|  |  |  |
| --- | --- | --- |
| **Sindh Gov Logo.jpg** | Employment through Skill  **Sindh Technical Education &**  **Vocational Training Authority (STEVTA)**  ST-19, Block-6, Near N.I.P.A., University Road,  Gulshan-e-Iqbal, Karachi. Tel: 021-99243818  ~~~~~~~~~~~~~~~~~~~~~~~ | STEVTA Logo.jpg |

**Bidding Document**

**Procurement of**

**Machinery/Equipment/Tools & Apparatus**

**for Various Science Laboratories**

**for**

**Government Monotechnic Institute,**

**Garhi Khuda Bux, District Larkana.**

Date & Time of Bid Submission: 24-05-2017 (up to 11:00 a.m.)

Date & Time of Bid Opening (Technical only): 24-05-2017 (at 11:30 a.m.]

**(FINANCIAL PROPOSAL)**

**PART TWO**

* **Sample Forms/Formats.**
* **Price Schedule for Goods.**

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M/s. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tender Cost Rs.2,000/-(Non-Refundable/Non-Transferable), Tender Enquiry No.\_\_\_\_\_\_\_\_\_\_\_

**Earnest Money: 5% of total bid value**

**Date of Receipt of Tender: 24.05.2017 till0 11:00 a.m.**

**Date of Opening of Technical Proposal: 24.05.2017 on 11:30 a.m.**

# Bid Submission Sheet

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ICB NO.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Invitation for Bid No.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Alternative No.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Managing Director,**

**Sindh Technical Education &**

**Vocational Training Authority,**

**Karachi**

We, the undersigned, declare that:

We have examined and have no reservations to the Bidding Document, including Addenda No.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_;

1. We offer to supply in conformity with the Bidding Document and in accordance with the delivery schedule specified in the Schedule of Supply, the Goods and Related Services.
2. The total price of our Bid, excluding any discounts offered in item (d) below is: Rs.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(Rupees\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_;
3. The discounts offered and the methodology for their application are: \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_;
4. Our Bid shall be valid for a period of 90 days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
5. If our Bid is accepted, we commit to obtain a Performance Security @ 10% of the Contract Price for the due performance of the Contract;
6. Our firm, including any subcontractors or suppliers for any part of the Contract, have nationalities from these eligible countries; \_\_\_\_\_\_\_\_\_\_\_\_\_\_; \_\_\_\_\_\_\_\_\_\_\_\_\_\_; \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_;
7. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;
8. Our firm, its affiliates or subsidiaries, including any subcontractors or suppliers for any part of the contract, has not been declared ineligible by the Government;
9. The following commissions, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract:

Name of Receipt Address Reason Amount

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

(If none has been paid or is to be paid, indicate “none.”)

1. We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed.
2. We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In the capacity of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Duly authorized to sign the security for and on behalf of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Price Schedule Format (for Goods)

**(Financial Proposal)**

**Name of Bidder \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ IFB Number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Page \_\_\_\_\_\_ of \_\_\_\_\_\_**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** | **6** |
| **Item** | **Description** | **Country of Origin**  **Make/Model** | **Quantity** | **Unit Price**  **(in PKR)** | **Total Price**  **(in PKR)** |
|  |  |  |  |  | **(Col: 4 x 5)** |
|  |  |  |  |  |  |
| **Total Amount :-** | | | | |  |

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In the capacity of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Duly authorized to sign the security for and on behalf of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Bid Security / Earnest Money Form

**WHEREAS** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hereinafter called the “***Bidder***” has submitted its bid, dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for the supply of \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in Sindh, hereinafter called the “***Bid****”*.

**KNOW ALL MEN** by these presents that I/We \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ having our registered office (s) at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ do hereby submit Earnest Money of Rs. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Rupees \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) for the aforesaid Bid in the shape of Pay Order/Demand Draft No. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ issued by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Bank in favour of “Sindh Technical Education & Vocational Training Authority”, hereinafter called ***“Procuring Agency/Purchaser”.***

Name of Supplier (s)

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

Authorized Representative

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

Dated: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Bid Security / Earnest Money Sheet

**Tender No. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Procurement of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SR.**  **No.** | **Package No.** | **Estimated Cost**  **(in PKR)** | **Bid Value**  **(in PKR)** | **Earnest Money @ 5% of Offered Value** | | |
| **Amount** | **P.O / D.D** | **Name of Bank** |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** |
|  | Package-I.  Package-II.  Package-III.  Package-IV. |  |  |  |  |  |
| **Total Amount :-** | | | |  |  |  |

Signature of the Bidder\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name & Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

Firm’s Stamp \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Dated: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Technical Proposal

|  |  |  |
| --- | --- | --- |
| **Item No.** | **Description / Specifications** | **Make / Model** |
|  |  |  |

***( Catalogue, brochure and other relevant literature should be provided )***

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In the capacity of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Duly authorized to sign the security for and on behalf of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Agreement Form**

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contract Name and No. : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

The Managing Director,

Sindh Technical Education &

Vocational Training Authority,

Karachi

WHEREAS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (hereinafter “the Supplier”) has undertaken, pursuant to Contract No. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_, to supply \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in Sindh (hereinafter “the Contract”).

AND WHEREAS it has been stipulated by you in the aforementioned Contract that the Supplier shall furnish you with a security \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ issued by a reputable guarantor for the sum specified therein as security for compliance with the Supplier’s performance obligations in accordance with the Contract.

AND WHEREAS the undersigned \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, legally domiciled in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (hereinafter “the Guarantor”), have agreed to give the Supplier a security.

THEREFORE, WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of Rupees \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract, without cavil or argument, any sum or sums within the limits of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This security is valid until the \_\_\_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In the capacity of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Duly authorized to sign the security for and on behalf of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contract Form

*THIS CONTRACT* made on this \_\_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_ 2017 between Sindh Technical Education & Vocational Training Authority (STEVTA) herein after called the PURCHASER of the one part and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hereinafter called the SUPPLIER of the other part.

*WHEREAS* the Purchaser is desirous that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Equipment/Furniture/ Lab: accessories be provided and installed by the Supplier, via\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (hereinafter “Equipment/Furniture/Lab: Apparatus” ) and has accepted a Bid by the Supplier for the provision of and installation for those stores in the sum of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ hereinafter “the Contract Price”.

**NOW THIS CONTRACT 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 referred to.

* 1. The following Documents shall be deemed to form and be read and Construed as part of this Agreement, viz,

1. The Bid Form and the Price Schedule submitted by the Bidder.
2. The Schedule of Requirements.
3. The Technical Specifications.
4. The General Conditions of Contract.
5. The Special Conditions of Contract. and
6. The Purchase’s Notification of Award.
   1. In consideration of the Payment to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Equipment and Services to remedy defects therein in conformity in all respects with the provisions of the Contract.
   2. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Equipment and Services and to remedy defects, the Contract Price of 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 in accordance with their respective laws the day and year first above written.

Signed, Sealed & Delivered by ……………………….. the ……………………. ( for the **Purchaser**)

Signed, Sealed & Delivered by ……………………….. the ……………………. ( for the **Supplier**)

# Performance Security

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Contract Name and No. : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

**The Managing Director,**

**Sindh Technical Education**

**& Vocational Training Authority,**

**Karachi**

WHEREAS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (hereinafter “the Supplier”) has undertaken, pursuant to Contract No. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dated \_\_\_\_\_\_\_\_\_\_\_\_\_\_, to supply \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in Sindh (hereinafter “the Contract”).

AND WHEREAS it has been stipulated by you in the aforementioned Contract that the Supplier shall furnish you with a security \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ issued by a reputable guarantor for the sum specified therein as security for compliance with the Supplier’s performance obligations in accordance with the Contract.

AND WHEREAS the undersigned \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, legally domiciled in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (hereinafter “the Guarantor”), have agreed to give the Supplier a security.

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, upto a total of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract, without cavil or argument, any sum or sums within the limits of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This security is valid until the \_\_\_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the capacity of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Duly authorized to sign the security for and on behalf of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Receipt Certificate Form

**(To be completed by the Consignee)**

1. Certified that the stores as accepted on the reverse and in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Continuation sheets attached have been received in good condition and are as per Contract specification subject to the remarks at, 3 below \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. The stores have been brought to account under Receipt Voucher No.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and posted in Ledger No. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Pages.

3. Details of recoveries proposed by the consignee in respect of deficiency breakage and/or freight etc., which should be made from the contractor under the terms of the contract.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **Reason** | **Amount** | **Item** | **Reason** | **Amount** |

Station \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_ Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Circle of Area \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Designation \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Manufacturer’s Authorization

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ICB NO.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Invitation for Bid No.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Alternative No.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Managing Director,**

**Sindh Technical Education &**

**Vocational Training Authority,**

**Karachi**

WHEREAS \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ who are official manufacturers of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ having factories at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 13 of the General Conditions of Contract, with respect to the Goods offered by the above firm in reply to this Invitation for Bids.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In the capacity of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Duly authorized to sign the security for and on behalf of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

CERTIFICATE

We guarantee to supply the stores exactly in accordance with the requirement specified in the invitation to this tender.

Signature of Bidder ………………

Name & Designation……………….

Address……………………………..

Amount of 5% Call Deposit\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Bank with Full Address\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Pay Order No\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Full Name & Address of Firm\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

CNIC# of Authorized Person\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature of Authorized Person\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Financial Proposal

Price Schedule **(Facilitated Format)**

| **Item No.** | **Description** | **Quantity** | **Unit Price (in PKR)** | **Total Price (in PKR)** |
| --- | --- | --- | --- | --- |
| **A** | **(PACKAGE-I) SOIL MECHANICS & HIGHWAY LABORATORY:-** | |  |  |
| 1 | Dispatch Electric Over Economy Forced  Convection Bench. | 02 |  |  |
| 2 | ASTM Thermometer | 02 |  |  |
| 3 | Steel Handling Pan | 10 |  |  |
| 4 | Steel Sample Pan | 04 |  |  |
| 5 | Stainless Steel Round Bowl | 04 |  |  |
| 6 | Large Round Plastic Sample Container | 04 |  |  |
| 7 | Stainless Steel Scoop | 04 |  |  |
| 8 | Sample Can | 04 |  |  |
| 9 | Fine Sieve Brush | 06 |  |  |
| 10 | Coarse Sieve Brush | 06 |  |  |
| 11 | Spatula, 4×3/4” (L×W) Blade | 04 |  |  |
| 12 | Stainless Steel Spatula and Spoon | 04 |  |  |
| 13 | Wash Bottle | 04 |  |  |
| 14 | Beaker Tong | 04 |  |  |
| 15 | Evaporating Dish | 06 |  |  |
| 16 | A&D Top loader Balance | 01 |  |  |
| 17 | Vibratory Sieve Shaker | 01 |  |  |
| 18 | Full Height International Round Test Sieve ,  Brass Frame, Stainless Steel | 01 |  |  |
| 19 | Sieve Ware Software: | 01 |  |  |
| 20 | Bucket Augers | 02 |  |  |
| 21 | CBR test apparatus with Accessory Set | 01 |  |  |
| 22 | Relative Density Set | 01 |  |  |
| 23 | Soil Cement Apparatus | 01 |  |  |
| 24 | Dropping Weight Compacting Machine | 02 |  |  |
| 25 | Mechanical Soil Compactor | 01 |  |  |
| 26 | Liquid Limits Machines-Motorized with counter  220V/50Hz For testing soil samples on standard  of AASHTO T89, ASTM D 4318 with all  Accessories. | 01 |  |  |
| 27 | Grooving Tool, Casegrande (ASTM),(AASHTO) | 01 |  |  |
| 28 | Plastic Limit Test Roller with accessories. | 01 |  |  |
| 29 | Digital Direct Shear Machine, 220v/50hz | 01 |  |  |
| 30 | Unconfined Load frame, UC/Trial-0.001” to | 01 |  |  |
| 31 | Multi Loader Frames, CBR, UCC-100:1-001” TO .1 MIN, 220V/50Hz | 01 |  |  |
| 32 | Direct/Residual Shear Machine | 01 |  |  |
| 33 | SHEAR BOX, 100MM × 100M × 100MM × 25MM  EXTRUDERS: | 02 |  |  |
| 34 | ASTM/AASHTO Permea meters. | 01 |  |  |
| 35 | Sand Cone Density Apparatus | 02 |  |  |
| 36 | Pocket Penetro meter | 02 |  |  |
| 37 | Soil Strength Classifier | 01 |  |  |
| 38 | Soil Sampling Kit: | 01 |  |  |
| 39 | Speedy 2000 Moisture Tester: | 01 |  |  |
| 40 | Complete Soils Chemical Analysis Test Set: | 01 |  |  |
| 41 | 4-Station Proportional Calliper Device: | 01 |  |  |
| 42 | Thickness Gauge (Flakiness Index) | 02 |  |  |
| 43 | Length Gauge (Elongation Index) | 02 |  |  |
| 44 | Filter Flask | 04 |  |  |
| 45 | Filter Flask | 04 |  |  |
| 46 | 4-Liter Filter Flask | 04 |  |  |
| 47 | Specific Gravity & Absorption of Fine  Aggregates Set | 04 |  |  |
| 48 | Pycnometer Bottle with Thermometer  10ml Capacity | 02 |  |  |
| 49 | In 0.2 °C increments100ml Capacity | 02 |  |  |
| 50 | Volumetric Flask | 04 |  |  |
| 51 | Volumetric Flask | 04 |  |  |
| 52 | Bitumen meters | 04 |  |  |
| 53 | Specific Gravity Bench | 01 |  |  |
| 54 | Marshall Automatic Mechanical  Compactor: | 01 |  |  |
| 55 | Tamping Rod. | 01 |  |  |
| 56 | Aggregate Impact Value. | 01 |  |  |
| 57 | Aggregate crushing value apparatus 150mm | 01 |  |  |
| 58 | Metal Measure 115mm dia × 180mm deep | 01 |  |  |
| 59 | Tamping Rod 5.12 16mm Dia × 600mm Long,  Hemispherical at both ends | 01 |  |  |
| 60 | Friction Tester | 01 |  |  |
| 61 | Base plate with Specimen Mounting Block for  Laboratory use | 01 |  |  |
| 62 | Detachable Scale | 01 |  |  |
| 63 | Rota test 1500 220/240V 50/60H2 1ph. | 01 |  |  |
| 64 | Filter Discs, Pack of 100. | 01 |  |  |
| 65 | Bowl 1500 gm. | 01 |  |  |
| 66 | Compaction Mould, BS 598 ASTMD 1559 | 01 |  |  |
| 67 | Compaction Pedestal to BS 598. | 01 |  |  |
| 68 | Compaction Hammer. | 01 |  |  |
| 69 | Aluminium Test Pan, 10.18 thin- film test  140mm dia × 9.5mm deep. | 01 |  |  |
| 70 | Penetration Tin, for penetrations below 200;  Nominally 55mm dia × 35mm deep. | 01 |  |  |
| 71 | Penetration Needle, verify by NPL. | 01 |  |  |
| 72 | Concrete Core Drill with Petrol DRIVEN  Motor Unit 3hp 2-Stroke Engine complete with water swivl | 01 |  |  |
| 73 | 100mm Core Barrel solid back end type | 01 |  |  |
| 74 | Triple beam balance 2610g × 0.1g | 01 |  |  |
| 75 | 6 Inch (152mm) Sand Cone. | 01 |  |  |
| 76 | 5Liter Plastic Container for Sand Cone | 01 |  |  |
| 77 | Density Plate for El 29. 4300. | 01 |  |  |
| 78 | Cleveland Flash cup | 01 |  |  |
| 79 | Series Humidity Oven | 01 |  |  |
| 80 | Syringe With Rubber bulb | 01 |  |  |
| 81 | Dee freezer 18 c-ft | 01 |  |  |
| 82 | Thermometer (Local) | 12 |  |  |
| 83 | Bowl and pans different of sizes | 20 |  |  |
|  | **Sub Total:-** |  |  |  |
| **B** | **(PACKAGE-II) FLUID MECHANICS/ HYDRAULICS/IRRIGATION LAB:** | | | |
| 1 | Hydraulic Bench | 01 |  |  |
| 1.a | **ACCESSORIES COMPRISE:-**  Dead weight calibrator. | 01 |  |  |
| 1.b | Hydrostatic Pressure. | 01 |  |  |
| 1.c | Flow Over Weirs Model. | 01 |  |  |
| 1.d | Mata centric Height Model. | 01 |  |  |
| 1.e | Bernoulli’s Theorem Demonstration. | 01 |  |  |
| 1.f | Impact of Jet Model. | 01 |  |  |
| 1.g | Orifice & Free Jet Flow Model. | 01 |  |  |
| 1.h | Orifice Discharge Model. | 01 |  |  |
| 1.i | Energy Losses in Pipes Model. | 01 |  |  |
| 1.j | Flow Channel Model. | 01 |  |  |
| 1.k | Osborne Reynolds’s Demonstration. | 01 |  |  |
| 1.l | Flow Meter Demonstration. | 01 |  |  |
| 1.m | Energy Losses in Bends. | 01 |  |  |
| 1.n | Free & Forced vortices. | 01 |  |  |
| 1.o | Hydraulic Ram. | 01 |  |  |
| 1.p | Demonstration Pelton Turbine. | 01 |  |  |
| 1.q | Series/Parallel pumps. | 01 |  |  |
| 1.r | Centrifugal Pump Characteristic. | 01 |  |  |
| 1.s | Computer Aided Learning Software. | 01 |  |  |
| 1.t | Fluid Friction Apparatus. | 01 |  |  |
| a) | Digital Pressure Meter. | 01 |  |  |
| b) | 1m Pressurized Water Manometer. | 01 |  |  |
| c) | Educational Software for Manual Data Entry. | 01 |  |  |
| d) | Data Logging Accessory with Software | 01 |  |  |
| 2 | Precision Pressure Gauge Apparatus | 01 |  |  |
| 3.a | Centrifugal Fan Demonstration Unit | 01 |  |  |
| 3.b | Interface Device | 01 |  |  |
| 3.c | Integrating Wattmeter | 01 |  |  |
| 4.a | Axial Fan Demonstration Unit | 01 |  |  |
| 4.b | Interface Device | 01 |  |  |
| 4.c | Integrating Wattmeter | 01 |  |  |
| 5.a | Centrifugal Compressor Demonstration Unit | 01 |  |  |
| 5.b | Interface Device | 01 |  |  |
| 5.c | Integrating Wattmeter | 01 |  |  |
| 6.a | Centrifugal Pump Demonstration Unit | 01 |  |  |
| 6.b | Interface Device | 01 |  |  |
| 6.c | Integrating Wattmeter | 01 |  |  |
| 7.a | Parallel Pumps Demonstration Unit | 01 |  |  |
| 7.b | Interface Device | 01 |  |  |
| 7.c | Integrating Wattmeter | 01 |  |  |
| 8.a | Gear Pump Demonstration Unit | 01 |  |  |
| 8.b | Interface Device | 01 |  |  |
| 8.c | Integrating Wattmeter | 01 |  |  |
| 9.a | Plunger Pump Demonstration unit | 01 |  |  |
| 9.b | Interface Device | 01 |  |  |
| 10.a | Axial Flow Impulse Turbine (Hydro Power) | 01 |  |  |
| 10.b | Turbine Service Unit | 01 |  |  |
| 10.c | Interface Device | 01 |  |  |
| 11.a | Radial Flow Reaction Turbine Demonstration unit | 01 |  |  |
| 11.b | Turbine Service Unit | 01 |  |  |
| 11.c | Interface Device | 01 |  |  |
| 12.a | Pelton Turbine Demonstration Unit. | 01 |  |  |
| 12.b | Turbine Service Unit | 01 |  |  |
| 12.c | Interface Device | 01 |  |  |
| 13.a | Propeller Turbine Demonstration Unit  (Small Scaled Hydropower unit). | 01 |  |  |
| 13.b | Interface Device | 01 |  |  |
|  | **Sub Total:-** |  |  |  |
|  | **(PACKAGE-III) LIBRARY BOOKS** | -- | **--** | **--** |
|  | **DEPARTMENT OF CIVIL TECHNOLOGY**  **LIST OF BOOKS REQUIRED:-** | -- | **--** | **--** |
|  | **ENGINEERING GEOLOGY:** |  |  |  |
| 1 | Geology for Engineers, Blyth FGH 7TH Arnold International student edition. | 02 Nos. |  |  |
| 2 | Geology and Engineering, Legged, RF 3rd edition McGraw Hill International edition. | 02 Nos. |  |  |
| 3 | Principals of Engineering Geology and Geotechniques, Keyline, DP 1st edition McGraw Hill International edition. | 02 Nos. |  |  |
|  | **MECHANICS OF MATERIALS:** | -- | **--** | **--** |
| 1 | Mechanics of Materials (S.I.Units) by Benham and F.V. Warnock, Edison Weseley Longman. January 1996 (Latest Edition) Text. | 02 Nos. |  |  |
| 2 | Mechanics of Materials (S.I.Version) E.P. Popov. 2nd Edition, Printice Hall, Inc. 1976 (Latest edition) Reference. | 02 Nos. |  |  |
| 3 | Strength of Materials by F.L. Singer Harper & Row Publishers. | 02 Nos. |  |  |
| 4 | Engineering Mechanics by Timoshenko & D.H. Young. 4th edition McGraw Hill (Latest Edition). | 02 Nos. |  |  |
|  | **MATERIALS AND METHODS OF CONSTRUCTION:** | -- | **--** | **--** |
| 1 | Materials of construction by R.C. Smith and C.K.Andres, ISBN: 0070585040, McGraw Hill, January 1987 Latest Edition (Text). | 02 Nos. |  |  |
| 2 | Fundamental of Building Construction: Material and Methods By Edward B. Allen, (Latest edition). | 02 Nos. |  |  |
| 3 | Building Construction Vol. I to IV by Mickay (Latest Edition) (Reference). | 02 Nos. |  |  |
| 4 | Building Construction by Mitchall (Latest Edition) (Reference) | 02 Nos. |  |  |
| 5 | Building Construction by Huntigton (Latest Edition) (Reference). | 02 Nos. |  |  |
| 6 | Civil Engineering Materials by Neil Jackson Latest Edition (Reference). | 02 Nos. |  |  |
| 7 | Construction Materials by P.D.Domone, University College , London, latest edition (Reference). | 02 Nos. |  |  |
|  | **FLUID MECHANICS:** | -- | **--** | **--** |
| 1 | Fluid Mechanics for Civil Engineering by N.B.Webber, Chapman, & Hall, (Latest Edition) Text. | 02 Nos. |  |  |
| 2 | Fluid Mechanics with Engineering Applications by Dougherty, Francine and Fennimore, McGraw , New York.(Latest Edition) Reference. | 02 Nos. |  |  |
| 3 | An Introduction to Engineering Fluid Mechanics by J.A. Fox, Macmillan Company (Latest edition). | 02 Nos. |  |  |
| 4 | Mechanics of fluids by B.S.Massey, wan Nost Reinhold International Rand hold Company Ltd. London (Latest Edition) Reference. | 02 Nos. |  |  |
| 5 | Mechanics of Fluids by J.W. Ireland, Bulterworth & | 02 Nos. |  |  |
| 6 | Company, London. (Latest Edition) Reference. | 02 Nos. |  |  |
|  | **CONSTRUCTION SURVEYING:** | -- | **--** | **--** |
| 1 | Surveying theory of practice by R.E. Davis J.Anderson, F.S. Foote, McGraw Hill (Latest Edition).Text. | 02 Nos. |  |  |
| 2 | Surveying by Jack C.McCormac, (Latest Edition) Reference. | 02 Nos. |  |  |
| 3 | Surveying: with construction Applications by Barry F. Kavanagh, prentice Hall (Latest Edition). Reference. | 02 Nos. |  |  |
| 4 | Scgaym’s Outline of Introductory Surveying By R.H.Wirshing, Roy Wirshing, James R. Wirshing, (Latest Edition) Reference. | 02 Nos. |  |  |
| 5 | Plane and Geodetic Survey Vol. I & II by David Clark. Trans-Atlantic Publications. (Latest Edition). | 02 Nos. |  |  |
| 6 | Design of Concrete Structures by H.Nilson, McGraw.(Latest Edition). Text. | 02 Nos. |  |  |
|  | **CONCRETE TECHNOLOGY- I:** | -- | **--** | **--** |
| 1 | Properties of Concrete by A.M. Venille; Wiley John & Sons. (Latest Edition) Reference. | 02 Nos. |  |  |
| 2 | Reinforced Concrete- Design & Behavior by C.K.Wang & Salmon. Reference. | 02 Nos. |  |  |
| 3 | Elementary Reinforced Concrete by W.Morgan (Latest Edition) Reference. | 02 Nos. |  |  |
| 4 | R.C. designers Handbooks by Charles. E.Reynold; Chapman & Hall. (Latest Edition) Reference. | 02 Nos. |  |  |
|  | **STRUCTURAL MECHANICS:** | -- | **--** | **--** |
| 1 | Statically Indeteminate Structures by C.K.Wang, McGraw Hill (Latest Edition) Text Book. | 02 Nos. |  |  |
| 2 | Elementary Theory of Structures by Yuan-Yu Hsieh. Prentice Hall, Inc. (Latest Edition) Reference. | 02 Nos. |  |  |
| 3 | Theory of Structures by Timoshenko. McGraw Hill ( Latest Edition). Reference | 02 Nos. |  |  |
| 4 | Structural Analysis by J.I. Laursen; McGraw Hill (Latest Edition) Reference. | 02 Nos. |  |  |
| 5 | Theory of Structures by J.C.Mccormac. Harper & Colins Publishers (Latest Edition) Reference. | 02 Nos. |  |  |
|  | **SOIL MECHANICS:** | -- | **--** | **--** |
| 1 | Fundamentals of Soil Mechanics by M. S. Qureshi & Aziz Akbar, A-1 Publishers, Urdu Bazar,Lahore. (Latest Edition) Text. | 02 Nos. |  |  |
| 2 | Soil Mechanics by A.R Jumikis (Latest Edition) Reference. | 02 Nos. |  |  |
| 3 | Fundamental of Soil Mechanics bhy D.W. Taylor (Latest Edition). Reference. | 02 Nos. |  |  |
| 4 | Elements of Soil Mechanics by G.N.Smith (Latest Edition) Reference. | 02 Nos. |  |  |
| 5 | Engineering properties f Soil and their Measurment by J.E. Bowles. McGraw Hill. (Latest Edition) Reference. | 02 Nos. |  |  |
|  | **HIGHWAY AND TRANSPORATION TECHNOLOGY:** | -- | **--** | **--** |
| 1 | Highway Engineering by C.H.Oglesby, Russelll G. Hicks. ISBN: 047102936X. John Willey & Sons. January 1982 (Latest Edition) Text Book. | 02 Nos. |  |  |
| 2 | A Policyon Geometric Design of Highways & AASHTO Staff, ISBN: 156010013. January 1990 (Latest Edition) Reference Book. | 02 Nos. |  |  |
| 3 | Hand Book of Highway Engineering by Baker ( Latest Edition) reference. | 02 Nos. |  |  |
| 4 | Railways, Bridges and Tunnels by S.K.Sharma (Latest Edition) Reference. | 02 Nos. |  |  |
| 5 | Roads , Railways, Bridges and Tunnels by Deshpande Antia and Shahna (Latest Edition) Reference. | 02 Nos. |  |  |
| 6 | Highway design Manual Highway Department, Govt. of Punjab (Latest Edition) Reference. | 02 Nos. |  |  |
|  | WATER SUPPLY AND WASTE WATER MANAGEMENT: | 02 Nos. |  |  |
| 1 | Water Supply and Sewerage by E. W.Steel and L.J.McGhee. McGraw Hill, New York, 1979 (Latest Edition) Text. | 02 Nos. |  |  |
| 2 | Water and Wastewater Technology by M.J. Hammer, John Wiley & Sons. New York, 1986(Latest edition) Reference. | 02 Nos. |  |  |
| 3 | Wastewater Engineering: Collection and Pumping of Wastewater by Metcalf and Eddy. McGraw Hill, New york 1981 (Latest Edition) Reference. | 02 Nos. |  |  |
|  | **COST ESTIMATE AND CONTROL DOCUMENTS.** | -- | **--** | **--** |
| 1 | Estimating Construction Costs by R.L. Peurifoy . McGraw Hill. (Latest Edition) Text Book. | 02 Nos. |  |  |
| 2 | Contract Specifications by Daniel and W.Mead (Latest edition) Reference. | 02 Nos. |  |  |
| 3 | Construction Scheduling, Cost Optimization and | 02 Nos. |  |  |
| 4 | Management by H.Adeli and A. Karim. (Latest Edition) Reference. | 02 Nos. |  |  |
| 5 | MES/Pak PWD Schedule of Rates(Latest Edition) Reference. | 02 Nos. |  |  |
| 6 | WAPDA Drafting Standards (Latest Edition) Reference. | 02 Nos. |  |  |
|  | **IRRIGATION AND HYDRAQULIC STRUCTRURES** | -- | **--** | **--** |
| 1 | Irrigation and Hydraulic Structures (Theory, Design and Practice by Dr. Iqbal Ali, Institute of Environmental Engineering & Research, NED University of Engineering & Technology, Karachi (Latest edition) Text. | 02 Nos. |  |  |
| 2 | Irrigation Canals by Iqtidar H. Siddiqi (Latest edition) | 02 Nos. |  |  |
| 3 | Fundamentals of Irrigation Engineering by V.B.Piryani (Latest Edition) Reference. | 02 Nos. |  |  |
|  | **CONCRETE TECHNOLOGY-II:** | -- | **--** | **--** |
| 1 | Properties of Concretes by A.M. Neville; John & Sons. (Latest edition) Text Book. | 02 Nos. |  |  |
| 2 | R.C. C Designers Handbooks by Charles. E. Raynold; Chapman & Hall. Reference. | 02 Nos. |  |  |
| 3 | Reinforced Concrete by J-Faber and F.Meed, Chapman and Hall. Reference. | 02 Nos. |  |  |
| 4 | Reinforced Concrete- Design & Behavior by C.K. Wang & Salmon. Reference. | 02 Nos. |  |  |
| 5 | Design of Concrete Structures by H. Nilson, McGraw Hill. | 02 Nos. |  |  |
|  | **ARCHITECTURE AND TOWN PLANNING:** | -- | **--** | **--** |
| 1 | Architecture in Pakistan, Kamal Khan Mumtaz, 1st Edition Concept Media Ltd. Singapore, 1985. | 02 Nos. |  |  |
| 2 | Architecture History, John Mosgrove, 19th edition Butterworth, 1987. | 02 Nos. |  |  |
| 3 | Urban and Regional Planning, Peter Hall 5th edition Billing and Sons Ltd. London, 1989. | 02 Nos. |  |  |
| 4 | Town Planning, S.C Rangwala, 3rd edition Farooq Kitab Ghar, Karachi. 1989. | 02 Nos. |  |  |
|  | **PROJECT MANAGEMENT:** | -- | **--** | **--** |
| 1 | Babcock D. L. MANAGING ENGINEERING AND TECHNOLOGY. Prentice Hall, UK (Latest Edition ) | 02 Nos. |  |  |
| 2 | INDUSTRIAL MANAGEMENT.  Rabbani Printing Press Lahore (Latest Edition) & Zuberi M. H. | 02 Nos. |  |  |
| 3 | Bateman T. S. and snell S. A MANAGEMENT. Building competitive advantages. Times mirror higher education group, USA (Latest Edition) | 02 Nos. |  |  |
| 4 | Spinner M. Elements Of Project Management. Prentice Hall, Uk (Latest Edition) | 02 Nos. |  |  |
|  | **STEEL STRUCTURES:** | -- | **--** | **--** |
| 1 | Steel Structure by Z.A Siddiqi, M.A Chaudhary and M. Ashraf, Civil Engineering Series Publishers (Latest Edition) | 02 Nos. |  |  |
| 2 | LRFD Steel Design Aids in SI Units by Z.A Siddiqi, M.A Chaudhry and M. Ashraf; Civil Engineering Series Publishers. | 02 Nos. |  |  |
| 3 | Structural Steel Design LRFD Method (Second Edition) by Jack C. McCormac; Harper Collins Publishers. LSBN: 0065016270. January 1994. | 02 Nos. |  |  |
| 4 | Design of Steel Structure by E.H Gaylord, C.N Gaylord; McGraw Hill. 1991. | 02 Nos. |  |  |
| 5 | Steel Structure Design & Behavior by Charles G. Salmon, John E. Johnson. | 02 Nos. |  |  |
| 6 | Structure Steel Designers Handbook by Fredrick S. Merritt. | 02 Nos. |  |  |
| 7 | LRFD Steel Design by William T. Segui; PWS | 02 Nos. |  |  |
| 8 | Publishers. LSBN: 053493353X. January 1993. | 02 Nos. |  |  |
| 9 | Design in Structure Steel BY John E. Lothers. | 02 Nos. |  |  |
|  | **TOTAL QUALITY MANAGEMENT:** | -- | **--** | **--** |
| 1 | Oakland J.S TOTAL QUILITY MANAGEMENT. Butterworth- Heinemann Ltd UK (Latest Edition). | 02 Nos. |  |  |
| 2 | ISO 9000 Series of Standards | 02 Nos. |  |  |
| 3 | ISO 14000 Series of Standards | 02 Nos. |  |  |
| 4 | TOTAL QUILITY CONTROL. McGraw Hill Book Co., USA (Latest Edition) | 02 Nos. |  |  |
| 5 | TOTAL QUILITY MANAGEMENT IN ACTION. Prentice-Hall, UK (Latest Edition) | 02 Nos. |  |  |
| 6 | Musa K. ISO 9000. Ibrahim Publishers, Lahore. | 02 Nos. |  |  |
| 7 | W.L.A PRACTICAL GUIDE FOR OBTAINING ISO 14000 CERTIFICATION. Prentice- Hall UK (Latest Edition). | 02 Nos. |  |  |
|  | **TRAFFIC ENGINEERING:** | -- | **--** | **--** |
| 1 | Fundamentals of Transportation Engineering, Robert G. Hennes. 2nd Edition, McGraw Hill. | 02 Nos. |  |  |
| 2 | Introduction to Transportation Engineering, Jason C Yu, 2nd Edition McGraw Hill | 02 Nos. |  |  |
| 3 | Transportation Engineering V-1, V.N Vazirani . 3rd Edition, Khanna Publishers Delhi. | 02 Nos. |  |  |
| 4 | Modes of Transportation Engineering, JF Thomson 5th Edition, London Butter works, 1983. | 02 Nos. |  |  |
|  | **HYDROLOGY** | -- | **--** | **--** |
| 1 | Hydrology for Engineering by Lesley, Kohler and Paul us. McGraw Hill, New York, 1982 (Latest Edition) | 02 Nos. |  |  |
| 2 | Handbook of Applied Hydrology by Chow, McGraw Hill, New York (Latest Edition) | 02 Nos. |  |  |
| 3 | Introduction to Hydrology By Vies man, Lewis and Knapp. Harper and Row, New York (Latest Edition) | 02 Nos. |  |  |
|  | **COMPUTER AIDED ANALYSIS & DESIGN:** | -- | **--** | **--** |
| 1 | Finite Element Structure Analysis by T.Y Yang, Prentice Hall Inc. Englewood Cliffs, (Latest Edition) | 02 Nos. |  |  |
| 2 | Matrix Structure Analysis by Ronald L. Sack; Waveland Press. (Latest Edition). | 02 Nos. |  |  |
| 3 | A First Course in the finite element method by William B. Bickford, IRWIN, Homewood, (Latest Edition) | 02 Nos. |  |  |
| 4 | Structure Analysis Programmed (Latest Version). | 02 Nos. |  |  |
|  | **APPLICATION OF GIS IN CIVIL TECHNOLOGY:** | -- | **--** | **--** |
| 1 | Transportation GIS by Laura Lans, ISBN: 1879702471, Environmental Systems Research 2. Institute. January 1999 | 02 Nos. |  |  |
| 2 | Multidimensional GIS by Jonathan Raper, ISBN: 0748405070. January 2000 (Latest Edition). | 02 Nos. |  |  |
| 3 | Cartographic Design Using Arc view GIS by Lin Liu, ISBN: 1566701871 (Latest Edition). | 02 Nos. |  |  |
| 4 | Exploring Spatial Analysis In GIS by Yue-host Version, ISBN: 1566901197. January 1996 (latest Edition). | 02 Nos. |  |  |
| 5 | Understanding GIS: The ARC-INFO Method, Host Version, ISBN: 1879102013. January 1998 (Latest Edition). | 02 Nos. |  |  |
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|  | **FOUNDATIONS AND PAVEMENTS:** | -- | **--** | **--** |
| 1 | Foundation Analysis and Design by J. E. Bowles, 5th Edition, McGraw Hill. ISBN: 007006839. January, 1996. | 02 Nos. |  |  |
| 2 | Foundation Engineering by Ralph B. Peck, W. E. Hanson, Thomas H. Thornburg; John Willey & Sons, ISBN: 0471675857. January 1974. | 02 Nos. |  |  |
| 3 | Foundation Design and Construction by Michael. J. Tomlinson; Longman Publishing Group. ISBN: 058222697X. January 1996. | 02 Nos. |  |  |
| 4 | Foundation Design by W. C. Teng; Prentice Hall. ISBN: 0133298051.’ | 02 Nos. |  |  |
| 5 | Geotechnical Engineering: Foundation Design by John. N. Cernica, John; Willey & Son. ISBN: 0471308870. January1994. | 02 Nos. |  |  |
|  | **PAVEMENTS:** | -- | **--** | **--** |
| 1 | Principles of Pavement Design by E. J. Yoder M. W. Witezak, ISBN: 0471977802, Wiley John & Son. January 1975 (Latest Edition). | 02 Nos. |  |  |
| 2 | Pavement Analysis & Design by Yang H. Huang, ISBN: 0136552757. January 1992 (Latest Edition). | 02 Nos. |  |  |
| 3 | Flexible pavement design and Management Materials Characterization, ISBN: 0309021286 (Latest Edition). | 02 Nos. |  |  |
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| 5 | Highway Engineering by C. H. Oglesby, R. G. Hicks; john Willey & Sons. ISBN: 047102936X. January 1982 (Latest Edition). Cast | 02 Nos. |  |  |
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