Collusive Practice ”** means any arrangement between two or more parties to the procurement process or contract execution, designed to achieve with or without the knowledge of the procuring agency to establish prices



at artificial, noncompetitive levels for any wrongful gain;

I-14

- (ii) **“Corrupt Practice”** means the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence the acts of another party for wrongful gain;
- (iv) **“Fraudulent Practice”** means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- (v) **“Obstructive Practice”** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract or deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements before investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or acts intended to materially impede the exercise of inspection and audit rights provided for under the Rules.

28.6 Evaluation Report (SPP Rule 45)

After the completion of evaluation process, as described in clauses IB 27 and IB 28, the procuring agency shall announce the results of bid evaluation in the form of report (available on the website of the authority) giving reasons for acceptance and rejection of bid. The report shall be hoisted on website of the authority and that of procuring agencies if its website exists and intimated to all bidders at least seven (7) days prior to the award of contract.

F. AWARD OF CONTRACT

IB.29 Award (SPP Rule 49)

- 29.1 Subject to Clauses IB.30 and IB.34, the Procuring Agency shall award the Contract to the bidder whose bid has been determined to be substantially responsive to the Bidding Documents and who has offered the lowest evaluated Bid Price, but not necessarily the lowest submitted price, within the original or extended period of bid validity. Provided that such bidder has been determined to be eligible in accordance with the provisions of clause IB 03 and qualify pursuant to sub-clause IB 29.2.
- 29.2 The Procuring Agency, at any stage of the bid evaluation, having credible reasons for or *prima facie* evidence of any deficiency(ies) in supplier’s or contractor’s capacities, may require the suppliers or contractors to provide information concerning their professional, technical, financial, legal or managerial competence whether already pre-qualified or not:

Provided that such qualification shall only be laid down after recording reasons therefor in writing. They shall form part of the records of that bid evaluation report.

IB.30 Procuring Agency’s Right to reject all Bids or Annul / Cancellation the Bidding Process (SPP Rule 25)

- 30.1 Notwithstanding Clause IB.29, and provision of the rule: (1) A procuring agency reserves may cancel the bidding process at any time prior to the acceptance



of a bid or proposal; (2) The procuring agency shall incur no liability towards bidders solely by virtue of its invoking sub-rule (1);

I-15

(3) Intimation of the cancellation of bidding process shall be given promptly to all bidders and bid security shall be returned along with such intimation; (4) The procuring agency shall, upon request by any of the bidders, communicate to such bidder, grounds for cancellation of the bidding process, but is not required to justify such grounds.

IB.31 Notification of Award (SPP Rule 25)

- 31.1 Prior to expiry of the period of bid validity, including extension, prescribed by the procuring agency, the procuring agency shall notify the successful bidder in writing (“Letter of Acceptance”) that his bid has been accepted. This letter shall mention the sum which the procuring agency will pay to the contractor in consideration of the execution and completion of the works by the contractor as prescribed by the contract (hereinafter and in the conditions of contract called the “Contract Price”).
- 31.2 No negotiation with the bidder having evaluated as lowest responsive or any other bidder shall be permitted, however, procuring agency may hold meetings to clarify any item in the bid evaluation report.
- 31.3 The notification of award and its acceptance by the bidder will constitute the formation of the contract, binding the procuring agency and the bidder till signing of the formal Contract Agreement.
- 31.4 Upon furnishing by the successful bidder of a Performance Security and signing of the contract, the procuring agency will promptly notify the name of the successful bidder to all bidders and return their bid securities accordingly.
- 31.5 Within seven days of the award of contract, procuring agency shall publish on the website of the Authority and on its own website, if such a website exists, the results of the bidding process, identify the bid through procurement identifying numbers, and the following information:
- (1) Evaluation Report;
 - (2) Form of Contract and letter of Award;
 - (3) Bill of Quantities or Schedule of Requirement.

31.6 Debriefing (SPP Rule 51).

- (a) A bidder may ask the procuring agency for reasons for non acceptance of his bid and may request for a debriefing meeting and procuring agency shall give him the reasons for such non acceptance, either in writing or by holding a debriefing meeting with such a bidder.
- (b) The requesting bidder shall bear all the costs of attending such a debriefing.

IB.32 Performance Security (SPP Rule 39)

- 32.1 The successful bidder shall furnish to the Procuring Agency a Performance Security in the form pay order or demand draft or bank guarantee, and the amount stipulated in the Bidding Data and the Conditions of Contract within a period of 28 days after the receipt of Letter of Acceptance.
- 32.2 Failure of the successful bidder to comply with the requirements of Sub-Clause IB.32.1 or Clauses IB.33 or IB.35 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.
- 32.3 Validity of performance security shall extend at least ninety days beyond the date



of completion of contract, or as mentioned in the bidding data to cover defects liability period or maintenance period subject to final acceptance by the procuring agency.

I-16

IB.33 Signing of Contract Agreement (SPP Rule 39)

- 33.1 Within 14 days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the Procuring Agency will send the successful bidder the Contract Agreement in the form provided in the Bidding Documents, incorporating all agreements between the parties.
- 33.2 The formal Agreement between the Procuring Agency and the successful bidder shall be executed within 14 days of the receipt of the Contract Agreement by the successful bidder from the Procuring Agency.
- 33.3 A procurement contract shall come into force when the procuring agency requires signs contract, the date on which the signatures of both the procuring agency and the successful bidder are affixed to the written contract. Such affixing of signatures shall take place within the time prescribed in the bidding documents. Provided that the procuring agency may reduce the maximum time limit for signing of contract, as and when required, and shall be mentioned in the bidding documents.

33.4 Stamp Duty.

The formal Agreement between the Procuring Agency and the successful bidder shall be duly stamped at rate of ----% *of bid price (updated from time to time) stated in Letter of Acceptance

IB.34 General Performance of the Bidders

Procuring agency may in case of consistent poor performance of the contractor and his failure to remedy the underperforming contract may take such action as may be deemed appropriate under the circumstances of the case including the rescinding the contract and/or black listing of such contractor and debarring him from participation in future bidding process.

IB.35 Integrity Pact (SPP Rule 89)

The Bidder shall sign and stamp the Integrity Pact provided at Appendix-L to Bid in the Bidding Documents for all Provincial/Local Government procurement contracts exceeding Rupees ten million. Failure to provide such Integrity Pact shall make the bidder non-responsive.

IB.36 Instructions not Part of Contract

Bids shall be prepared and submitted in accordance with these Instructions which are provided to assist bidders in preparing their bids, and do not constitute part of the Bid or the Contract Documents.

* Note: See Bidding Data

IB.37 Arbitration (SPP Rule 34)

Any dispute that is not amicably resolved shall be finally settled, unless otherwise specified in the Contract, under the Arbitration Act 1940 updated from time to time and would be held anywhere in the Province of Sindh at the discretion of procuring agency.



**BIDDING
DATA**



Bidding Data

1.1 Name and Address of the Procuring Agency:

*JINNAH SINDH MEDICAL UNIVERSITY, KARACHI
Director,
Planning & Development,
Jinnah Sindh Medical University,
Rafiqi H.J. Shaheed Road, Karachi.*

1.1 Name of the Project & Summary of the Works:

Repair and Renovation of Lecture Halls of Ground and Fourth Floor, Jinnah Sindh Medical University, Karachi.

Repair and Renovation with complete civil works including architectural, plumbing, electrical & heating ventilation & air conditioning as described in the drawings, BOQ & Specifications in detail.

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

The project is financed by University own funding.

2.1 Amount and type of financing: Not Applicable

8.1 Time limit for clarification:

Bidders may seek clarification in writing at least seven (07) days before the deadline of bid submission..

10.1 Bid language:

English

11.1 (b) Post-qualification Information to be updated:

Updated information shall be submitted in accordance with the Appendices to the Tender along with current contractual and financial commitments.

13.1 Bidders to quote entirely in Pak. Rupees only.

14.1 Period of Bid Validity:

120 days after the date of Bid opening

15.1 Amount of Bid Security:

Bid Security for the amount of minimum 2.0% of the quoted Bid Price in the form of Deposit at Call or a Bank Guarantee issued by a Scheduled Bank in Pakistan or from a foreign bank duly counter guaranteed by a Scheduled Bank in Pakistan in favour of the Procuring Agency. The Validity of Bid Security should be of 148 days from the date of bid submission.

17.1 Venue, time, and date of the pre-Bid meeting:

Venue: As notified in Notice Inviting Tenders (NIT)



Time and date: As notified in Notice Inviting Tenders (NIT)

BD-2

18.4 Number of copies of the Bid to be completed and returned:

One Original plus one (01) copy of all tender documents. However the drawings set shall be acceptable original only with the bidders sign and stamp.

19.2(a) address for the purpose of Bid submission:

*Director,
Planning & Development,
Jinnah Sindh Medical University,
Rafiqi H.J. Shaheed Road,
Karachi.
Postal Code# 75510
Tel: 35223811-15 Ext. 350, Fax # 99201372
www.jsmu.edu.pk*

19.2(b) Name and Number of the Contract: (_____)

20.1(a) Deadline for submission of bids:

As notified in Notice Inviting Tenders NIT

23.1 Venue, time, and date of Bid opening:

*Venue: As notified by the Procuring Agency in Notice Inviting Tenders
Time: As notified by the Procuring Agency in Notice Inviting Tenders
Date: As notified by the Procuring Agency in Notice Inviting Tenders*

26. Examination of Bids and Determination of Responsiveness/Qualification:

The bids shall be prepared and submitted as per SPPRA 2010 Rule 46(2) "Single Stage – Two Envelope" bidding process. However, it is essential that each bidder shall submit all required data / information as per Evaluation Criteria Document & Appendices to Bid to demonstrate responsiveness and qualification.

32.1 Standard form and amount of Performance Security acceptable to the Employer:

Performance Security shall be equal to 10% of Contract Amount stated in the Letter of Acceptance. Such Security shall be in the form of unconditional on-demand Bank Guarantee from a Schedule bank in Pakistan.

32.3 Validity of Performance Security:

Performance Security shall be valid up to completion of Defects Liability Period.

33.3 Signing of Contract Agreement:

Within fourteen (14) days from the date of furnishing acceptable Performance security, the successful bidder shall bring Contract Agreement (as per format given in Tender documents) on stamp paper of the value as per stamp duty Act latest version, signed and stamped by him for Employer's signature and stamp.



33.4 Stamp duty

Stamp duty on contract agreement or other papers shall be paid by the successful bidder/contractor as per percentage given in stamp duty Act latest version.



BUILDING'S LOCATION PLAN



**FORM OF BID
AND
APPENDICES TO BID**



FORM OF BID

Bid Reference No. _____
(Name of Contract/Works)

To:

Director,
P&D / Procurement Department,,
Jinnah Sindh Medical University,
Rafiqi H.J. Shaheed Road,
Karachi.

1. Having examined the Bidding Documents including Instructions to Bidders, Bidding Data, Conditions of Contract. Specifications, Drawings and Bill of Quantities and Addenda Nos. _____ for the execution of the above-named Works, we, the undersigned, offer to execute and complete such Works 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 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 submit herewith a Bid Security in the amount of Rupees _____ (Rs. _____) drawn in your favour or made payable to you and valid for a period of 148 days beginning from the date Bids are 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 120 days from the date fixed for receiving 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.



- 8. 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 4.2 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 _____ 2019 _____

Signature: _____

in the capacity of _____duly authorized to sign Bids for and on behalf of

(Name of Bidder in Block Capitals)
(Seal)

Address: _____

Witness:

Signature: _____

Name: _____

Address. _____

Occupation _____



SPECIAL STIPULATIONS
Clause Conditions of Contract

S.No	Description	*Ref	Summary
1.	Engineer's Authority to issue Variation in emergency	3.1	2% of the Contract Price stated in the Letter of Acceptance.
2.	Amount of Performance Security	4.2	10% of contract price stated in the Letter of Acceptance. Performance Security shall be in the form of bank guarantee from a Schedule bank in Pakistan.
3.	Time for Furnishing Programme	8.3	Within 14 days from the date of receipt of Letter of Acceptance.
4.	Minimum amount of Third Party Insurance	18.3	Rs. 500,000/- for property damage and Rs. 500,000/- for personnel injury / death per occurrence with number of occurrences unlimited.
5.	Time for Commencement	8.1	Within 07 days from the date of receipt of Engineer's Notice to Commence which shall be issued within fourteen (14) days after signing of Contract Agreement or issuance of LOA.
6.	Time for Completion	8.2 & 10.2	Six (06) calendar Months from the date of receipt of Engineer's Notice to Commence.
7.	a) Amount of Liquidated Damages / Delay Damages/Penalties	8.7	0.08% of Contract Amount for each day of delay in completion of the Works subject to a maximum of 10% of Contract Price stated in the Letter of Acceptance.
	b) Amount of Bonus		Not Applicable
8.	Defects Liability Period	11.1	365 days from the effective date of Taking Over Certificate.
9.	Percentage of Retention Money	14.2	5 % of the amount of Interim Payment Certificate.
10.	Limit of Retention Money	14.2	5 % of Contract Price stated in the Letter of Acceptance.
11.	Minimum amount of Interim Payment Certificates (Running Bills)	14.2	15 % of Contract Price stated in the Letter of Acceptance
12.	Time of Payment from delivery of Engineer's Interim Payment Certificate to the Procuring Agency.	14.7	28 days from the Issuance date of Interim Payment Certificate by the Engineer.
13.	Mobilization Advance	*14.2	10% of Contract Price stated in the Letter of Acceptance.

*Note: For complete text please Refer related clause in Conditions of Contract



FOREIGN CURRENCY REQUIREMENTS

1. The Bidder may indicate here in below his requirements of foreign currency (if any), with reference to various inputs to the Works.
2. Foreign Currency Requirement as percentage of the Bid (excluding Provisional Sums) _____%.
3. Table of Exchange Rates

Unit of Currency	Equivalent in Pak. Rupees
Australian Dollar	-----
Euro	-----
Japanese Yen	-----
U.K. Pound	-----
U.S. Dollars	-----
-----	-----
-----	-----

Not Applicable



**PRICE ADJUSTMENT UNDER CLAUSE 70/13.80
OF CONDITIONS OF CONTRACT**

The source of indices and the weightages or coefficients for price adjustment formula under Clause 13.80 shall be as follows:

Cost Element	Description	Weightages	Applicable index
(1)	(2)	(3)	(4)
(i)	Fixed Portion		
(ii)	Cement – in bags		
(iii)	Reinforcing Steel		
	Total		

Notes:

- 1) Indices for “(i)” & “(iv)” are taken from the Government of Pakistan Federal Bureau of Statistics Monthly Statistical Bulletin. For steel reinforcement the prices for 1/2” dia bar shall be referred. The base cost indices or prices shall be those applying 28 days prior to the latest day for submission of bids. Current indices or prices shall be those applying 28 days prior to the last day of the monthly billing period.
- 2) Any fluctuation in the indices or prices of materials other than those given above shall not be subject to adjustment of the Contract Price.



BD-1

Appendix-D to Bid

BILL OF QUANTITIES



JINNAH SINDH MEDICAL UNIVERSITY, KARACHI

REPAIR & RENOVATION OF LECTURE HALLS AT GROUND & FOURTH FLOOR

SUMMARY OF BID PRICE

ITEM No.	DESCRIPTION	TOTAL AMOUNT (Rupees)
(1)	(2)	(3)

A REPAIR & RENOVATION OF LECTURE HALL AT GROUND FLOOR

1 C. CIVIL WORKS

2 E. ELECTRICAL WORKS

3 TC. TELECOMMUNICATION WORKS

SUB TOTAL - A (Rs.)

B REPAIR & RENOVATION OF LECTURE HALL AT FOURTH FLOOR

1 C. CIVIL WORKS

2 E. ELECTRICAL WORKS

3 TC. TELECOMMUNICATION WORKS

SUB TOTAL - B (Rs.)

TOTAL SUB TOTAL (A + B) (Rs.)

ADD 13% SST

TOTAL BID PRICE (Rs.)



BID PRICE IN WORDS

(Rupees _____)

JINNAH SINDH MEDICAL UNIVERSITY, KARACHI
REPAIR & RENOVATION OF LECTURE HALL (GROUND FLOOR)

(Based on Composite Schedule of Rates (CSR) 2012. Government of Sindh)

CIVIL WORKS				BILL OF QUANTITIES		
Item No.	C.S.R. 2012 Item No.	Description	Unit	Qty.	Unit Rate (Rupees)	Total Amount (Rupees)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

C. CIVIL WORKS

CHAPTER NO. 4
CONCRETE

1C	Page No. 19, Sr. No. 24	Providing and laying 1:3:6 cement concrete solid block masonry wall 6" and below in thickness set in 1:6 cement mortar in ground floor Super Structure including raking out joints & curing etc. complete.	%Cft	1,000	15,771.01	157,710.10
----	-------------------------	--	------	-------	-----------	------------

CHAPTER NO. 9
SURFACE RENDERING

2C	Page No. 52, Sr.No.11	Cement plaster 1:4 upto 12' height.				
	(b)	1/2" thick	% Sft.	3,000	2,283.93	68,517.90
	(d+29)	3/4" thick	% Sft.	2,800	3,332.73	93,316.44
3C	Page No. 56, Sr.No.38.A & B	Preparation the surface and painting with weather coat i/c rubbing the surface with rubbing brick / sand paper, filling the voids with chalk / plaster of paris and then painting with weather coat of approved make. B2014.(sample and shade approved by the Architect / Engineer).				
	(a)	On Exterior surfaces.	% Sft.	4,000	1,948.10	77,924.00

Amount of Schedule Items Civil Works Rs. 397,468.44



CIVIL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Qty.	Unit Rate (Rupees)	Total Amount (Rupees)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

NON - SCHEDULE ITEMS

4C	NSR	Removal of existing false ceiling, windows, carpet, blinds, electrical fittings & fixtures, communication cables/devices, HVAC and multi - media equipments, glazing/glass (any type), door, sitting chairs and dismantling of existing block masonry etc. All the useable materials stacking on designated place and handed over to JSMU/Employer representative. The Contractor will remove the un-suitable material/debries from site to out of Municipal limits and complete cleaning from top to bottom etc. existing sitting chairs steps making corner & repair of floor (where ever required) complete in all respects and/or as directed by the Architect / Engineer.	Job.	1		
5C	NSR	Providing and laying 6" wide 1-1/2" thick seasoned sapeli wooden planks floor, 6" wide 3/4" thick seasoned sapeli wooden plank, 1" thick wooden edge strip around stage, rough wood framing (horizontal & vertical), 1-1/2" thick seasoned sapeli wooden planks tread and riser with approved polish & transparent sealer, 8"X16"X8" thick Envicrete hollow block etc. stage completed in all respects as per dwg no. 3687/08/TD/B014 including demolishing of existing stage and removal dismantled stuff to designated place and/or as directed by the Architect / Engineer.	Sft	200		
6C	NSR	Providing and fixing curved & straight (blue & yellow) wall cladding with cushioned fabric panels over partal framing, 1/2" thick Marine Ply, Foam Infill between Marine Ply, 1/4" thick Glass wool insulation, Partal framing inside. Wood should be Termite treated etc. complete in all respects drawing no. 3687/08/TD/B004 & B005 and/or as directed by the Architect / Engineer	Sft	1,575		
7C	NSR	Providing and fixing straight wall cladding panels over partal framing, 1/2" thick commercial ply with approved paint, 1/2" thick Marine Ply, Foam Infill between Marine Ply, Partal framing inside. Wood should be Termite treated etc. complete in all respects drawing no. 3687/08/TD/B004 & B005 and/or as directed by the Architect / Engineer	Sft	1,575		
8C	NSR	Providing and laying 20" x 20" Carpet Tiles (approved quality / colour / shade) over existing floor, setting tile in approved adhesive, cleaning etc. complete in all respects as per drawings, specifications and/or as directed by the Architect / Engineer (sample and shade/colour approved by the Architect / Engineer).	Sft.	3,000		



CIVIL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Qty.	Unit Rate (Rupees)	Total Amount (Rupees)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
9C	NSR	Renovation of existing doors both sides as per drawing no. 3687/08/TD/B006 consisting of 1/2" thick teak ply wood panel over existing wooden door sheet with approved polish, 2mm thick SS Sheet over door panel, SS handrail, door lock, closer, stopper, hinges (Italy Made) & polishing etc. complete in all respects as shown on drawings and/or as directed by the Architect / Engineer (sample approved by the Architect / Engineer).				
		(a) Type - D1	Sft	80		
		(b) Type - D2	Sft	32		
10C	NSR	Providing and fixing fully glazed anodized aluminum windows of approved manufacturer using 2mm thick 4" wide extruded sections, glazed with distortion free 5mm thick approved tinted glass, fly proof shutter including all hardware, PVC / rubber gasket and sealant complete as per schedule & specifications and/or as directed by the Architect / Engineer (sample as approved by the Architects/Engineer).				
		<u>Windows</u>				
		(a) Type - W1	Sft.	150		
11C	NSR	Providing, making and fixing false ceiling for Lecture Stage area comprising approved texture coating over 9mm thick gypsum board sheet complete in all respects as shown on drawings (3687/08/TD/B005, B006 & B007) and/or as directed by the Architect / Engineer.	Sft.	550		
12C	NSR	Providing and fixing false ceiling round for Lecture Stage comprising 3mm thick teak ply wood over 1/2" thick marine ply, Form Infill between marine ply, to be finish in approved matt polish including rough wood frame, suspension rod @ 1200mm c/c, metal channel F @ 1200mm c/c, joiner, metal furring channel @ 600mm c/c and supporting hangers etc. complete in all respects as shown on drawings (3687/08/TD/B005, B006 & B007) and/or as directed by the Architect / Engineer.	Sft.	200		
13C	NSR	Providing, making and fixing false ceiling curved, straight or circular for Lecture Hall comprising 3mm thick teak & beech ply wood over 1/2" thick marine ply to be finish in approved matt polish with suspension rod @ 1200mm c/c, metal channel F @ 1200mm c/c, joiner, metal furring channel @ 600mm c/c and supporting hangers, as per drawing no. 3687/08/TD/B005, B006 & B007 etc. complete in all respects as shown on drawings and/or as directed by the Architect / Engineer.	Sft.	2,200		



CIVIL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Qty.	Unit Rate (Rupees)	Total Amount (Rupees)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
14C	NSR	Providing and fixing window blinds (roller type) one way view screen fabric, block out fabric chain rolled mechanism (The Protectors or equivalent) complete in all respects and/or as directed by the Architect / Engineer.	Sft.	200		
15C	NSR	Providing, fabricating and fixing M.S. flat 3/4" wide & 1/4" thick safety grill (approved section & design) with painting etc. complete in all respects and/or as directed by the Architect / Engineer.	Kg.	1,000		

Amount of Non - Schedule Items Civil Works Rs. _____

Amount of Schedule Items Civil Works Rs. 397,468.44

Add / Deduct _____% Premium on Civil Works Schedule Items Rs. _____

Amount of Non-Schedule Items Civil Works Rs. _____

Total Amount of Civil Works Schedule & Non-Schedule items carried over to Summary Rs. _____



JINNAH SINDH MEDICAL UNIVERSITY KARACHI

REPAIR & RENOVATION OF LECTURE HALL (GROUND FLOOR)

ELECTRICAL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

NON-SCHEDULE ITEMSE. ELECTRICAL WORKS

Ref Spec Sec: 8001, 8020

Supply, installation, testing and commissioning of the following items of work (unless specifically stated otherwise) including all material, labour, tool, plant, accessories, related civil works etc required for proper completion of each item as per specifications (Section-8001 "General Specifications for Electrical Works" shall be applicable to all BOQ items). The contractor is bound to submit all relevant data, information, literature, drawings, submittals etc. as per specifications & recommended manufacturers list to (Specs Section-8020) The engineer for necessary approvals. Note: in case of any discrepancy found between BoQ, Specifications and drawings, then BoQ/Specifications will govern.

LT Distribution Boards

Ref Spec Sec: 8133, 8212, 8240

1E Following 16 SWG MS sheet, recessed / surface mounted on wall or floor LT Distribution Boards (as per single line diagram shown on drawings) including electrical & mechanical components, electrolytic tinned copper busbars, control wiring, related civil works and all accessories, complete in all respect.

a) DB-GF-1 (Recessed)	Job.	1
b) EDB-GF-1 (Recessed)	Job.	1



ELECTRICAL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Light Fixtures

Ref. Specs Sec. 8150, 8212, 8240

2E

Following light fixtures as per lighting fixture schedule (as shown on drawing) installed on surface or wall or floor or false ceiling or columns or masts complete with all accessories such as lamps, lamp holders, ballasts, starters, ignitors, capacitors, LED drivers as applicable, etc. including all relevant installation material as required and approved by the Engineer. (Note: The contractor shall be responsible for compatibility of recessed mounted light fixtures with gypsum / aluminium / dampa etc., false ceiling types in coordination with architectural design.)

a) Type - B1	no.	3
LED bulk head light fixture 1500 lumens, polycarbonate diffuser, eyelid type, power rating 80 watt/lumens or better, LED output driver, IP54		
b) Type - D1	no.	34
LED recessed mounted spot downlight 700 lumens (24 deg beam angle), power output 80 watt/lumens or better, LED output driver, IP20		
c) Type - D2	no.	33
LED recessed mounted downlight 2100 lumens (8 inch dia or minimum), power rating 80 watts/lumens or better, LED output driver, IP20		
d) Type - D3	no.	62
LED recessed mounted square downlight (1 ft x1 ft), 2100 lumens (8 inch dia or minimum), power rating 80 watt/lumens or better, LED output driver, IP20		
e) Type - P1	no.	36
LED staircase light fixture, LED output driver, IP20		
f) Type - Exit	no.	3
Surface mounted / suspended bulk head, non maintained type exit light fixture with Ni-Cd battery backup unit for 3 hours backup, IP65		



ELECTRICAL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

LT Cables

Ref. Specs Sec. 8212, 8240

3E Following sizes, 600/1000 V, Single core or multi core, copper conductor, PVC insulated, armoured / unarmoured, PVC Sheathed cable pulled in already installed surface mounted conduits or concealed conduits or cable tray or concrete ducts or underground in already excavated trenches or in already laid PVC pipes including tags, ties, lugs, termination kits, colour sleeves, cable glands, bushes etc., all related accessories, complete in all respect.

a) 4 core, 120 mm², Cu/PVC/PVC Rft. 300

b) 4 core, 25 mm², Cu/PVC/PVC Rft. 300

Wiring

Refer Spec Sec: 8212, 8220, 8230, 8240, 8290

4E Wiring of light circuits from distribution board (DB) to point/switch including wiring between switches on the same circuit with 3 no. (1 x 2.5 mm² as phase, neutral & CPC) single core Copper conductor PVC cable complete with appropriate size concealed (minimum 1" dia) / surface mounted PVC conduit and all accessories etc. complete in all respects. no. 15

5E Wiring of light circuits from switch board to switch board including wiring between switches on the same circuit with 3 no. (1 x 2.5 mm² as phase, neutral & CPC) single core Copper conductor PVC cable complete with appropriate size concealed (minimum 1" dia) / surface mounted PVC conduit and all accessories etc. complete in all respects. no. 15

6E Wiring from light/exhaust fan point to switch with 3 no. (1 x 1.5 mm² as phase, neutral & CPC) single core copper conductor PVC cable complete with appropriate size concealed (minimum 1" dia) / surface mounted PVC conduit, ceiling rose, 10 Amps light control gang switch, sheet steel back box, 3 core flexible cable and all accessories etc. complete in all respects. no. 85

7E Same as above item 1-6E but wiring from point to point no. 85

8E Wiring from fan point to switch with 3 no. (1 x 1.5 mm² as phase, neutral & CPC) single core copper conductor PVC cable complete with appropriate size concealed (minimum 1" dia in concrete slab) / surface mounted PVC conduit, ceiling rose, 10 Amps fan control gang switch, with fan dimmer, sheet steel back box, 3 core flexible cable and all accessories etc. complete in all respects. no. 18



ELECTRICAL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
9E		Wiring of 250 Volts socket outlets with following size single core, copper conductor PVC cables complete with appropriate size concealed (minimum 1" dia in concrete slab) / surface mounted PVC conduit and all accessories, etc. complete in all respects.				
		a) From Distribution Board (DB) to outlet with 3 no. (1 x 4.0 mm ² as phase, neutral & CPC)	no.	18		
		b) From outlet to outlet with (1 x 2.5 mm ² as phase, neutral & CPC)	no.	74		
10E		Wiring from distribution board to load break switch / circuit breaker box / socket outlet with 3 no. (1 x 6.0 mm ² as 3-phase, neutral & CPC) single core copper conductor PVC cable, complete with appropriate size concealed (minimum 1" dia in concrete slab) / surface mounted PVC conduit and all accessories, etc. complete in all respects.	no.	3		
11E		Wiring from distribution board to load break switch / circuit breaker box / socket outlet with 5 no. (1 x 6.0 mm ² as 3-phase, neutral & CPC) single core copper conductor PVC cable, complete with appropriate size concealed (minimum 1" dia in concrete slab) / surface mounted PVC conduit and all accessories, etc. complete in all respects.	no.	14		
		<u>Wiring Accessories</u> Ref. Specs Sec. 8220				
12E		Following types of socket outlets including all accessories, complete in all respect.				
		a) Simple 1 no. 13 A, 250 V, 3 pin multi pin type + 16 A, 250V, 2 pin, socket outlet with sheet steel back box.	no.	37		
		b) Ceiling monted 13A spur socket outlet with sheet steel box.	no.	19		
		<u>Earthing</u> Ref. Specs Sec. 8212, 8240				
13E		Following sizes of single core PVC insulated copper conductor cable as earth continuity conductor (ECC) installed on surface or on already installed pipes / conduits / trenches / cable tray etc., including tags, ties, lugs, termination kits, colour sleeves, cable glands, bushes etc., all related accessories, complete in all respect.				
		a) 70 mm ² , Cu/PVC	Rft.	300		
		b) 25 mm ² , Cu/PVC	Rft.	300		
		c) 10 mm ² , Cu/PVC	Rft.	300		
14E		300 mm (L) x 50 mm (H) x 6 mm (T) tinned copper earth connecting point, including all accessories, complete in all respect.	No.	3		



ELECTRICAL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		<u>Miscellaneous Items</u>				
		Ref. Specs Sec. 8290				
15E		Following rating SP&N/TP&N load break switches AC-3 duty in IP65 enclosure of the following rating:				
		a) 32 Amp, SP&N (Wall / Pedestal mounted)	no.	14		
		b) 32 Amp, TP&N (Wall / Pedestal mounted)	no.	14		
16E		Under floor outlet box with provision for 4 no. socket outlet as set of 1 no. 16 A Schuko + 1 no.13 A Flat Pin socket outlet on normal & UPS power supply & 2 No. one port CAT-6 STP Giga speed RJ-45 socket outlet including all accessories, complete in all respect.	no.	2		
17E		Following 16 SWG (1.62 mm) thick G.I sheet cable tray with soild cover including properly manufactured flexible expansion coupler, elbows, risers, tees, crosses, internal & external bends and fittings, galvanized support structure, all accessories, compelete in all respects. (Note: Welded connection is not allowed and prohibited)				
		a) 450 mm x 100 mm	Rft.	10		
		b) 300 mm x 100 mm	Rft.	300		
		c) 150 mm x 100 mm	Rft.	10		
18E		Recessed/surface mounted type 2 ft x 2ft, 18 inch dia grill and blade, plastic body louvre fan complete with blades, regulator or remote control & moveing grill with motor, installed on false ceilling including all accessories, complete in all respect. (Make VOLDAM or approved equivalent)	no.	35		
19E		Online double conversion UPS (2 hours backup), input/output PF = 1.0, three phase in/three phase out), static & manual bypass switches, parallel operation capability upto 4 numbers UPS of same rating, including in/out connections through suitable rating industrial sockets or any suitable arrangement, appropriate size floor mounting racks for UPS and battery bank all accessories, complete in all respect.				
		a) 5 kVA	Job	1		

Total Amount of Electrical Works Non-Schedule items carried over to Summary Rs. _____



JINNAH SINDH MEDICAL UNIVERSITY KARACHI

REPAIR & RENOVATION OF LECTURE HALL (GROUND FLOOR)

TELECOMMUNICATION WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

T. TELECOMMUNICATION WORKS

Ref Spec Sec: 8001, 8020

Supply, installation, testing and commissioning of the following items of work (unless specifically stated otherwise) including all material, labour, tool, plant, accessories, related civil works etc required for proper completion of each item as per specifications (Section-8001 "General Specifications for Electrical Works" shall be applicable to all BOQ items). The contractor is bound to submit all relevant data, information, literature, drawings, submittals etc. as per specifications & recommended manufacturers list to (Specs Section-8020) The engineer for necessary approvals. Note: in case of any discrepancy found between BoQ, Specifications and drawings, then BoQ/Specifications will govern.

STRUCTURED CABLING NETWORK

Ref.Spec.Sec.8001,8212,8230,8240,8290,8312

1T	CAT-5e UTP RJ45 outlet including sheet steel back box and face plate including all mounting accessories.	no.	5		
2T	CAT-5e UTP RJ45 outlet including face plate without sheet steel back box including all mounting accessories.	no.	1		
3T	CAT-6 UTP RJ45 duplex outlet including sheet steel back box and face plate including all mounting accessories.	no.	5		
4T	CAT-6 UTP RJ45 duplex outlet including face plate without sheet steel back box including all mounting accessories.	no.	1		
5T	Wiring from RJ45 outlet point to relevant Building / floor distributor with CAT-5e UTP cable already laid concealed conduit / already installed cable tray or cable trunking including all accessories complete in all respect.	no.	6		
6T	Wiring from RJ45 outlet point to relevant Building / floor distributor with CAT-6 UTP cable already laid concealed conduit / already installed cable tray or cable trunking including all accessories complete in all respect.	no.	6		



TELECOMMUNICATION WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
7T		25 pair CAT5e cable in already installed PVC conduit / cable trunking/ cable tray, including connectors etc., all components & accessories, complete in all respect.	Rft.	300		
8T		Following type CAT-6, UTP Giga Speed patch cord with RJ45 connector at both ends. a) 1 metre (3 ft.) long	no.	24		
		c) 3 metre (10 ft.) long	no.	24		
9T		Following sizes of rack mounted 110 base unit with connecting blocks including all components & accessories, complete in all respect. a) 10 pair	no.	1		
10T		24 port Cat-6 UTP Giga Speed modular loaded (RJ45) jack patch panels compatible with 19" rack installed in floor/wall mounted cabinet including built-in rear cable management with all mounting accessories.	no.	1		
11T		19" Rack mounted Front Cable Management with all installation accessories.	no.	1		
12T		18U (600mm (width) x 800mm (height)) rack with plexiglass door including Hoops, side management, cable trays, fan tray, slide shelf and required number of power sockets including all mounting accessories.	no.	1		
13T		Following Layer-2 distribution switch, suitable to be installed in 19" rack, including all components and accessories complete in all respect. a) 24 port	no.	1		
14T		WiFi router 2.4 GHz & 5 GHz band frequency, upto 1000 Mbps data speed, with suitable to be installed in 19" rack, including all components and accessories complete in all respect.	no.	4		
<u>PUBLIC ADDRESS SYSTEM</u>						
Ref.Spec.Sec.8290						
15T		Multimedia Projector type Panasonic model EZ-950 or equivalent with 1920x1200 resolution, produces brightness upto 5400 lumens and automatically adjusts the iris to match the situation, resulting in a 10000:1 contrast ratio, 16:10 aspect ratio. The projector's lamp life cycle can last upto 5000 hours in Eco mode.	no.	1		



TELECOMMUNICATION WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
16T		RGB Video Splitter make Extron or equivalent, 300 Mhz (-3dB) RGB video bandwidth, fully loaded, compatible with VGA-QXGA resolution & both outputs are individually buffered.	no.	1		
17T		Speker make Interm or equivalent, i2 30 W Speaker CS-20, 6 inch full range speaker, using high quality matching trance, 3 stage ouput slection & high sound pressure and wide frequency characteristics.	no.	12		
18T		Amplifier make Interm or equivalent, PA-480, 5 zone slection switches, 5 Microphone/Line inputs & input Level LED Monitor per channel.	no.	1		
19T		Gooseneck Mike make Samson or equivalent, model CM20P internal Selectable Hi-pass filter, XLR connectro & mulistage windscreen.	no.	1		
20T		Handheld Wireless Samson Mike or equivalent, Concert 99 Multifunctional backlit LCD removable i/4-wave antennas & balanced XLR and 1/4" outputs	no.	2		
21T		Handheld Wireless Samson Mike or equivalent, Concert 99 Multifunctional backlit LCD.	no.	1		
22T		Collar Mike Samson or equivalent, Headset Wireless system, high performance UHF wireless microphone.	no.	1		
<u>Conduits & Pipes</u>						
Ref. Specs Sec. 8230						
23T		Following sizes of PVC conduit / pipes installed on surface / concealed in wall, slab & floor including pull wire and all accessories as required etc., complete in all respects.				
		a) 1" dia	Rft.	500		
<u>MISCELLANEOUS ITEMS</u>						
Ref.Spec.Sec.8001,8212,8230,8240,8290,8335						
24T		Rack mounted compact UPS, line interactive with 4 hours hot swapable battery backup, greater than 95% efficiency, ABM technology including all related accessories etc., complete in all respect.				
		a) 1 kVA	Job.	2		

Total Rupees



JINNAH SINDH MEDICAL UNIVERSITY, KARACHI
REPAIR & RENOVATION OF LECTURE HALL (FOURTH FLOOR)

(Based on Composite Schedule of Rates (CSR) 2012. Government of Sindh)

CIVIL WORKS			BILL OF QUANTITIES			
Item No.	C.S.R. 2012 Item No.	Description	Unit	Qty.	Unit Rate (Rupees)	Total Amount (Rupees)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

C. CIVIL WORKS

CHAPTER NO. 4

CONCRETE

1C	Page No. 19, Sr. No. 24 + 30 (4th floor)	Providing and laying 1:3:6 cement concrete solid block masonry wall 6" and below in thickness set in 1:6 cement mortar in 4th floor Super Structure including raking out joints & curing etc. complete.	%Cft	1,000	17,710.79	177,107.90
----	--	---	------	-------	-----------	------------

CHAPTER NO. 9

SURFACE RENDERING

2C	Page No. 52, Sr.No.11	Cement plaster 1:4 upto 12' height.				
	(b)	1/2" thick	% Sft.	3,000	2,283.93	68,517.90
	(d+29)	3/4" thick	% Sft.	2,800	3,332.73	93,316.44
3C	Page No. 56, Sr.No.38.A & B	Preparation the surface and painting with weather coat i/c rubbing the surface with rubbing brick / sand paper, filling the voids with chalk / plaster of paris and then painting with weather coat of approved make. B2014.(sample and shade approved by the Architect / Engineer).				
	(a)	On Exterior surfaces.	% Sft.	4,000	1,948.10	77,924.00

Amount of Schedule Items Civil Works Rs. 416,866.24



CIVIL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Qty.	Unit Rate (Rupees)	Total Amount (Rupees)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

NON - SCHEDULE ITEMS

4C	NSR	Removal of existing false ceiling, windows, carpet, blinds, electrical fittings & fixtures, communication cables/devices, HVAC and multi - media equipments, glazing/glass (any type), door, sitting chairs and dismantling of existing block masonry etc. All the useable materials stacking on designated place and handed over to JSMU/Employer representative. The Contractor will remove the un-suitable material/debris from site to out of Municipal limits and complete cleaning from top to bottom etc. existing sitting chairs steps making corner & repair of floor (where ever required) complete in all respects and/or as directed by the Architect / Engineer.	Job.	1		
5C	NSR	Providing and laying 6" wide 1-1/2" thick seasoned sapeli wooden planks floor, 6" wide 3/4" thick seasoned sapeli wooden plank, 1" thick wooden edge strip around stage, rough wood framing (horizontal & vertical), 1-1/2" thick seasoned sapeli wooden planks tread and riser with approved polish & transparent sealer, 8"X16"X8" thick Envicrete hollow block etc. stage completed in all respects as per dwg no. 3687/08/TD/B014 including demolishing of existing stage and removal dismantled stuff to designated place and/or as directed by the Architect / Engineer.	Sft	200		
6C	NSR	Providing and fixing curved & straight (blue & yellow) wall cladding with cushioned fabric panels over partial framing, 1/2" thick Marine Ply, Foam Infill between Marine Ply, 1/4" thick Glass wool insulation, Partial framing inside. Wood should be Termite treated etc. complete in all respects drawing no. 3687/08/TD/B004 & B005 and/or as directed by the Architect / Engineer	Sft	1,575		
7C	NSR	Providing and fixing straight wall cladding panels over partial framing, 1/2" thick commercial ply with approved paint, 1/2" thick Marine Ply, Foam Infill between Marine Ply, Partial framing inside. Wood should be Termite treated etc. complete in all respects drawing no. 3687/08/TD/B004 & B005 and/or as directed by the Architect / Engineer	Sft	1,575		
8C	NSR	Providing and laying 20" x 20" Carpet Tiles (approved quality / colour / shade) over existing floor, setting tile in approved adhesive, cleaning etc. complete in all respects as per drawings, specifications and/or as directed by the Architect / Engineer (sample and shade/colour approved by the Architect / Engineer).	Sft.	3,000		



CIVIL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Qty.	Unit Rate (Rupees)	Total Amount (Rupees)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
9C	NSR	Renovation of existing doors both sides as per drawing no. 3687/08/TD/B006 consisting of 1/2" thick teak ply wood panel over existing wooden door sheet with approved polish, 2mm thick SS Sheet over door panel, SS handrail, door lock, closer, stopper, hinges (Italy Made) & polishing etc. complete in all respects as shown on drawings and/or as directed by the Architect / Engineer (sample approved by the Architect / Engineer).				
		(a) Type - D1	Sft	80		
		(b) Type - D2	Sft	32		
10C	NSR	Providing and fixing fully glazed anodized aluminum windows of approved manufacturer using 2mm thick 4" wide extruded sections, glazed with distortion free 5mm thick approved tinted glass, fly proof shutter including all hardware, PVC / rubber gasket and sealant complete as per schedule & specifications and/or as directed by the Architect / Engineer (sample as approved by the Architects/Engineer).				
		<u>Windows</u>				
		(a) Type - W1	Sft.	150		
11C	NSR	Providing, making and fixing false ceiling for Lecture Stage area comprising approved texture coating over 9mm thick gypsum board sheet complete in all respects as shown on drawings (3687/08/TD/B005, B006 & B007) and/or as directed by the Architect / Engineer.	Sft.	550		
12C	NSR	Providing and fixing false ceiling round for Lecture Stage comprising 3mm thick teak ply wood over 1/2" thick marine ply, Form Infill between marine ply, to be finish in approved matt polish including rough wood frame, suspension rod @ 1200mm c/c, metal channel F @ 1200mm c/c, joiner, metal furring channel @ 600mm c/c and supporting hangers etc. complete in all respects as shown on drawings (3687/08/TD/B005, B006 & B007) and/or as directed by the Architect / Engineer.	Sft.	200		
13C	NSR	Providing, making and fixing false ceiling curved, straight or circular for Lecture Hall comprising 3mm thick teak & beech ply wood over 1/2" thick marine ply to be finish in approved matt polish with suspension rod @ 1200mm c/c, metal channel F @ 1200mm c/c, joiner, metal furring channel @ 600mm c/c and supporting hangers, as per drawing no. 3687/08/TD/B005, B006 & B007 etc. complete in all respects as shown on drawings and/or as directed by the Architect / Engineer.	Sft.	2,200		



CIVIL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Qty.	Unit Rate (Rupees)	Total Amount (Rupees)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
14C	NSR	Providing and fixing window blinds (roller type) one way view screen fabric, block out fabric chain rolled mechanism (The Protectors or equivalent) complete in all respects and/or as directed by the Architect / Engineer	Sft.	200		
15C	NSR	Providing, fabricating and fixing M.S. flat 3/4" wide & 1/4" thick safety grill (approved section & design) with painting etc. complete in all respects and/or as directed by the Architect / Engineer.	Kg.	1,000		

Amount of Non - Schedule Items Civil Works Rs. _____

Amount of Schedule Items Civil Works Rs. 416,866.24

Add / Deduct _____% Premium on Civil Works Schedule Items Rs. _____

Amount of Non-Schedule Items Civil Works Rs. _____

Total Amount of Civil Works Schedule & Non-Schedule items carried over to Summary Rs. _____



JINNAH SINDH MEDICAL UNIVERSITY KARACHI

REPAIR & RENOVATION OF LECTURE HALL (FOURTH FLOOR)

ELECTRICAL WORKS				BILL OF QUANTITIES		
Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

NON-SCHEDULE ITEMSE. ELECTRICAL WORKS

Ref Spec Sec: 8001, 8020

Supply, installation, testing and commissioning of the following items of work (unless specifically stated otherwise) including all material, labour, tool, plant, accessories, related civil works etc required for proper completion of each item as per specifications (Section-8001 "General Specifications for Electrical Works" shall be applicable to all BOQ items). The contractor is bound to submit all relevant data, information, literature, drawings, submittals etc. as per specifications & recommended manufacturers list to (Specs Section-8020) The engineer for necessary approvals. Note: in case of any discrepancy found between BoQ, Specifications and drawings, then BoQ/Specifications will govern.

LT Distribution Boards

Ref Spec Sec: 8133, 8212, 8240

1E

Following 16 SWG MS sheet, recessed / surface mounted on wall or floor LT Distribution Boards (as per single line diagram shown on drawings) including electrical & mechanical components, electrolytic tinned copper busbars, control wiring, related civil works and all accessories, complete in all respect.

a) DB-GF-1 (Recessed)	Job.	1
b) EDB-GF-1(Recessed)	Job.	1



ELECTRICAL WORKS			BILL OF QUANTITIES			
Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Light Fixtures

Ref. Specs Sec. 8150, 8212, 8240

2E

Following light fixtures as per lighting fixture schedule (as shown on drawing) installed on surface or wall or floor or false ceiling or columns or masts complete with all accessories such as lamps, lamp holders, ballasts, starters, ignitors, capacitors, LED drivers as applicable, etc. including all relevant installation material as required and approved by the Engineer. (Note: The contractor shall be responsible for compatibility of recessed mounted light fixtures with gypsum / aluminium / dampa etc., false ceiling types in coordination with architectural design.)

a) Type - B1 no. 3
LED bulk head light fixture 1500 lumens, polycarbonate diffuser, eyelid type, power rating 80 watt/lumens or better, LED output driver, IP54

b) Type - D1 no. 34
LED recessed mounted spot downlight 700 lumens (24 deg beam angle), power output 80 watt/lumens or better, LED output driver, IP20

c) Type - D2 no. 33
LED recessed mounted downlight 2100 lumens (8 inch dia or minimum), power rating 80 watts/lumens or better, LED output driver, IP20

d) Type - D3 no. 62
LED recessed mounted square downlight (1 ft x1 ft), 2100 lumens (8 inch dia or minimum), power rating 80 watt/lumens or better, LED output driver, IP20

e) Type - P1 no. 36
LED staircase light fixture, LED output driver, IP20

f) Type - Exit no. 3
Surface mounted / suspended bulk head, non maintained type exit light fixture with Ni-Cd battery backup unit for 3 hours backup, IP65



ELECTRICAL WORKS				BILL OF QUANTITIES		
Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

LT Cables

Ref. Specs Sec. 8212, 8240

3E		Following sizes, 600/1000 V, Single core or multi core, copper conductor, PVC insulated, armoured / unarmoured, PVC Sheathed cable pulled in already installed surface mounted conduits or concealed conduits or cable tray or concrete ducts or underground in already excavated trenches or in already laid PVC pipes including tags, ties, lugs, termination kits, colour sleeves, cable glands, bushes etc., all related accessories, complete in all respect.				
		a) 4 core, 120 mm ² , Cu/PVC/PVC	Rft.	300		
		b) 4 core, 25 mm ² , Cu/PVC/PVC	Rft.	300		

Wiring

Refer Spec Sec: 8212, 8220, 8230, 8240, 8290

4E		Wiring of light circuits from distribution board (DB) to point/switch including wiring between switches on the same circuit with 3 no. (1 x 2.5 mm ² as phase, neutral & CPC) single core Copper conductor PVC cable complete with appropriate size concealed (minimum 1" dia) / surface mounted PVC conduit and all accessories etc. complete in all respects.	no.	15		
5E		Wiring of light circuits from switch board to switch board including wiring between switches on the same circuit with 3 no. (1 x 2.5 mm ² as phase, neutral & CPC) single core Copper conductor PVC cable complete with appropriate size concealed (minimum 1" dia) / surface mounted PVC conduit and all accessories etc. complete in all respects.	no.	15		
6E		Wiring from light/exhaust fan point to switch with 3 no. (1 x 1.5 mm ² as phase, neutral & CPC) single core copper conductor PVC cable complete with appropriate size concealed (minimum 1" dia) / surface mounted PVC conduit, ceiling rose, 10 Amps light control gang switch, sheet steel back box, 3 core flexible cable and all accessories etc. complete in all respects.	no.	85		
7E		Same as above item 1-6E but wiring from point to point	no.	85		



ELECTRICAL WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
8E		Wiring from fan point to switch with 3 no. (1 x 1.5 mm ² as phase, neutral & CPC) single core copper conductor PVC cable complete with appropriate size concealed (minimum 1" dia in concrete slab) / surface mounted PVC conduit, ceiling rose, 10 Amps fan control gang switch, with fan dimmer, sheet steel back box, 3 core flexible cable and all accessories etc. complete in all respects.	no.	18		
9E		Wiring of 250 Volts socket outlets with following size single core, copper conductor PVC cables complete with appropriate size concealed (minimum 1" dia in concrete slab) / surface mounted PVC conduit and all accessories, etc. complete in all respects.				
		a) From Distribution Board (DB) to outlet with 3 no. (1 x 4.0 mm ² as phase, neutral & CPC)	no.	18		
		b) From outlet to outlet with (1 x 2.5 mm ² as phase, neutral & CPC)	no.	74		
10E		Wiring from distribution board to load break switch / circuit breaker box / socket outlet with 3 no. (1 x 6.0 mm ² as 3-phase, neutral & CPC) single core copper conductor PVC cable, complete with appropriate size concealed (minimum 1" dia in concrete slab) / surface mounted PVC conduit and all accessories, etc. complete in all respects.	no.	3		
11E		Wiring from distribution board to load break switch / circuit breaker box / socket outlet with 5 no. (1 x 6.0 mm ² as 3-phase, neutral & CPC) single core copper conductor PVC cable, complete with appropriate size concealed (minimum 1" dia in concrete slab) / surface mounted PVC conduit and all accessories, etc. complete in all respects.	no.	14		
		<u>Wiring Accessories</u> Ref. Specs Sec. 8220				
12E		Following types of socket outlets including all accessories, complete in all respect.				
		a) Simple 1 no. 13 A, 250 V, 3 pin multi pin type + 16 A, 250V, 2 pin, socket outlet with sheet steel back box.	no.	37		
		b) Ceiling monted 13A spur socket outlet with sheet steel box.	no.	19		



ELECTRICAL WORKS				BILL OF QUANTITIES		
Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Earthing

Ref. Specs Sec. 8212, 8240

13E	Following sizes of single core PVC insulated copper conductor cable as earth continuity conductor (ECC) installed on surface or on already installed pipes / conduits / trenches / cable tray etc., including tags, ties, lugs, termination kits, colour sleeves, cable glands, bushes etc., all related accessories, complete in all respect.					
	a) 70 mm ² , Cu/PVC	Rft.	300			
	b) 25 mm ² , Cu/PVC	Rft.	300			
	c) 10 mm ² , Cu/PVC	Rft.	300			

14E	300 mm (L) x 50 mm (H) x 6 mm (T) tinned copper earth connecting point, including all accessories, complete in all respect.	No.	3			
-----	---	-----	---	--	--	--

Miscellaneous Items

Ref. Specs Sec. 8290

15E	Following rating SP&N/TP&N load break switches AC-3 duty in IP65 enclosure of the following rating:					
	a) 32 Amp, SP&N (Wall / Pedestal mounted)	no.	14			
	b) 32 Amp, TP&N (Wall / Pedestal mounted)	no.	14			

16E	Under floor outlet box with provision for 4 no. socket outlet as set of 1 no. 16 A Schuko + 1 no.13 A Flat Pin socket outlet on normal & UPS power supply & 2 No. one port CAT-6 STP Giga speed RJ-45 socket outlet including all accessories, complete in all respect.	no.	2			
-----	---	-----	---	--	--	--

17E	Following 16 SWG (1.62 mm) thick G.I sheet cable tray with solid cover including properly manufactured flexible expansion coupler, elbows, risers, tees, crosses, internal & external bends and fittings, galvanized support structure, all accessories, complete in all respects. (Note: Welded connection is not allowed and prohibited)					
	a) 450 mm x 100 mm	Rft.	10			
	b) 300 mm x 100 mm	Rft.	300			
	c) 150 mm x 100 mm	Rft.	10			

18E	Recessed/surface mounted type 2 ft x 2ft, 18 inch dia grill and blade, plastic body louvre fan complete with blades, regulator or remote control & moving grill with motor, installed on false ceiling including all accessories, complete in all respect. (Make VOLDAM or approved equivalent)	no.	35			
-----	---	-----	----	--	--	--

19E	Online double conversion UPS (2 hours backup), input/output PF = 1.0, three phase in/three phase out), static & manual bypass switches, parallel operation capability upto 4 numbers UPS of same rating, including in/out connections through suitable rating industrial sockets or any suitable arrangement, appropriate size floor mounting racks for UPS and battery bank all accessories, complete in all respect.					
	a) 5 kVA	Job	1	250,000		

Total Amount of Electrical Works Non-Schedule items carried over to Summary Rs. _____



JINNAH SINDH MEDICAL UNIVERSITY KARACHI

REPAIR & RENOVATION OF LECTURE HALL (FOURTH FLOOR)

TELECOMMUNICATION WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)

T. TELECOMMUNICATION WORKS

Ref Spec Sec: 8001, 8020

Supply, installation, testing and commissioning of the following items of work (unless specifically stated otherwise) including all material, labour, tool, plant, accessories, related civil works etc required for proper completion of each item as per specifications (Section-8001 "General Specifications for Electrical Works" shall be applicable to all BOQ items). The contractor is bound to submit all relevant data, information, literature, drawings, submittals etc. as per specifications & recommended manufacturers list to (Specs Section-8020) The engineer for necessary approvals. Note: in case of any discrepancy found between BoQ, Specifications and drawings, then BoQ/Specifications will govern.

STRUCTURED CABLING NETWORK

Ref.Spec.Sec.8001,8212,8230,8240,8290,8312

1T	CAT-5e UTP RJ45 outlet including sheet steel back box and face plate including all mounting accessories.	no.	5
2T	CAT-5e UTP RJ45 outlet including face plate without sheet steel back box including all mounting accessories.	no.	1
3T	CAT-6 UTP RJ45 duplex outlet including sheet steel back box and face plate including all mounting accessories.	no.	5
4T	CAT-6 UTP RJ45 duplex outlet including face plate without sheet steel back box including all mounting accessories.	no.	1
5T	Wiring from RJ45 outlet point to relevant Building / floor distributor with CAT-5e UTP cable already laid concealed conduit / already installed cable tray or cable trunking including all accessories complete in all respect.	no.	6
6T	Wiring from RJ45 outlet point to relevant Building / floor distributor with CAT-6 UTP cable already laid concealed conduit / already installed cable tray or cable trunking including all accessories complete in all respect.	no.	6



TELECOMMUNICATION WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
7T		25 pair CAT5e cable in already installed PVC conduit / cable trunking/ cable tray, including connectors etc., all components & accessories, complete in all respect.	Rft.	300		
8T		Following type CAT-6, UTP Giga Speed patch cord with RJ45 connector at both ends. a) 1 metre (3 ft.) long	no.	24		
		c) 3 metre (10 ft.) long	no.	24		
9T		Following sizes of rack mounted 110 base unit with connecting blocks including all components & accessories, complete in all respect. a) 10 pair	no.	1		
10T		24 port Cat-6 UTP Giga Speed modular loaded (RJ45) jack patch panels compatible with 19" rack installed in floor/wall mounted cabinet including built-in rear cable management with all mounting accessories.	no.	1		
11T		19" Rack mounted Front Cable Management with all installation accessories.	no.	1		
12T		18U (600mm (width) x 800mm (height)) rack with plexiglass door including Hoops, side management, cable trays, fan tray, slide shelf and required number of power sockets including all mounting accessories.	no.	1		
13T		Following Layer-2 distribution switch, suitable to be installed in 19" rack, including all components and accessories complete in all respect. a) 24 port	no.	1		
14T		WiFi router 2.4 GHz & 5 GHz band frequency, upto 1000 Mbps data speed, with suitable to be installed in 19" rack, including all components and accessories complete in all respect.	no.	4		
<u>PUBLIC ADDRESS SYSTEM</u>						
Ref.Spec.Sec.8290						
15T		Multimedia Projector type Panasonic model EZ-950 or equivalent with 1920x1200 resolution, produces brightness upto 5400 lumens and automatically adjusts the iris to match the situation, resulting in a 10000:1 contrast ratio, 16:10 aspect ratio. The projector's lamp life cycle can last upto 5000 hours in Eco mode.	no.	1		



TELECOMMUNICATION WORKS

BILL OF QUANTITIES

Item No.	C.S.R. 2012 Item No.	Description	Unit	Quantity	Unit Rate (Rs.)	Total Amount (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
16T		RGB Video Splitter make Extron or equivalent, 300 Mhz (-3dB) RGB video bandwidth, fully loaded, compatible with VGA-QXGA resolution & both outputs are individually buffered.	no.	1		
17T		Speker make Interm or equivalent, i2 30 W Speaker CS-20, 6 inch full range speaker, using high quality matching trance, 3 stage ouput slection & high sound pressure and wide frequency characteristics.	no.	12		
18T		Amplifier make Interm or equivalent, PA-480, 5 zone slection switches, 5 Microphone/Line inputs & input Level LED Monitor per channel.	no.	1		
19T		Gooseneck Mike make Samson or equivalent, model CM20P internal Selectable Hi-pass filter, XLR connectro & mulistage windscreen.	no.	1		
20T		Handheld Wireless Samson Mike or equivalent, Concert 99 Multifunctional backlit LCD removable i/4-wave antennas & balanced XLR and 1/4" outputs	no.	2		
21T		Handheld Wireless Samson Mike or equivalent, Concert 99 Multifunctional backlit LCD.	no.	1		
22T		Collar Mike Samson or equivalent, Headset Wireless system, high performance UHF wireless microphone.	no.	1		
<u>Conduits & Pipes</u>						
Ref. Specs Sec. 8230						
23T		Following sizes of PVC conduit / pipes installed on surface / concealed in wall, slab & floor including pull wire and all accessories as required etc., complete in all respects.				
		a) 1" dia	Rft.	500		
<u>MISCELLANEOUS ITEMS</u>						
Ref.Spec.Sec.8001,8212,8230,8240,8290,8335						
24T		Rack mounted compact UPS, line interactive with 4 hours hot swapable battery backup, greater than 95% efficiency, ABM technology including all related accessories etc., complete in all respect.				
		a) 1 kVA	Job.	2		

Total Amount carried forward to Summary



PROPOSED CONSTRUCTION SCHEDULE

Pursuant to Sub-Clause 8.2 of the General Conditions of Contract, the Works shall be completed on or before the date stated in Appendix-A to Bid. The Bidder shall provide as Appendix-E to Bid, the Construction Schedule in the bar chart (CPM, PERT or any other to be specified herein) at least in form of latest MS Project or approved, showing the sequence of work items and the period of time during which he proposes to complete each work item in such a manner that his proposed programme for completion of the whole of the Works and parts of the Works may meet Employer's overall completion targets in days noted below and counted from the date of receipt of Engineer's Notice to Commence. The bidders shall propose completion time for major milestones of the project to ensure effective monitoring:

The contractor shall submit work plan for each building and a comprehensive plan for complete Package containing all Buildings.

Description

Time for Completion

a) Whole Works

Six (06) calendar months



METHOD OF PERFORMING THE WORK

The Bidder is required to submit a narrative outlining the method of performing the Work. The narrative should indicate in detail and include but not be limited to:

1. Organization Chart indicating head office and field office personnel involved in management and supervision, engineering, equipment maintenance and purchasing.
2. Mobilization, the type of facilities including personnel accommodation, office accommodation, provision for maintenance and for storage, communications, security and other services to be used.
3. The method of executing the Works, the procedures for installation of equipment and machinery and transportation of equipment and materials to the site of each Building and complete project containing all Buildings.



LIST OF MAJOR EQUIPMENT – RELATED ITEMS

The Bidder will provide on Sheet 2 of this Appendix a list of all major equipment and related items, under separate heading for items owned, to be purchased or to be arranged on lease by him to carry out the Works. The information shall include make, type, capacity, and anticipated period of utilization for all equipment which shall be in sufficient detail to demonstrate fully that the equipment will meet all requirements of the Specifications.



LIST OF MAJOR EQUIPMENT

Owned Purchased or Leased	Description of Unit (Make, Model, Year)	Capacity HP Rating	Condition	Present Location or Source	Date of Delivery at Site	Period of Work on Project
(1)	(2)	(3)	(4)	(5)	(6)	(7)
a. Owned						
b. To be Purchased						
c. To be arranged on Lease						



CONSTRUCTION CAMP AND HOUSING FACILITIES

The Contractor in accordance with the Conditions of Contract shall provide description of his construction camp's facilities and staff housing requirements for each building site and for complete project containing all building units.

The Contractor shall be responsible for pumps, electrical power, water and electrical distribution systems, and sewerage system including all fittings, pipes and other items necessary for servicing the Contractor's construction camp.

The Bidder shall list or explain his plans for providing these facilities for the service of the Contract as follows:

1. Site Preparation (clearing, land preparation, etc.).
2. Provision of Services.
 - a) Power (expected power load, etc.).
 - b) Water (required amount and system proposed).
 - c) Sanitation (sewage disposal system, etc.).
3. Construction of Facilities
 - a) Contractor's Office. Workshop and Work Areas (areas required and proposed layout, type of construction of buildings, etc.).
 - b) Warehouses and Storage Areas (area required, type of construction and layout).
 - c) Housing and Staff Facilities (Plans for housing for proposed staff, layout, type of construction, etc.).
4. Construction Equipment Assembly and Preparation (detailed plans for carrying out this activity).
5. Other Items Proposed (Security services, etc.).



LIST OF SUBCONTRACTORS

I/We intend to subcontract the following parts of the Work to subcontractors. In my/our opinion, the subcontractors named hereunder are reliable and competent to perform that part of the work for which each is listed.

Enclosed are documentation outlining experience of subcontractors, the curriculum vitae and experience of their key personnel who will be assigned to the Contract, equipment to be supplied by them, size, location and type of contracts carried out in the past.

Part of Works (Give Details)	Subcontractor (With Complete Address)
(1)	(2)



ESTIMATED PROGRESS PAYMENTS

Bidder's estimate of the value of work which would be executed by him during each of the periods stated below, based on his Programme of the Works and the Rates in the Bill of Quantities, expressed in thousands of Pakistani Rupees:

Months	Max. upto %age	Amounts (1,000 Rs.)
1 st Month		
2 nd Month		
3 rd Month		
4 th Month		
5 th Month		
6 th Month		
Bid Price		

The Contractor shall submit, to 'Project Manager / The Engineer, a Cash Flow in 'S-Curve' and update regularly according to the progress payments.



**ORGANIZATION CHART
FOR THE
SUPERVISORY STAFF AND LABOUR**

(To be filled in by the bidder)

The Contractor should have team of reasonably skilled persons in the field of building construction led by a Project Manager (B.E Civil) registered in PEC as Professional Engineer, having at least 10 years experience in the relevant field. The Project Manager should be authorized to take instruction from the Engineer and direct contractor's crew to complete the works in accordance with the specifications.

The Contractor shall depute B.E civil site engineers in appropriate number as per law and at least one experienced supervisor (DAE) at each building site to be directly responsible for the execution of works at site. The contractor must employ experienced lab technician in his laboratory to conduct required QA/QC testing at site / lab and to keep record of all tests.

The Contractor shall propose staff for building site and for complete project containing all building units.



(INTEGRITY PACT)

**DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC.
PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS CONTRACT**

Contract No. _____ Dated _____

Contract Value: _____

Contract Title: _____

..... [name of Contractor] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Sindh (GoS) or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoS) through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Contractor] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder s fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from, from Procuring Agency (PA) except that which has been expressly declared pursuant hereto.

[name of Contractor] accepts full responsibility and strict liability that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with PA and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[name of Contractor] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to PA under any law, contract or other instrument, be voidable at the option of PA.

Notwithstanding any rights and remedies exercised by PA in this regard, [name of Supplier/Contractor/Consultant] agrees to indemnify PA for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to PA in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder s fee or kickback given by [name of Contractor] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from PA.

Name of Buyer:

Name of Seller/Supplier:

Signature:

Signature:

[Seal]

[Seal]



FORMS

**PERFORMANCE SECURITY
CONTRACT AGREEMENT
MOBILIZATION ADVANCE GUARANTEE/BOND
INDENTURE BOND FOR SECURED ADVANCE**



BID SECURITY
(Bank Guarantee)

Security Executed on _____
(Date)

Name of Surety (Bank) with Address: _____
(Scheduled Bank in Pakistan)

Name of Principal (Bidder) with Address _____

Penal Sum of Security Rupees. _____ (Rs. _____)

Bid Reference No. _____ KNOW ALL

MEN BY THESE PRESENTS, that in pursuance of the terms of the bid and at the request of the said Principal (Bidder)we, the Surety above named, are held and firmly bound unto

_____ (hereinafter called the 'Procuring Agency') in the sum stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Bidder has submitted the accompanying bid dated _____ for Bid No. _____ for _____ (Particulars of Bid) to the said Procuring Agency; and

WHEREAS, the Procuring Agency has required as a condition for considering said bid that the **bidder** furnishes a bid security in the above said sum from a Scheduled Bank in Pakistan or from a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan, to the procuring agency, conditioned as under:

- (1) that the bid security shall remain in force up to and including the date 28 days after the deadline for validity of bids as stated in the Instructions to bidders or as it may be extended by the procuring agency, notice of which extension(s) to the Surety is hereby waived;
- (2) that the bid security of unsuccessful bidders will be returned by the procuring agency after expiry of its validity or upon signing of the Contract Agreement; and
- (3) that in the event of failure of the successful bidder to execute the proposed Contract Agreement for such work and furnish the required Performance Security, the entire said sum be paid immediately to the said procuring agency pursuant to Clause 15.6 of the Instruction to bidders for the successful bidder's failure to perform.

NOW THEREFORE, if the successful bidder shall, within the period specified therefore, on the prescribed form presented to him for signature enter into a formal Contract with the said procuring agency in accordance with his bid as accepted and furnish within twenty eight (28) days of his being requested to do so, a Performance Security with good and sufficient surety, as may be required, upon the form prescribed by the said procuring agency for the faithful performance and proper fulfilment of the said Contract or in the event of non-withdrawal of the said bid within the time specified for its validity then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

PROVIDED THAT the Surety shall forthwith pay the procuring agency, the said sum upon first written demand of the procuring agency (without cavil or argument) and without



requiring the procuring agency to prove or to show grounds or reasons for such demand, notice of which shall be sent by the procuring agency by registered post duly addressed to the Surety at its address given above.

PROVIDED ALSO THAT the procuring agency shall be the sole and final judge for deciding whether the Principal (Bidder) has duly performed his obligations to sign the Contract Agreement and to furnish the requisite Performance Security within the time stated above, or has defaulted in fulfilling said requirements and the Surety shall pay without objection the said sum upon demand from the procuring agency forthwith and without any reference to the Principal (Bidder) or any other person.

IN WITNESS WHEREOF, the above bounden Surety has executed the instrument under its seal on the date indicated above, the name and seal of the Surety being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

SURETY (Bank)

WITNESS:

Signature

1.

Name

Title

Corporate Secretary (Seal)

Corporate Guarantor (Seal)

2.

Name, Title & Address



**FORM OF PERFORMANCE SECURITY
(Bank Guarantee)**

Guarantee No. _____
Executed on _____
Expiry date _____

[Letter by the Guarantor to the Employer]

Name of Guarantor (Bank) with address: _____
(Scheduled Bank in Pakistan)

Name of Principal (Contractor) with address: _____

Penal Sum of Security (express in words and figures) _____

Letter of Acceptance No. _____ Dated _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bidding Documents and above said Letter of Acceptance (hereinafter called the Documents) and at the request of the said Principal we, the Guarantor above named, are held and firmly bound unto the _____ (hereinafter called the Employer) in the penal sum of the amount stated above for the payment of which sum well and truly to be made to the said Employer, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has accepted the Employer's above said Letter of Acceptance for _____ (Name of Contract) for the _____ (Name of Project).

NOW THEREFORE, if the Principal (Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the said Documents and any extensions thereof that may be granted by the Employer, with or without notice to the Guarantor, which notice is, hereby, waived and shall also well and truly perform and fulfill all the undertakings, covenants terms and conditions of the Contract and of any and all modifications of said Documents that may hereafter be made, notice of which modifications to the Guarantor being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue till all requirements of Clause 11, Defects Liability, of Conditions of Contract are fulfilled.

Our total liability under this Guarantee is limited to the sum stated above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by us within the validity period of this Guarantee, failing which we shall be discharged of our liability, if any, under this Guarantee.



We, _____ (the Guarantor), waiving all objections and defences under the Contract, do hereby irrevocably and independently guarantee to pay to the Employer without delay upon the Employer's first written demand without cavil or arguments and without requiring the Employer to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Employer's written declaration that the Principal has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to Employer's designated Bank & Account Number.

PROVIDED ALSO THAT the Employer shall be the sole and final judge for deciding whether the Principal (Contractor) has duly performed his obligations under the Contract or has defaulted in fulfilling said obligations and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the Employer forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above-bounden Guarantor has executed this Instrument under its seal on the date indicated above, the name and corporate seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Witness:

1. _____

Corporate Secretary (Seal)

2. _____

Name, Title & Address

Guarantor (Bank)

Signature _____

Name _____

Title _____

Corporate Guarantor (Seal)



FORM OF CONTRACT AGREEMENT

THIS CONTRACT AGREEMENT (hereinafter called the "Agreement") made on the _____ day of _____ (month) 20____ between _____ (hereafter called the "Employer") of the one part and _____ (hereafter called the "Contractor") of the other part.

WHEREAS the Employer is desirous that certain Works, viz _____ should be executed by the Contractor and has accepted a Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW this Agreement witnesseth as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents after incorporating addenda, if any, except those parts relating to Instructions to Bidders shall be deemed to form and be read and construed as part of this Agreement, viz:
 - (a) The Contract Agreement;
 - (b) The Letter of Acceptance;
 - (c) The completed Form of Bid;
 - (d) Special Stipulations (Appendix-A to Bid);
 - (e) The Particular Conditions of Contract – Part II;
 - (f) The General Conditions – Part I;
 - (g) The priced Bill of Quantities (Appendix-D to Bid);
 - (h) The completed Appendices to Bid (B, C, E to L);
 - (i) The Drawings;
 - (j) The Specifications.
 - (k) _____ (any other)
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy defects therein in conformity and in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works as per provisions of the Contract, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.



IN WITNESS WHEREOF the parties hereto have caused this Agreement to be executed on the day, month and year first before written in accordance with their respective laws.

Signature of the Contactor

(Seal)

Signature of Employer

(Seal)

Signed, Sealed and Delivered in the presence of:

Witness:

(Name, Title and Address)

Witness:

(Name, Title and Address)



**MOBILIZATION ADVANCE GUARANTEE
(Bank Guarantee)**

Guarantee No. _____ Date _____

WHEREAS _____ (hereinafter called the 'Employer') has entered into a Contract for

 (Particulars of Contract)
 with _____ (hereinafter called the "Contractor").

AND WHEREAS, the Employer has agreed to advance to the Contractor, at the Contractor's request, an amount of Rupees _____ (Rs _____) which amount shall be advanced to the Contractor as per provisions of the Contract.

AND WHEREAS, the Employer has asked the Contractor to furnish Guarantee to secure the mobilization advance for the performance of his obligations under the said Contract.

AND WHEREAS, _____
 (Scheduled Bank in Pakistan or Insurance Company acceptable to the Employer)
 (hereinafter called the "Guarantor") at the request of the Contractor and in consideration of the Employer agreeing to make the above advance to the Contractor, has agreed to furnish the said Guarantee.

NOW, THEREFORE, the Guarantor hereby guarantees that the Contractor shall use the advance for the purpose of above mentioned Contract and if he fails and commits default in fulfilment of any of his obligations for which the advance payment is made, the Guarantor shall be liable to the Employer for payment not exceeding the aforementioned amount.

Notice in writing of any default, of which the Employer shall be the sole and final judge, on the part of the Contractor, shall be given by the Employer to the Guarantor, and on such first written demand, payment shall be made by the Guarantor of all sums then due under this Guarantee without any reference to the Contractor and without any objection.

This Guarantee shall remain in force until the advance is fully adjusted against payments from the Interim Payment Certificates of the Contractor or until _____ whichever is earlier.

 (Date)

The Guarantor's liability under this Guarantee shall not in any case exceed the sum of Rupees _____ (Rs _____).

This Guarantee shall remain valid up to the aforesaid date and shall be null and void after the aforesaid date or earlier if the advance made to the Contractor is fully adjusted against payments from Interim Payment Certificates of the Contractor provided that the Guarantor agrees that the aforesaid period of validity shall be deemed to be extended if on the above mentioned date the advance payment is not fully adjusted.



GUARANTOR

- 1. Signature _____
- 2. Name _____
- 3. Title _____

WITNESS

1. _____

Corporate Secretary (Seal)

2. _____
(Name Title & Address) _____
Corporate Guarantor(Seal)



INDENTURE FOR SECURED ADVANCES.

(For use in cases in which is contract is for finished work and the contractor has entered into an agreement for the execution of a certain specified quantity of work in a given time).

This INDENTURE made the day of
 20..... BETWEEN (hereinafter called "the Contractor"
 which expression shall where the context so admits or implied be deemed to include his
 heirs, executors, administrators and assigns) of the one part and THE GOVERNOR OF
 SINDH (hereinafter called "the Government" of the other part).

WHEREAS by an agreement, dated (hereinaf ter called the said agreement, the
 contractor has agreed to perform the under-mentioned works (hereinafter referred to as the said
 work):- (Here enter (the description of the works). 1

AND WHEREAS the contractor has applied to the
for an advance to him of Rupees
 (Rs.) on the security of materials absolutely belonging to him and brought by
 him to the site of the said works the subject of the said agreement for use in the
 construction of such of the said works as he has under taken to execute at rates fixed for the
 finished work (inclusive of the cost of materials and labour and other charge) AND

WHEREAS the Government has agreed to advance to the Contractor the sum of Rupees, (Rs.
) on the security of materials the quantities and other particulars of which are
 detailed in Part II of Running Account Bill (B). the said works signed by the contractor Fin
 R.Form.17.A On and on such covenants and conditions as
 are hereinafter contained and the Government has reserved to itself the option of
 marking any further advance or advances on the security of other materials brought by the
 Contractor to the site of the said works.

NOW THIS INDENTURE WTTNESSETH that in pursuance of the said
 agreement and in consideration of the sum of Rupees..... (Rs.
) on or before the execution of these presents paid to the Contractor by the
 Government (the receipt whereof the Contractor doth hereby acknowledge) and of such further
 advances (if any) as may be made to him as aforesaid (all of which advances are
 hereinaf ter collectively referred to as the said amount) the Contractor doth her eby assign
 unto the Government the said materials by way of security for the said amount And doth
 hereby covenant and agree with the Government and declare ay follow :-



- (1) That the said sum of Rupees. Rs.....) so advanced by the Government to the Contractor as aforesaid and all or any further sum or sums which may be advanced as aforesaid shall be employed by the contractor in or towards expending the execution of the said works and for no other purpose whatsoever.
- (2) That the materials detailed in the said Running Account Bill (B) which have been offered to and accepted by (he Government as security for the said amount are absolutely by the Contractor's own property free from encumbrances of any kind and the Contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the contractor hereby agrees, at all times, to indemnify and save harmless the Government against all claims whatsoever to any materials in respect of which an advance has been made to him as aforesaid.
- (3) That the said materials detailed in the said Running Account Bill (B) and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the Contractor solely in *the* execution of the said works in accordance with the directions of the Divisional Officer (hereinafter called the Divisional Officer) and in the terms of the said agreement.
- (4) That the Contractor shall make at his own cost all necessary and adequate arrangement for the proper watch, safe custody and protection against all risks of the said material and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and at his own risk and on his own responsibility and shall at all times be open to inspection by (he Divisional Officer or any officer authorized by him. In the event of the said materials of any part (hereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof Contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Divisional Officer and the materials so brought to replace the said materials so repaired and made good shall also be considered as security for the said amount.
- (5) That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Divisional Officer or an officer authorized by him in that behalf
- (6) That the said amount shall be payable in full when or before the Contractor receives payment, from the Government of the price payable to him for the said works under the terms and provisions of the said agreement PROVIDED THAT if any intermediate payments are made to the contractor on account of work done then on the occasion of each such payment the Government will be at liberty to make a recovery from the Contractor's Bill for such payment by deducting therefrom in the value of the said materials (then actually used in the construction and in respect of which recovery has not been made previously the value for this purpose being determined in respect of each description of material at the rates at which the amount of the advances made under these presents were calculated.



- (7) at if the Contractor shall at any time make any default in the performance or observation in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing to the Government shall immediately on the happening of such default be repayable by the Contractor to the Government together with interest thereon at twelve percent per annum from the date or respective dates of such advance or advances to the date or repayment and with all costs, charges, damages and expenses incurred by the Government in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and any moneys so becoming due and payable shall constitute a debt due from the Contractor to the Government and the Contractor hereby covenants and agrees with the Government to repay and the same respectively to it accordingly.
- (8) That the Contractor hereby charges all the said materials with the repayment to the Government of the said sum of Rupees(Rs.....) and any further sum or sums which may be advanced as aforesaid and all costs charges damages and expenses payable under these present PROVIDED ALWAYS and it is hereby agreed and declared that not, withstanding anything in the said agreement and without prejudice to the powers contained therein if and whether the covenant for payment and repayment hereinbefore contained shall become enforceable and the money owing shall not be paid to accordingly. Once there with the Government may at any time thereafter adopt all or any of following courses as it may deem best :-
- (a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the Contractor in accordance with the provisions in that behalf contained in the said agreement debiting the Contractor with the actual cost of effecting such completion the amount due in respect of advances under these presents and crediting the Contractor with the value of work done as he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the Contractor he is to pay the same to the Government on demand.
- (b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable to the Government under these presents and pay over the surplus (if any) to the Contractor.
- (c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.
- (9) That except as is expressly provided by the presents interest on the said advance shall not be payable.
- (10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been hereinbefore expressly provided for the same shall be referred to the Superintending Engineer/Executive District Officer/Officer one grade higher to officer signed the agreement Circle whose decision shall be final and the provisions of the Arbitration Act 1940 for the time being in force so far as they are applicable shall apply to any such reference.



- 1. Signature _____
- 2. Name _____
- 3. Title _____

WITNESS

- 1. _____
(Name Title & Address) Corporate Secretary (Seal)
- 2. _____
(Name Title & Address) Corporate Guarantor(Seal)



(GENERAL CONDITIONS OF CONTRACT PART-I)

Conditions of Contract
CONSTRUCTION for

FOR BUILDING AND ENGINEERING
WORKS DESIGNED BY THE EMPLOYER

Multilateral Development Bank Harmonised Edition
March 2006
General Conditions

This publication is exclusive for use as provided under a Licence Agreement between a Participating Bank and FIDIC, and, consequently, no part of this publication may be reproduced, translated, adapted, stored in a retrieval system or communicated, in any form or by any means, whether mechanical, electronic, magnetic, photocopying, recording or otherwise, without prior permission in writing from FIDIC. To request such permission, please contact: FIDIC, Case Postale 311, CH-1215 Geneva 15, Switzerland; Tel. +41 22 799 49 00; Fax +41 22 799 49 01; E-mail: fidic@fidic.org. FIDIC is not responsible for the accuracy or completeness of translations of this publication unless such translation explicitly indicates otherwise.

FEDERATION INTERNATIONALE DES INGENIEURS-CONSEILS
INTERNATIONAL FEDERATION OF CONSULTING ENGINEERS
INTERNATIONALE VEREINIGUNG BERATENDER INGENIEURE
FEDERACION INTERNACIONAL DE INGENIEROS CONSULTORES

(It is presumed that all the bidders possess original copy of FIDIC for their reference while preparation of Bid)



TABLE OF CONTENTS

General Conditions

CONTENTS

Definitions listed alphabetically

GENERAL PROVISIONS

- 1.1 Definitions
- 1.2 Interpretation
- 1.3 Communications
- 1.4 Law and Language
- 1.5 Priority of Documents
- 1.6 Contract Agreement
- 1.7 Assignment
- 1.8 Care and Supply of Documents
- 1.9 Delayed Drawings or Instructions
- 1.10 Employer's Use of Contractor's Documents
- 1.11 Contractor's Use of Employer's Documents
- 1.12 Confidential Details
- 1.13 Compliance with Laws
- 1.14 Joint and Several Liability
- 1.15 Inspections and Audit by the Bank

2 THE EMPLOYER

- 2.1 Right of Access to the Site
- 2.2 Permits, Licences or Approvals
- 2.3 Employer's Personnel
- 2.4 Employer's Financial Arrangements
- 2.5 Employer's Claims

3 THE ENGINEER

- 3.1 Engineer's Duties and Authority
- 3.2 Delegation by the Engineer
- 3.3 Instructions of the Engineer
- 3.4 Replacement of the Engineer
- 3.5 Determinations

4 THE CONTRACTOR

- 4.1 Contractor's General Obligations
- 4.2 Performance Security
- 4.3 Contractor's Representative
- 4.4 Subcontractors
- 4.5 Assignment of Benefit of Subcontract
- 4.6 Co-operation
- 4.7 Setting Out
- 4.8 Safety Procedures



- 4.9 Quality Assurance
- 4.10 Site Data
- 4.11 Sufficiency of the Accepted Contract Amount
- 4.12 Unforeseeable Physical Conditions
- 4.13 Rights of Way and Facilities
- 4.14 Avoidance of Interference
- 4.15 Access Route
- 4.16 Transport of Goods
- 4.17 Contractor's Equipment
- 4.18 Protection of the Environment
- 4.19 Electricity, Water and Gas
- 4.20 Employer's Equipment and Free -Issue Materials
- 4.21 Progress Reports
- 4.22 Security of the Site
- 4.23 Contractor's Operations on Site
- 4.24 Fossils

5 NOMINATED SUBCONTRACTORS

- 5.1 Definition of "nominated Subcontractor"
- 5.2 Objection to Nomination
- 5.3 Payments to nominated Subcontractors
- 5.4 Evidence of Payments

6 STAFF AND LABOUR

- 6.1 Engagement of Staff and Labour
- 6.2 Rates of Wages and Conditions of Labour
- 6.3 Persons in the Service of Employer
- 6.4 Labour Laws
- 6.5 Working Hours
- 6.6 Facilities for Staff and Labour
- 6.7 Health and Safety
- 6.8 Contractor's Superintendence
- 6.9 Contractor's Personnel
- 6.10 Records of Contractor's Personnel and Equipment
- 6.11 Disorderly Conduct
- 6.12 Foreign Personnel
- 6.13 Supply of Foodstuffs
- 6.14 Supply of Water
- 6.15 Measures against Insect and Pest Nuisance
- 6.16 Alcoholic Liquor or Drugs
- 6.17 Arms and Ammunition
- 6.18 Festival and Religious Customs
- 6.19 Funeral Arrangements
- 6.20 Prohibition of Forced or Compulsory Labour
- 6.21 Prohibition of Harmful Child Labour
- 6.22 Employment Records of Workers

7 PLANT, MATERIALS AND WORKMANSHIP

- 7.1 Manner of Execution
- 7.2 Samples



- 7.3 Inspection
- 7.4 Testing
- 7.5 Rejection
- 7.6 Remedial Work
- 7.7 Ownership of Plant and Materials
- 7.8 Royalties

8 COMMENCEMENT, DELAYS AND SUSPENSION

- 8.1 Commencement of Works
- 8.2 Time for Completion
- 8.3 Programme
- 8.4 Extension of Time for Completion
- 8.5 Delays Caused by Authorities
- 8.6 Rate of Progress
- 8.7 Delay Damages
- 8.8 Suspension of Work
- 8.9 Consequences of Suspension
- 8.10 Payment for Plant and Materials in Event of Suspension
- 8.11 Prolonged Suspension
- 8.12 Resumption of Work

9 TESTS ON COMPLETION

- 9.1 Obligations Contractor's
- 9.2 Delayed Tests
- 9.3 Retesting
- 9.4 Failure to Pass Tests on Completion

10 EMPLOYER'S TAKING OVER

- 10.1 Taking Over of the Works and Sections
- 10.2 Taking Over of Parts of the Works
- 10.3 Interference with Tests on Completion
- 10.4 Surfaces Requiring Reinstatement

11 DEFECTS LIABILITY

- 11.1 Completion of Outstanding Work and Remedying Defects
- 11.2 Cost of Remedying Defects
- 11.3 Extension of Defects Notification Period
- 11.4 Failure to Remedy Defects
- 11.5 Removal of Defective Work
- 11.6 Further Tests
- 11.7 Right of Access
- 11.8 Contractor to Search
- 11.9 Performance Certificate
- 11.10 Unfulfilled Obligations
- 11.11 Clearance of Site

12 MEASUREMENT AND EVALUATION

- 12.1 Works to be Measured
- 12.2 Method of Measurement
- 12.3 Evaluation



12.4 Omissions

13 VARIATIONS AND ADJUSTMENTS

- 13.1 Right to Vary
- 13.2 Value Engineering
- 13.3 Variation Procedure
- 13.4 Payment in Applicable Currencies
- 13.5 Provisional Sums
- 13.6 Daywork
- 13.7 Adjustments for Changes in Legislation
- 13.8 Adjustments for Changes in Cost

14 CONTRACT PRICE AND PAYMENT

- 14.1 The Contract Price
- 14.2 Advance Payment
- 14.3 Application for Interim Payment Certificates
- 14.4 Schedule of Payments
- 14.5 Plant and Materials intended for the Works
- 14.6 Issue of Interim Payment Certificates
- 14.7 Payment
- 14.8 Delayed Payment
- 14.9 Payment of Retention Money
- 14.10 Statement at Completion
- 14.11 Application for Final Payment Certificate
- 14.12 Discharge
- 14.13 Issue of Final Payment Certificate
- 14.14 Cessation of Employer's Liability
- 14.15 Currencies of Payment

15 TERMINATION BY EMPLOYER

- 15.1 Notice to Correct
- 15.2 Termination by Employer
- 15.3 Valuation at Date of Termination
- 15.4 Payment after Termination
- 15.5 Employer's Entitlement to Termination for Convenience
- 15.6 Corrupt or Fraudulent Practices

16 SUSPENSION AND TERMINATION BY CONTRACTOR

- 16.1 Contractor's Entitlement to Suspend Work
- 16.2 Termination by Contractor
- 16.3 Cessation of Work and Removal of Contractor's Equipment
- 16.4 Payment on Termination

17 RISK AND RESPONSIBILITY

- 17.1 Indemnities
- 17.2 Contractor's Care of the Works
- 17.3 Employer's Risks
- 17.4 Consequences of Employer's Risks
- 17.5 Intellectual and Industrial Property Rights



- 17.6 Limitation of Liability
- 17.7 Use of Employer's Accommodation/Facilities

18 INSURANCE

- 18.1 General Requirements for Insurances
- 18.2 Insurance for Works and Contractor's Equipment
- 18.3 Insurance against Injury to Persons and Damage to Property
- 18.4 Insurance for Contractor's Personnel

19 FORCE MAJEURE

- 19.1 Definition of Force Majeure
- 19.2 Notice of Force Majeure
- 19.3 Duty to Minimise Delay
- 19.4 Consequences of Force Majeure
- 19.5 Force Majeure Affecting Subcontractor
- 19.6 Optional Termination, Payment and Release
- 19.7 Release from Performance

20 CLAIMS, DISPUTES AND ARBITRATION

- 20.1 Contractor's Claims
- 20.2 Appointment of the Dispute Board
- 20.3 Failure to Agree on the Composition of the Dispute Board
- 20.4 Obtaining Dispute Board's Decision
- 20.5 Amicable Settlement
- 20.6 Arbitration
- 20.7 Failure to Comply with Dispute Board's Decision
- 20.8 Expiry of Dispute Board's Appointment

APPENDIX: DISPUTE BOARD

- General Conditions of Dispute Board Agreement
- Annex: Procedural Rules

INDEX OF SUB-CLAUSES 77

Definitions listed alphabetically

- 1.1.4.1 Accepted Contract Amount
- 1.1.4.7 Interim Payment Certificate
- 1.1.2.11 Bank
- 1.1.6.5 Laws
- 1.1.3.1 Base Date
- 1.1.1.3 Letter of Acceptance
- 1.1.1.9 Bill of Quantities
- 1.1.1.4 Letter of Tender
- 1.1.2.12 Borrower
- 1.1.4.8 Local Currency
- 1.1.3.2 Commencement Date
- 1.1.5.3 Materials
- 1.1.1.1 Contract
- 1.1.2.1 Party



1.1.1.2 Contract Agreement
1.1.4.9 Payment Certificate
1.1.1.10 Contract Data
1.1.3.8 Performance Certificate
1.1.4.2 Contract Price
1.1.6.6 Performance Security
1.1.2.3 Contractor
1.1.5.4 Permanent Works
1.1.5.5 Plant
1.1.6.1 Contractor's Documents
1.1.4.10 Provisional Sum
1.1.5.1 Contractor's Equipment
1.1.2.7 Contractor's Personnel
1.1.4.11 Retention Money
1.1.2.5 Contractor's Representative
1.1.1.7 Schedules
1.1.4.3 Cost
1.1.1.9 Schedule, Payment Currencies
1.1.6.2 Country
1.1.5.6 Section
1.1.2.9 DB
1.1.6.7 Site
1.1.3.9 day
1.1.1.5 Specification
1.1.1.9 Daywork Schedule
1.1.4.12 Statement
1.1.3.7 Defects Notification Period
1.1.2.8 Subcontractor
1.1.1.6 Drawings
1.1.3.5 Taking-Over Certificate
1.1.2.2 Employer
1.1.5.7 Temporary Works
1.1.6.3 Employer's Equipment
1.1.1.8 Tender
1.1.2.6 Employer's Personnel
1.1.3.6 Tests after Completion
1.1.2.4 Engineer
1.1.3.4 Tests on Completion
1.1.2.10 FIDIC
1.1.3.3 Time for Completion
1.1.4.4 Final Payment Certificate
1.1.6.8 Unforeseeable
1.1.4.5 Final Statement
1.1.6.9 Variation
1.1.6.4 Force Majeure
1.1.5.8 Works
1.1.4.6 Foreign Currency
1.1.3.9 year
1.1.5.2 Goods



PART II – SPECIAL /PARTICULAR CONDITIONS OF CONTRACT

TABLE OF CONTENTS

<u>Clause</u>	<u>Title</u>	<u>Page No.</u>
1.1	Definitions.....	64
1.4	Law and Language(s)	64
1.5	Priority of Contract Documents.....	64
1.15	Inspections and Audit by the Procuring Agency.....	64
3.1	Engineer’s Duties & Authorities.....	65
3.6	Engineer Not Liable.....	66
4.2	Performance Security.....	66
4.3	Contractor’s Representative.....	66
4.25	Vesting of Contractor’s Plant, Equipment, Temporary Works and Materials.....	66
6.9	Engineer at Liberty to Object.....	69
6.10	Records of Contractor’s Personnel and Equipment.....	69
6.23	Compliance by Subcontractors.....	69
7.9	Use of Pakistani Materials and Services.....	69
8.1	Commencement of Works.....	69
8.3	Programme.....	70
8.11	Prolonged Suspension.....	70
13.1	Right to vary.....	70
13.3	Variation procedure.....	70
13.8	Adjustment for changes in cost.....	71
14.1	The Contract Price.....	71
14.2	Advance Payment.....	72
14.3	Application for Interim Payment Certificate	72
14.5	Plants and Materials intended for Works.....	72
14.8	Delayed Payment.....	73
15.2	Termination by Employer.....	74
15.6	Corrupt and fraudulent Practices.....	74
16.4	Payment on Termination.....	74
17.3	Employer’s/ Procuring Agency’s Risks.....	74
18.1	General Requirements for Insurance.....	74
19.6	Optional Termination, Payment and release by the Employer.....	76
20.6	Arbitration.....	76
21.1	Customs Clearance.....	76
22.1	Notice to Contractor.....	76
22.2	Notice to Employer and The Engineer	77
23.1	Payment of Income Tax.....	77



PART II - SPECIAL /PARTICULAR CONDITIONS OF CONTRACT

1.1 Definitions

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

1.1.1.8 “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.

1.1.2.4 The Engineer is National Engineering Services Pakistan, Architecture & Planning Division – Karachi, 4th floor, NIC Building, Abbasi Shaheed Road off. Shahrah-e-Faisal, Karachi - 75500, or any other competent person appointed by the Employer, and notified to the Contractor, to act in replacement of the Engineer. Provided always that except in cases of professional misconduct, the outgoing Engineers is to formulate his certifications/recommendations in relation to all outstanding matters, disputes and claims relating to the execution of the Works during his tenure. “Project Manager” shall be considered as synonymous to “The Engineer” or vice versa where used in the Bidding Documents.

1.1.2.2 “Employer” is synonymous with “Procuring Agency”

1.1.2.9 “DAB” is synonymous with “Committee”.

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

1.4 Law and Language(s)

- (a) The Contract Documents, shall be drawn up in the English language.
- (b) The Contract shall be subject to the Laws of Islamic Republic of Pakistan.

1.5 Priority of Contract Documents

Add following paragraph at the end of Sub-clause:

In case of discrepancies between drawings, those of larger scale shall govern unless they are superseded by a drawing of later date regardless of scale. All Drawings and Specifications shall be interpreted in conformity with the Contract and these Conditions. Addendum, if any, shall be deemed to have been incorporated at the appropriate places in the documents forming the Contract.

1.15 Inspections and Audit by the Procuring Agency

The Contractor shall give access to Procuring Agency or its representative to its record and audit to verify the funds of the project has been used for the purposes intended in the Tender documents.



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)

The Engineer shall obtain the specific approval of the Employer before carrying out his duties in accordance with the following Clauses:

- (i) Consenting to the sub-letting of any part of the Works under Sub-Clause 4.4 "Subcontracting".
- (ii) Certifying additional cost determined under Sub-Clause 4.12 "Not Foreseeable Physical Obstructions or Conditions".
- (iii) Any action under Sub-Clause 4.2 "Performance Security" and Clause 18 "Insurance" of sorts.
- (iv) Any action under Clause 16 "Suspension".
- (v) Any action under Clause 8.4 "Extension of Time for Completion".
- (vi) Any action under Clause 8.7 "Delay Damages" or Payment of Bonus for Early Completion of Works.
- (vii) Issuance of "Taking Over Certificate" under Clause 10.
- (viii) Issuing a Variation Order under Clause 13, except:
 - a) in an emergency* situation, as stated herebelow, and
 - b) if such variation would increase the Contract Price by less than the amount stated in the Appendix-A to Bid.
- (ix) Fixing rates or prices under Clause 13.3.
- (x) Extra payment as a result of Contractor's claims under Clause 20.
- (xi) Release of Retention Money to the Contractor under Sub-Clause 14.9 "Payment of Retention Money".
- (xii) Issuance of "Final Payment Certificate" under Sub-Clause 14.11 & 14.13.
- (xiii) Issuance of "Defect Liability Certificate" under Sub-Clause 11.

* (The Contractor shall notify the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the work, and if in the opinion of the Engineer an emergency occurs (whether notified by the Contractor or not) affecting the safety of life or of the Works or of adjoining property, the Engineer may, without relieving the Contractor of any of his duties and responsibilities under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such



instruction, in accordance with Clause 13 and shall notify the Contractor accordingly, with a copy to the Employer.)

The following sub-clause 3.6 is added in (GCC):

3.6 Engineer Not Liable

Approval, reviews and inspection by the Engineer of any part of the Works does not relieve the Contractor from his sole responsibility and liability for the supply of materials, plant and equipment for construction of the Works and their parts in accordance with the Contract and neither the Engineer's authority to act nor any decision made by him in good faith as provided for under the Contract whether to exercise or not to exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, any Subcontractor, any of their representatives or employees or any other person performing any portion of the Works.

4.2 Performance Security

Delete and replace '28' days with '14' days wherever found in the sub-clause.

Add the following text at the end;

The Performance Security shall be binding irrespective of changes in the quantities or variations in the Works or extensions in Time for Completion of the Works which are granted or agreed upon under the provisions of the Contract.

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 be registered with the Pakistan Engineering Council.

In case the Contractor fails to appoint his representative / PM and other staff, minimum stated in Appendix-K to bid, the Engineer may order to stop complete or appropriate portion of work at site until Contractor fulfills the requirement of staff employment.

Following are added after sub clause 4.24;

4.25 Vesting of Contractor's Plant, Equipment Temporary Works and Materials:

(a) Definitions

For the purpose of Sub-Clause 4.17.

- i) The expression "Construction Plant" shall be deemed to exclude vehicles engaged in transporting any labour equipment or materials to or from the site.
- ii) The expression "Essential Hired Plant" shall mean all Constructional Plant, Equipment Temporary Works and materials of Temporary Work the withdrawal of which in the event of termination under Sub-Clause 15.2 hereof might (having regard to the methods of construction employed prior to the termination) endanger the safety or stability of or result in serious disturbance to the execution of any part of the Works and which are held by the Contractor under any agreement for hire thereof.



- iii) The expression "Hired Plant" shall mean any Constructional Plant, Equipment, Temporary Works (other than essential hired plant) held by the Contractor under any agreement for hire thereof.
- iv) The expression "Agreement for Hire" shall be deemed not to include an agreement for hire purchase with an option to purchase or for conditional sale either of which is herein referred to as an "agreement for the purchase".
- v) The expression "Hire Purchase Plant" shall mean any Constructional Plant, Equipment, Temporary Works held by the Contractor under an agreement for hire purchase thereof.
- vi) The expression "owner" means the owner of the plant and equipment of any Hire Purchase Plant.

(b) Vesting of Certain Plant

All Constructional Plant, Equipment, Temporary Works and material owned by the Contractor or by any company in which the Contractor has a controlling interest shall when brought on to the site (or in the case of hire purchase plant upon becoming the property of the Contractor) and shall be deemed to become the property of the Employer.

(c) Conditions of Hire of Certain Plant

With a view to securing in the event of termination Sub-Clause 15.2 hereof the continued availability for the purpose of executing the Works of any essential hired plant and equipment the Contractor shall not bring on to the Site any essential hired plant unless the agreement for hire thereof contains a provision that the owner will on request in writing made by the Employer within 7 days after the date on which any such termination has become effective and on the Employer undertaking to pay all hire charges in respect thereof on the same terms in all respects as the same was hired to the contractor save that the Employer shall be entitled to permit the use thereof by any other contractor employed by it for the purposes of completing the works under the terms of Sub-Clause 15.2 hereof.

(d) Costs for purpose of Approval of Materials not implied

In the event of the Employer entering into any agreement for hire of essential hired plant pursuant to the contract provisions, all sums properly paid by the Employer under the provisions of any such agreement and all expenses incurred by it (including stamp duties) in entering into such agreement shall be deemed for the purpose of Sub-Clause 15.2 hereof to be part of the cost of completing the Works.

(e) Contractor's Certificate as to Hiring Provisions

The Contractor shall upon request made by the Engineer at any time in relation to any item of essential hired plant forthwith notify to the Engineer in writing the name and address of the owner and shall certify that the agreement for the hire thereof contains a provision in accordance with the requirements of Approval of Materials not Implied. The Contractor shall also upon request as aforesaid give a like notification (but without certificate) in regard to any hire purchase plant.



(f) Hire Purchase Payment by the Employer

The Employer shall in order to avoid seizure by the owner of any hire purchase plant be entitled to pay to such owner the amount of any overdue installment or other sum payable optionally or otherwise under any Agreement of hire purchase and in the event of his doing so any amount so paid by him shall be debt due from the Contractor to the Employer and may be deducted by the Employer from any moneys due or that may become due to the Contractor under the Contract or may be recovered by the Employer from the Contractor at law.

(g) Irrevocability of Certain Plant etc.

No Constructional Plant, Equipment Temporary Works or materials or any part thereof shall be removed from the site without the written consent of the Engineer which consent shall not be unreasonably withheld where the same is no longer immediately required for the purposes of completion of the Works but the Employer will permit the Contractor the exclusive use of all such Constructional Plant, Equipment, Temporary Works and materials in and for the completion of the Works until the occurrence of any event which gives the Employer the right to expel the Contractor from the site and proceed with the completion of the Works.

(h) Re-vesting and Removal of Plant

Upon the removal with the consent of the Engineer of any such Constructional Plant Equipment, Temporary Works or materials as have been deemed to have become the property of the Employer, the property therein shall be deemed to re-vest in the Contractor and, upon completion of the Works the property in the remainder of such Constructional Plant, Equipment, Temporary Works and materials as aforesaid shall subject to the provisions of Sub-Clause 15.2 be deemed to re-vest in the Contractor who shall remove the same together with any essential hired plant or hire purchase plant. If the Contractor shall fail to remove any Constructional Plant, Equipment, Temporary Works or materials as aforesaid or any essential hire plant or hire purchase plant within such reasonable time after completion of the Works as may be allowed by the Engineer then the Employer may:

- i) sell any such Constructional Plant, Equipment, Temporary Works and materials as aforesaid, and
- ii) return at the Contractor's expenses to the person firm or company from whom any Essential Hired Plant or any Hire Purchase Plant was held by the Contractor such essential hired plant or hire purchase plant, and after deducting from any proceeds of sale, the costs, charges and expenses of and in connection with such sale and return as aforesaid shall pay the balance (if any) to the Contractor but to the extent that the proceeds of any sale are insufficient to meet all such cost, charges and expenses the excess shall be a debt due from the Contractor to the Employer and shall be deductible or recoverable by the Employer accordingly as aforesaid.

(j) Liability for loss or injury to plant

The Employer shall not at any time be liable for the loss of or injury to any of the Constructional plant, Temporary Works or materials which have been deemed to become the property of the Employer, hereof save as mentioned in Sub-Clause 20



hereof.

(k) **Incorporation of Sub-Clause in Sub-Contracts**

The Contractor shall when entering into any sub-contract for the execution of any part of the Works incorporate in such sub-contract (by reference or otherwise) the provisions of this Sub-Clause in relation to Constructional Plant, Temporary Works and materials. Essential Hired Plant and Hire Purchase Plant to be brought on the Site by the sub-contractor.

(l) **Approval of Materials etc., not implied**

The contractor's operation shall not be deemed to imply any approval by the Engineer of the materials or other matters referred to therein nor shall it prevent the rejection of any materials at any time by the Engineer.

6.9 Engineer at Liberty to Object

The following is added at the end of sub clause in General Conditions of Contract:

If the Employer asks the Engineer to direct Contractor to remove a person who is a member of his staff or workforce stating the reasons the Contractor shall ensure that the person leaves the site immediately and has no further connection with the work in the Contract.

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.

Add the following sub-clause at the end of 6.22 in (GCC)

6.23 Compliance by Subcontractors

The Contractor shall be responsible for compliance by his Subcontractors of the provisions of this Clause.

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.

8.3 Programme

The programme/schedule shall be submitted in the form of Critical Path Method (CPM) identifying the critical path/activities, in hard form as well as in soft form in latest version of MS Project or as agreed with the Engineer.

- a) The Contractor shall submit to the Engineer detailed programme for the following:
- (1) Execution of Works;
 - (2) Key Deliverables and submittals
 - (3) Labour Resources;
 - (4) Local Material Procurement;
 - (5) Material Imports, if any; and
 - (6) Other details as required by the Engineer.
- b) If Contractor fails to submit updated work schedule within the time instructed by the Engineer/Project Manager, the Engineer/Project Manager may withhold an amount at his discretion from next due amount and continue to withhold this amount until the next payment after the date on which the overdue program has been submitted.
- (c) During the period of the Contract, the Contractor shall submit to the Engineer no later than the 8th day of the following month, 04 copies each of Monthly Progress Reports covering:
- (1) Progress update of the project program/schedule indicating the monthly progress in percentages with actual start and finish dates;
 - (2) Description of all work carried out since the last report;
 - (3) Description of the work planned for the next 56 days sufficiently detailed to enable the Engineer to determine his programme of inspection and testing;
 - (4) Monthly summary of daily job record; and
 - (5) Information about problems and difficulties encountered, if any, and proposals to overcome the same.
- (d) During the period of the Contract, the Contractor shall keep a daily record of the work progress, which shall be made available to the Engineer as and when requested. The daily record shall include particulars of weather conditions, number of men working, deliveries of materials, quantity, location and assignment of Contractor's equipment.
- (e) The detailed Cash Flow Estimate shall be submitted within 21 days from the date of receipt of Letter of Acceptance

8.11 Prolonged Suspension

Replace 84 days by 120 days.

13.1 Right to vary

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

13.3 Variation procedure

In the 2nd 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

14.1 The Contract Price

Sub-para (d) is deleted.

14.2 Advance Payment

The Text is deleted and replaced with following:

Advance Payment/Mobilization Advance shall be made available to the Contractor by the procuring agency on following conditions:

Mobilization Advance/Advance Payment

- (i) Mobilization advance up to 10 % of the Contract Price may be paid by the procuring agency to the Contractor on the works costing Rs. 2.5 million or above on following conditions:
 - a. on submission by the Contractor of a mobilization advance guarantee for the full amount of the advance in the form of Bank Guarantee, from a Scheduled Bank in Pakistan, acceptable to the procuring agency;
 - b. The contractor shall pay interest on the mobilization advance at the rate of 10% per annum on the advance;
- (ii) This Advance including the interest shall be recovered in 5 equal installments from the 5 R.A bills and in case the number of bills is less than 5 then 1/5 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.

14.3 Application for Interim Payment Certificate

The Text is added at the end of sub clause 14.3 as follows:

The Contractor shall submit a certificate signed and stamped by the contractor, certifying that the Contractor has paid all dues of the materials, suppliers, workmen and subcontractors for the works whose payment is claimed in this Application of Interim Payment.

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 and materials :-

- (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/ Engineer's Representative 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;
- (v) Ownership of such materials shall be deemed to vest in the procuring agency and these materials shall not be removed from the site or otherwise disposed of without written permission of the procuring agency;
- (vi) The sum payable for such materials on site shall not exceed 75 % of the (i) landed cost of imported materials, or (ii) ex-factory / ex-warehouse price of locally manufactured or produced materials, or (iii) market price of stands other materials;
- (vii) Secured Advance shall not be allowed unless and until the previous advance, if any, is substantially recovered;
- (viii) Detailed account of advances must be kept in part II of running account bill or a separate statement; and
- (ix) Secured Advance may be permitted only against materials/quantities anticipated to be consumed / utilized on the work within a period of 3 months from the date of issue of secured advance and in no case for full quantities of materials for the entire work/contract.

(II) Recovery of Secured Advance:

Secured Advance paid on non-perishable materials to the Contractor under the above provisions shall be recovered from the monthly payments on actual consumption basis, but not later than period specified in the rules not more than three months (even if unutilized).

14.8 Delayed Payment

Second Para is replaced with following text:

In the event of the failure of the Procuring Agency to make the payment within the time stated, the procuring agency shall pay to the Contractor, the compensation at rate of KIBOR+2% per annum in local currency and Libour+1% for foreign currency, upon all sums to be paid from the date of which the same would have been paid.

15.2 Termination by Employer

The following Para is added at the end of the sub-clause:

Provided further, that in addition to the action taken by the procuring agency against



the Contractor under this Clause, the procuring agency may also refer the case of default of the Contractor to Pakistan Engineering Council for punitive action under the Construction and Operation of Engineering Works Bye-Laws 1987, as amended from time to time.

15.6 Corrupt and fraudulent Practices.

The following text is to be added as 3rd paragraph:

Successful Contractor has to provide Integrity Pact (for contracts worth Rs.10.0 million and above).

If the Contractor or any of his Subcontractors, agents or servants is found to have violated or involved in violation of the Integrity Pact signed by the Contractor as Appendix-L to his Bid, then the procuring agency shall be entitled to:

- (a) recover from the Contractor an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by the Contractor or any of his Subcontractors, agents or servants;
- (b) terminate the Contract; and
- (c) recover from the Contractor any loss or damage to the procuring agency as a result of such termination or of any other corrupt business practices of the Contractor or any of his Subcontractors, agents or servants.

The termination under sub-para (b) of this Sub-Clause shall proceed in the manner prescribed under sub-clauses 15.2 & 15.5 and the payment under Sub-Clause 15.4 shall be made after having deducted the amounts due to the procuring agency under Sub-Para (a) and (c) of this Sub-Clause.

16.4 Payment on Termination

Sub-paragraph (c) is deleted.

17.3 Employer's/ Procuring Agency's Risks

Sub-Clause 17.3 (h) is deleted.

The following text is added in Clause 18.1 (GCC):

18.1 General Requirements for Insurance

The contractor shall be obliged to place all insurances relating to the contract (including, but not limited to, the insurances referred to in Clauses 18.1,18.2,18.3,18.4) with Insurance Company having at least AA rating from PACRA/JCR in favour of the Employer//Procuring Agency valid for a period 28 days after beyond the Bid Validity date.

Costs of such insurances shall be borne by the contractor.

19.6 Optional Termination, Payment and release by the Employer

Sub-clauses (c), (d) and (e) are deleted.

20.6 Arbitration

Text will be replaced as under;



Any dispute in respect of which:

(a) the decision, of the Dispute Board has not become final and binding pursuant to sub-clause 20.2, and

(b) amicable settlement has not been reached within the period stated in sub-clause 20.5, shall be finally settled, under the provisions of the Arbitration Act, 1940 as amended or any statutory modification/Rules of Conciliation And Arbitration PEC Islamabad or re-enactment thereof for the time being in force.

The place of arbitration shall be Karachi, in Sindh Province.

Following is added;

21.1 Customs Clearance

Customs clearance shall be Contractor's responsibility.

22.1 Notice to Contractor

The following paragraph is added:

For the purposes of this Sub-Clause, the Contractor shall, immediately after receipt of Letter of Acceptance, intimate in writing to the Employer and the Engineer by registered post, the address of his principal place of business or any change in such address during the period of the Contract.

22.2 Notice to Employer and Engineer

For the purposes of this Sub-Clause, the respective address are:

a) The Employer :

Director,
P&D / Procurement Department,
Jinnah Sindh Medical University,
Rafiqi H.J. Shaheed Road,
Karachi.
Postal Code# 75510
www.jsmu.edu.pk

b) The Engineer:

National Engineering Services Pakistan (Pvt.) Limited (NESPAK)
Architecture & Planning Division Karachi
4th Floor, NIC Building, Abbasi Shaheed Road off. Shahrah-e-Faisal,
Karachi-75500
Ph 021-99225430-34, Fax 021-99225424

The following Sub-Clause 23.1 are added:

23.1 Payment of Income Tax

The Contractor, Subcontractors and their employees shall be responsible for payment of all their income tax, super tax and other taxes on income arising out of the Contract and the rates and prices stated in the Contract shall be deemed to cover all such taxes. As per Government of Pakistan (GoP) regulations, the income tax of the contractor will be deducted at source that is Procuring Agency.



Annex PROCEDURAL RULES

Procuring Agency retains SPPRA rules without changes, in case of contracts under Project, Bank and donor's programme.



PART II –SPECIAL/PARTICULAR CONDITIONS OF CONTRACT

INDEX

CLAUSE	
Adjustment for changes in cost	13.8
Advance Payment	14.2
Amicable Settlement.	20.5
Appointment of the Dispute Board / Notification of the Committee	20.2
Arbitration	20.6
Commencement of Works	8.1
Contractor s Representative	4.3
Contractor s Claims	20.1
Contract Price	14.1
Corrupt and fraudulent Practices (Integrity Pact).	15.6
Definitions	1.1
Delayed Payments	14.8
Employer s/Procuring Agency s Risks	17.3
Engineer s Duties and Authority	3.1
Expiry of Dispute Board s Appointment	20.8
Failure to agree on the composition of the Dispute Board.	20.3
Failure to comply with Dispute Board s Decision	20.7
General Conditions of Dispute Board AgreementAppendix	
General Requirements for Insurance	18.1
Optional Termination, Payment and release by the Employer	19.6
Obtaining Dispute Board s Decision	20.4
Payment on Termination	15.6
Plants and Materials intended for Works	14.5
PROCEDURAL RULES	Annex
Prolonged Suspension	8.11
Programme	8.3
Records of Contractor s Personnel and equipment	6.10
Right to vary	13.1
Termination by Employer/Procuring Agency	15.2
Use of Pakistani Materials and Services	7.9
Variation procedure	13.3



**SPECIFICATIONS-
SPECIAL PROVISIONS
(Separate Volume)**



**SPECIFICATIONS-
TECHNICAL PROVISIONS
(Separate Volume)**



DRAWINGS
(Separate Volume)



LIST OF APPROVED MANUFACTURERS/BRANDS OF MATERIALS/EQUIPMENT

These lists of recommended manufactures/suppliers of different materials/equipment with brand names have been provided in order to establish a standard level of performance. The Contractor is bound provide and fix the materials/equipment of superior quality approved by the Engineer only from the list.

Sr. No.	Materials	Manufactures
1.	Crushed Stone Aggregate	Source as approved by the Engineer
2.	Reinforcement Steel	(i) AFCO, (ii) Mughal, (iii) Amrelli, (iv) Fazal, (v) Razzaq, (vi) Nawab, (vii) Pak Steel, (viii) PECO, (ix) Nazir, (x) Punjab, (xi) Ittehad, (xii) Agha Steel, (xiii) Al Farooq Steel Industries. or approved equivalent (The Contractor must provide a certification from the concerned Steel Mill that the Steel reinforcement has been manufactured from Pakistan Steel Mill billet, and should conform to the specification and to the satisfactory of the Engineer/PM.)
3.	Block/Bricks, Sand, Crushed Stone Aggregate	Source as approved by the Engineer
4.	Cement	(i) Dewan, (ii) Falcon, (iii) Javedan, (iv) Lucky, (v) D.G. or approved equivalent
5.	Bathroom Tiles	Ceramix (Thailand, Malaysia, UAE) or approved equivalent (A-Quality material)
6.	Porcelain Tiles	(i) Cretesol Malaysia, (ii) MML Malaysia (iii) KALE Turkey or approved equivalent – (A Quality material)
7.	Thermal Insulation	(i) Expanded Polystyrene, (ii) Ployurethane Sapry, (iii) Glass Wool, Foam, (iv) Gypsum Styopax. or approved equivalent
8.	Paints & Varnish	(i) ICI, (ii) Berger, (iii) Nippon, (iv) Kansai, (v) Nelson or approved equivalent
9.	Hardware Stays, Hinges, Handles & Door Locks	(i) FGV (Italy), (ii) DORMA, (iii) Newise (iv) Bonco or approved equivalent
10.	Lamination Boards / Veneer Boards	(i) Formite, (ii) Al-Noor or approved equivalent
11.	Formica	(i) Formite (Tuff), (ii) Al-Noor or approved equivalent
12.	Glass, Tinted glass / Double Glasses Tempered / Reflected / Wired Glass / Mirror Glass, Glass for doors & Windows	(i) Gunj Glass, (ii) Ghani Glass, (iii) Guardian (iv) St-Gobain or approved equivalent
13.	Gypsum Board False Ceiling(2' x 2') including Suspension System	(i) Boral, (ii) DFB (iii) Knauff (iv) Elephant or approved equivalent
14.	Wooden Door	As per Specification
17.	<u>Termite Proofing</u> For Soil For Wood	(i) Biflex, (ii) Merage (iii) Bio Wood, (iv) Power Max, (v) Solignum (vi) Biflies or approved equivalent
18.	Construction Chemicals	(i) SIKA, (ii) BSF (iii) Mapei or approved equivalent
19.	Aluminium for doors, windows and façade products	(i) ALCOP, (ii) Prime, (iii) Pakistan Cables or approved equivalent



LIST OF APPROVED MANUFACTURERS/BRANDS OF MATERIALS/EQUIPMENT

This list of recommended manufactures/suppliers of different materials/equipment with brand names have been provided in order to establish a standard level of performance. The Contractor is bound to provide and fix the materials/equipment of superior quality approved by the Engineer only from the list.

Sr. No.	Materials	Manufactures
1.	GI Pipe	ILL, Jamal or approved equivalent
2.	Valves all types	Kitz, Econostoor approved equivalent
3.	Stainless Steel Sink	Atlas, Super Asia, Masteror approved equivalent
4.	CI Pipe, Fittings & manhole covers	Alpine (Supper)or approved equivalent
5.	uPVC Pipe (Non Pressure Pipe)	Dadex, AGM, Vesboor approved equivalent
6.	ASTM A-53, API 5L Pipe (Seamless Pipes for Fire Fighting)	Huffaz, or approved equivalent.
7.	Fire Hose Cabinets	Haseen Habib, Fire Chiefor approved equivalent
8.	Portable fire extinguishers	NAFFCO, SRIor approved equivalent
9.	Concrete Pipe & Fittings	Pakistan Pipe, Sindh pipeor approved equivalent
10.	Sanitary Fixtures	Porta, American Standardor approved equivalent
11.	Flush Tank	As approved by the Engineeror approved equivalent
12.	Sanitary Fittings (Local)	As approved by the Engineer
13.	Pumps	KSB, Grundfosor approved equivalent
14.	Geysers	Singer, Nasgasor approved equivalent
15.	PPR Pipe	Palling, Hepworthor approved equivalent
16.	Water cooler	Mecco, Sunnyor approved equivalent
17.	Pipe insulation	Iqbal Sons, Aficoor approved equivalent
18.	Electric water heater	Atlas, Nasgasor approved equivalent
19.	Fiber Glass	Popularor approved equivalent



SECTION 8020**LIST OF RECOMMENDED MANUFACTURERS AND BRANDS OF MATERIALS/EQUIPMENT**

This list of recommended manufacturers or brands of different materials or equipments is provided in order to establish a standard level of performance. The contractor is bound to provide and fix the materials or equipments of superior quality approved by the Engineer only from the list unless otherwise specified in relevant equipment specification clauses, drawings and BoQ. However, the material provided from the List of Recommended Manufacturers and Brands or mentioned in other relevant equipment specification clauses or drawings or BoQ shall meet all the requirements of the relevant specification(s) comes under specification section 8001 of the tender documents. The contractor shall procure from recommended manufacturers or brands mentioned this Section 8020 here under or in relevant equipment specifications or drawings or BoQ of different material or equipments, from their authorized dealers or agents. The contractor shall provide the letter of authorization from the principal, for dealer's letter of dealership from the authorized dealer(s) and delivery challan(s) for ensuring the quality of purchased equipment. The nomenclature to mentioned manufacturers or brands name hereunder is as, manufacturer or brand name or both is mentioned first and then afterwards in bracket country of origin of manufacturer is mentioned.

SR. NO.	MATERIALS	MANUFACTURER/BRANDS OF MATERIALS/EQUIPMENT
	CABLES & ACCESSORIES	
1.	LV Wiring Cables (300 / 500 Volts)	Pakistan Cables, Pioneer Cables, Fast Cables, Allied Cables, AGE, or approved equivalent
2.	LV Power Cables (600 / 1000 Volts)	Pakistan Cables, Pioneer Cables, Fast Cables, Allied Cables, AGE, or approved equivalent
3.	High Voltage Cables(15 kV)	Pakistan Cables, Pioneer Cables, AGE, or approved equivalent
4.	MV Termination/Straight Jointing kit (Hot/Cold Termination)	Raychem (Germany), 3M (USA), Elastimold (Egypt), DSG-CANUSA (GmbH) or approved equivalent
5.	CAT Cables	3M, Indus Cables, Draka Cables, Clipsal, Norden Communication, Pony, Leviton or approved equivalent
6.	Fire Resistant Cables	Prismian, Cavicel, Context Plus, Indus Cables, or approved equivalent
7.	Glands, Lugs, Ferrules, Connectors	Cembre (Italy), Hellermanntyton (UK), or approved equivalent
8.	Cable Tagging/Labelling System	Cembre (Italy), Hellermanntyton (UK), or approved equivalent
	PVC AND STEEL CONDUIT	
9.	PVC Conduit & Accessories/ Halogen free PVC conduit for special applications	Beta, Popular, Tesco, Galco, Jeddah Polymer, Dadex, Decoduct, Euro Gulf, Pak Arab, Civic, Adamjee (Durabuilt), or approved equivalent



10.	Steel Conduit & Accessories	Hilal Industries, IIL, Jamal, Poiner, Dietzel-Univolt (Austria), or approved equivalent
	ELECTRICAL COMPONENTS	
11.	LV Circuit Breakers (MCB, MCCB, ELCB, ACB)	Merlin Gerin (MG) (France), Siemens (Germany), ABB (France), Terasaki (Japan), LS (Korea), Legrand (France), Silk Engineering, or approved equivalent
12.	LV Magnetic Contactor, Starters & Thermal Overload Relay	ABB (France), Siemens (Germany), Schneider Electric, National/Panasonic (Japan), LS (Korea), Legrand (France), Silk Engineering or approved equivalent
13.	Power Capacitor	National / Panasonic (Japan), Ducati (Italy), Entes (Turkey), Nokian (Finland), Janitza (Germany), Schneider Electric or approved equivalent
14.	LV Capacitor	Amber Capacitor (Pakistan), Entes (Turkey), Nokian (Finland), INCR (Italy), Schneider Electric, Gruppo Energia (Italy) or approved equivalent
15.	PF Controller	Nokian (Finland), ABB (Finland), Siemens (Germany), Schneider Electric, Entes (Turkey), Ducati (Italy) or approved equivalent
16.	Series Reactor	National / Panasonic (Japan), Nokian (Finland), Schneider Electric or approved equivalent
17.	Timer	National / Panasonic (Japan), Entes (Turkey), ABB (Germany), GE (EU) or approved equivalent
18.	Push buttons and indication lights	Maruyasu (Japan), GE (EU), Schneider Electric or approved equivalent
19.	Current Transformer/Voltage Transformer	Circutor (Italy), Revalco (Italy), Entes (Turkey), Complee or approved equivalent
20.	Measuring Instrument	Revalco (Italy), Circutor (Italy), Entes (Turkey), Lumel (Poland), Complee or approved equivalent
21.	Programmable Logic Controllers	Siemens, ABB, LG, Schneider Electric or approved equivalent
22.	VSS/ASS	Breter (Italy), Kraus & Naimer (NZ), MERZ (Germany), Schneider Electric or approved equivalent
23.	HRC Fuses	Siba (Germany), ETI, KP, or approved equivalent
	TRANSFORMER	
24.	Pad Mounted Transformers (11/0.415 kV)	Siemens, Climax, PEL, Transfopower, or approved equivalent
	ELECTRIC PANELS	



25.	LV Panel	Hussian & Co, Baber Brothers, Schneider, Siemens, JEI Switchgear, Libra, Bilal S/G Engg., HRA Switchgear, Premier Engineering, Karimi Electromech Systems, or approved equivalent
26.	11 kV Panels	Siemens, Schneider (formerly Areva), PEL, or approved equivalent
27.	Busbar Trunking System	Schneider, Siemens, EAE (Turkey), Gersan (Turkey), Legrand (France) or approved equivalent
	LIGHTING FIXTURE & COMPONENTS	
28.	Surface/recessed office luminaries (3 years warranty minimum)	Philips, Britlite Engineering, Pierlite, Unilux, Sunlight, Future Technologies, or approved equivalent
29.	Battens	Philips, Britlite Engineering, Pierlite, Unilux, Sunlight, Future Technologies, or approved equivalent
30.	Downlights	Philips, Thorn, Britlite Engineering, Pierlite, Unilux, Sunlight, Future Technologies, or approved equivalent
31.	Exit Emergency Light Fixture	Philips, Lverlux, Menvier, Pierlite (Australia), Unilux, Sunlight, Osaka, Future Technologies, Electroline, or approved equivalent
32.	Lamps	Source as approved by the "Engineer"
33.	Control gear	Source as approved by the "Engineer"
34.	Connectors/holders	Source as approved by the "Engineer"
	SWITCHES & SOCKETS	
35.	Switches	MK, Clipsal, ABB (Germany), Legrand (France), Hager (France), Orange or approved equivalent
36.	Sockets	MK, Clipsal, ABB (Germany), Legrand (France), Hager (France), Orange or approved equivalent
37.	Dimmer / Fan Speed Controller	MK Clipsal, ABB (Germany), Legrand (France), Hager (France), Orange or approved equivalent
38.	Connection Unit	MK, Clipsal, ABB (Germany) or approved equivalent
39.	Voice/TV/Data Outlets	MK, Clipsal, ABB (Germany), Legrand (France), Hager (France) or approved equivalent
40.	Back Boxes	MK, Dietzel-Univolt (Austria), Clipsal (Australia), Hussain & Co. or approved equivalent
41.	High Current Switches	MK, Clipsal, ABB (Germany), Legrand (France), Hager (France) or approved equivalent
	DIESEL GENERATOR SET	



42.	Couplers	Siemens, Caterpillar, SDMO, FG -Wilson, Doosan, Mitsubishi, VPL, Cummins (The brand should consists of components as mentioned in list of approved manufacturers), or approved equivalent
43.	Engine	Cummins, John Deere, Perkins, MTU, Mitsubishi, Doosan, or approved equivalent
44.	Alternator	Stamford, Caterpillar, Mitsubishi, Leroy Somer or approved equivalent
45.	Generator Module	Datakom (Turkey), Deepsea Electronics (UK) or approved equivalent
46.	ATS/AMF, Generator Panels	Refer to heading Electrical Panels in the List of Approved Manufacturer's.
	ELECTRONICS/COMPUTER EQUIPMENT	
47.	UPS	APC (USA), MG (France), ELIT (Italy), ABB (Switzerland), Alberex, GTEC(Italy) or approved equivalent
48.	Fire Alarm System	Simplex (USA), Gent-Honeywell (USA/UK/EU), Edwards (USA), GST (UK), Cooper Menvier (UK), Notifier, Inim Electronics Italy, C-Tec U. K. or approved equivalent
49.	Public Address System	TOA (Japan), Bosch (EU), Optimus (Spain), Honeywell, or approved equivalent
50.	Burglar Alarm System	DSC (Canada), Texicom (UK), Bosch (Germany or approved equivalent
51.	CCTV System	Pelco (USA), Bosch (EU), Sony (Japan), Optimus (Spain), Hyundai (Korea), Watchnet (Canada), or approved equivalent
52.	CATV	WISI (Germany), Scientific Atlanta (USA), Pony, Leviton (USA), or approved equivalent
53.	Lightning Protection & Earthing System	Aplicaciones Tecnologicas (Spain), Furse (UK), Duval – Messien (France), Thermo Weld (USA) or approved equivalent
54.	PABX	LG-Ericsson, Panasonic or approved equivalent
55.	Access Control System	Cavdax Gallaghev (Newzealand) or approved equivalent
	COMPUTER NETWORK SYSTEM/COMPONENTS	
56.	Structured Cabling	3M (USA), Panduit (USA), Clipsil-Schneider (France), Leviton (USA), or approved equivalent
57.	Ethernet Switches	CISCO (USA) or approved equivalent
58.	Cable Trunking & Accessories	Dietzel-Univolt (Austria), MITA-Schneider (France), Davis (Malaysia), NAXSO (Italy), Karimi Electromech Systems, EAE (Turkey), or approved equivalent
	MISC MATERIALS	
59.	Cable Tray with accessories	Ashraf Industries, Ezzi Engineering, Electroline or approved equivalent



		approved equivalent
60.	Tubular Poles	Jamal Pipes, PECO, Excel Engineering, Lion Industries, Farhan Mechanical Works or approved equivalent



**JINNAH SINDH MEDICAL UNIVERSITY, KARACHI
LECTURER HALL**

**List of Recommended Manufacturers of
Equipment/Material and as offered by the Tenderer**

1. Qualifications of Manufacturers of Equipment and Material

The local and imported equipment offered by the Tenderers shall be of reputed manufacturers who have atleast 10 (ten) years of proven experience in the design and manufacture of such equipment and have all testing facilities for testing of equipment strictly in accordance with the laid down standards and specifications.

2. Brand Names

Equipment and materials specified with a Brand Name have been named in order to establish a standard of performance and do not necessarily indicate a preference for a particular manufacturer or material.

3. List of Manufacturers Recommended and as Offered

The names of manufacturers given below are to indicate the level of quality and performance anticipated by the Engineer/Employer. Other makes may be accepted provided the quality and performance of such equipment in the sole opinion of the Engineer are atleast equal to or better than the equipment offered by the recommended manufacturer listed hereunder:-

S. No.	Equipment/Material	Recommended Manufacturer	Offered Manufacturer
1.	Split Air-Conditioning Units	a) LG, KOREA b) MITSUBISHI, THAILAND c) HITACHI, MALAYSIA / DIAKIN, THAILAND d) ACSON, MALAYSIA e) GENERAL, MALAYSIA / THAILAND	
2.	Condensate Drain Piping	a) DADEX ETERNIT, PAKISTAN b) HEP WORTH c) JAMAL PIPES, PAKISTAN d) PAK ARAB	
3.	Insulation for Condensate Drain	a) AEROFLEX, THAILAND b) SUPERLON, THAILAND	



S. No.	Equipment/Material	Recommended Manufacturer	Offered Manufacturer
4.	Electrical Cables	a) PAKISTAN CABLES, PAK. b) PIONEER CABLES, PAK. c) NEWAGE, PAK	
5.	Refrigerant Copper Piping	a) MULLER, USA b) KEMBLA, AUSTRALIA	

Signature & Seal of Tenderer