



**SHAHEED BENAZIR BHUTTO UNIVERSITY  
SHAHEED BENAZIRABAD**

**TENDER DOCUMENTS  
FOR  
MICROBIOLOGY LAB EQUIPMENT**

WILL BE ***SUBMITTED*** UPTO

16/05/2022 @ 12:30 Hours

***OPENED ON***

16/05/2022 @ 13:00 Hours

## **INSTRUCTIONS TO BIDDERS**

1. The Contract resulting from this invitation to tender shall be governed by the SPP Rule 2010.
2. In the event of Tender being submitted by the firm, it must be signed by the Supplier /Manufacturer / Dealer / Supplier thereof, in the event of the absence of any partner it must be signed on his behalf by a person holding a power of attorney authorizing to do so.
3. The amount of earnest money deposited shall be Rs. 2% of the maximum quoted value of all items, earnest money should be paid by the Suppliers through Pay Order / Demand Draft of the scheduled banks in favor of Vice Chancellor, Shaheed Benazir Bhutto University Shaheed Benazirabad **(No other payment will be accepted)**.
4. The procuring Agency reserves the right to call any or all the bidder (s) to give presentation / demonstration for their items/supplies.
5. The proposal of bid shall be opened publicly at the time, date and venue announced and communicated to the bidders in advance.
6. The bidder has to quote the total value of bids in the financial proposal including all taxes.
7. The income tax and all Government taxes shall be deducted at a source on total value of bid.
8. The bidder has to provide the GST registration certificate, NTN and Sindh Revenue Board registration certificate. The Department while making payments to any supplier / Supplier shall deduct according to rule.
9. The Procuring Agency shall have right of rejecting all or any of the tenders as per provisions of SPP Rules 2010.
10. The bidders will supply a sample of the material (if any) for approval (if applicable).

## BIDDING DATA

- (a). Name of Procuring Agency Shaheed Benazir Bhutto University, SBA
- (b). Brief Description of Supplies Supply, of Microbiology Lab Equipment at Shaheed Benazir Bhutto University SBA.
- (c). Procuring Agency's address SBBU SBA, Sakrand Road Near landhi stop  
Nawabshah
- (d). Estimated Cost: - 16.200 Million
- (e). Earnest Money: - 2% of Contract Supply —
- (f). Period of Bid Validity (days):- 90 DAYS
- (g). Retention Money :- 5% of Contract Supply
- (h). Percentage, if any, to be deducted from bills: - Income Tax, SRB & GST (as per rule)
- (i). Venue, Time, and Date of Bid Opening: - Office of the Project Coordinator, SBBU, SBA – 11:30 am @ 13-05-2022
- (j). Time for Completion from written order of commence: - 03-Months
- (k). Deposit Receipt No: Date: Amount: -----
-

## **Conditions of Contract**

### **Clause – 1: Commencement & Completion Dates of supply**

The Supplier shall not enter upon or commence any portion or supply except with the written authority and instructions of The Procuring Agency-in-charge/Project Director/Executive Engineer or of in subordinate-in-charge of the supply. Failing such authority the Supplier shall have no claim to ask for measurements of or payment for supply.

The Supplier shall proceed with the supplies with due expedition and without delay and complete the supplies in the time allowed for carrying out the supply as entered in the tender shall be strictly observed by the Supplier and shall be reckoned from the date on which the order to commence supply is given to the Supplier. And further to ensure good progress during the execution of the work, Supplier shall be bound, in all in which the time allowed for completion of any supply exceeds one month, to achieve progress on the prorated basis.

### **Clause – 2: Liquidated Damages**

The Supplier shall pay liquidated damages to the Procuring Agency at the rate per day stated in the bidding data for each day that the completion date is later than the Intended completion date; the amount of liquidated damage paid by the Supplier to the Procuring Agency shall not exceed 10% of the contract price. Procuring Agency may deduct liquidated damages from payments due to the Supplier. Payment of liquidated damages does not affect the Supplier's liabilities.

### **Clause – 3: Termination of the Contract**

**(A)** Procuring Agency/Project Director may terminate the contract if either of the following conditions exists:-

- (i) Supplier causes a breach of any clause of the Contract;
- (ii) The progress of any particular portion of the supply is unsatisfactory and notice of 10 days has expired;
- (iii) In the case of abandonment of the supply owing to the serious illness or death of the Supplier or any other cause.
- (iv) Supplier can also request for termination of contract if a payment certified by The Procuring Agency is not paid to the Supplier within 45 days of the date of the submission of the bill;

**(B)** The Procuring Agency has power to adopt any of the following courses as may deem fit:-

- (i) To forfeit the security deposit available except conditions mentioned at a (iii) and (iv) above;
- (ii) To finalize the supply as per the adopted procedure.

(C) In the event of any of the above courses being adopted by the Project Director/Executive Engineer/Procuring Agency, the Supplier shall have:-

- (i) No claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials, or entered into any engagements, or made any advances on account of, or with a view to the execution of the supply or the performance of the contract,
- (ii) However, the Supplier can claim in writing regarding the performance of such supply and has not been paid.  
Procuring Agency/Engineer may invite fresh bids for remaining supply.

**Clause 4: JOINT VENTURE (FORM A-5)**

The Supplier can form a Joint Venture (JV) to strengthen their technical & financial capabilities. In case of JV all information regarding both partners shall be given in relevant forms. JV agreement should be attached for information. Marking for Joint Venture Firms will be Cumulative.

Joint Venture must comply with the following minimum requirements: -

- a. The lead partner shall meet not less than 50 percent of all qualifying criteria given in Para's 3.1 and 3.7 heretofore.
- b. Each of the partners shall meet not less than 25 percent of all the qualifying criteria given in Para's 3.1 and 3.7 heretofore.
- c. The joint venture must collectively satisfy the criteria of Para's 3, 4 and 5, for which purpose the relevant figures for each of the partners shall be added together to arrive at the JV's total capacity. Individual members must satisfy each of the requirements of Para's 3.5 and 3.6 heretofore.
- d. Any change in a JV after qualification shall not be allowed.
- e. Already qualified firm or partner of any JV, cannot form JV with any other firm.
- f. Bid shall be signed by all members in the JV so as to legally bind all partners, jointly and severally, and any bid shall be submitted with a copy of the JV agreement duly incorporating the joint and several liabilities with respect to the contract.
- g. The prequalification of a JV does not necessarily prequalify any of its partners individually or as a partner in any other JV or association.

**Clause 5: Possession of the site and claims for compensation for delay**

The Procuring Agency shall give possession of all parts of the site to the **Supplier**. If possession of site is not given by the date stated in the contract data, no compensation shall be allowed for any delay caused in starting of the supply on account of any acquisition of land, water standing in borrow pits/ compartments or in according sanction to estimates. In such case, either date of commencement will be changed or period of completion is to be extended accordingly.

**Clause –5: Extension of Intended Completion Date**

The Procuring Agency either at its own initiatives before the date of completion or on desire of the Supplier may extend the intended completion date, if an event (which hinders the execution of contract) occurs or a variation order is issued which makes it impossible to complete the supply by the intended completion date for such period as he may think necessary or proper. The decision of the Executive Engineer in this matter shall be final; where time has been extended under this or any other clause of this agreement, the date for completion of the supply shall be the date fixed by the order giving the extension or by the aggregate of all such orders, made under this agreement.

When time has been extended as aforesaid, it shall continue to be the essence of the contract and all clauses of the contract shall continue to be operative during the extended period.

**Clause –6: Specifications**

The Supplier shall execute the whole and every part of the supply in the most substantial and supply-man-like manner and both as regards materials and all other matters in strict accordance with the specifications lodged in the office of the Executive Engineer and initialed by the parties, the said specification being a part of the contract. The Supplier shall also confirm exactly, fully and faithfully to the designs, drawing, and instructions in writing relating to the supply signed by The Procuring Agency-in-charge and lodge in his office and to which the Supplier shall be entitled to have access at such office or on the site of supply for the purpose of inspection during office hours and the Supplier shall, if he so requires, be entitled at his own expense to make or cause to be made copies of the specifications, and of all such designs, drawings, and instructions as aforesaid.

### **Clause –7: Payments**

- (A) **Interim/Running Bill.** Interim Payment will be released as recommended by the concerned officer after inspection in terms of material delivery.
- (B) **The Final Bill.** A bill shall be submitted by the Supplier within ten days of the date fixed for the completion of the supply otherwise Engineer-in-charge's certificate of the measurements and of the total amount payable for the supplies shall be final and binding on all parties.

### **Clause – 8: Reduced Rates**

In cases where the items of supply are not accepted as so completed, The Procuring Agency-in-charge may make payment on account of such items at such reduced rates as he may consider reasonable in the preparation of final or on running account bills with reasons recorded in writing.

### **Clause – 9: Issuance of Variation and Repeat Orders**

- (A) Procuring Agency may issue a Variation Order for procurement of supplies, physical services from the original Supplier to cover any increase or decrease in quantities, including the introduction of new supply items that are either due to change of plans, design or alignment to suit actual field conditions, within the general scope and physical boundaries of the contract.
- (B) Supplier shall not perform a variation until the Procuring Agency has authorized the variation in writing subject to the limit not exceeding the contract cost by of 15% on the same conditions in all respects on which he agreed to do them in the supply, and at the same rates, as are specified in the tender for the main supply. The Supplier has no right to claim for compensation by reason of alterations or curtailment of the supply.
- (C) In case the nature of the supply in the variation does not correspond with items in the Bill of Quantities, the quotation by the Supplier is to be in the form of new rates for the relevant items of supply, and if The Procuring Agency-in-charge is satisfied that the rate quoted is within the rate supplied out by him on detailed rate analysis, and then only he shall allow him that rate after approval from higher authority.
- (D) The time for the completion of the supply shall be extended in the proportion that the additional supply bear to the original contract supply.
- (D) In case of quantities of supply executed result the Initial Contract Price to be exceeded by more than 15%, and then Engineer can adjust the rates for those quantities causing excess the cost of contract beyond 15% after approval of

Superintending Engineer/Authority.

- (F) **Repeat Order:** Any cumulative variation, beyond the 15% of initial contract amount, shall be subject of another contract to be tendered out if the supplies are separable from the original contract.

#### **Clause-10: Quality Control.**

- (A) **Identifying Defects:** If at any time before the security deposit is refunded to the Supplier/during defect liability period mentioned in bid data, The Procuring Agency-in-charge or his subordinate-in-charge of the supply may instruct the Supplier to uncover and test any part of the supplies which he considers may have a defect due to use of unsound materials or unskillful supplymanship and the Supplier has to carry out a test at his own cost irrespective of supply already approved or paid.
- (B) **Correction of Defects:** The Supplier shall be bound forthwith to rectify or remove and reconstruct the supply so specified in whole or in part, as the case may require. The Supplier shall correct the notified defect within the Defects Correction Period mentioned in notice.
- (C) **Uncorrected Defects:**
- (i) In the case of any such failure, the Engineer-in-charge shall give the Supplier at least 14 days notice of his intention to use a third party to correct a defect. He may rectify or remove, and re-execute the supply or remove and replace the materials or articles complained of as the case may be at the risk and expense in all respects of the Supplier.
  - (ii) If The Procuring Agency considers that rectification/correction of a defect is not essential and it may be accepted or made use of; it shall be within his discretion to accept the same at such reduced rates as he may fix therefore.

#### **Clause – 11: Inspection**

- (A) **Inspection of Operations.** The Engineer and his subordinates, shall at all reasonable times have access to the site for supervision and inspection of supplies under or in course of execution in pursuance of the contract and the Supplier shall afford every facility for and every assistance in obtaining the right to such access.
- (B) **Dates for Inspection and Testing.** The Procuring Agency shall give the Supplier reasonable notice of the intention of The Procuring Agency-in-charge or his subordinate to visit the supply shall have been given to the Supplier, then he either himself be present to receive orders and instructions, or have a responsible agent



duly accredited in writing present for that purpose, orders given to the Supplier's duly authorized agent shall be considered to have the same force and effect as if they had been given to the Supplier himself.

#### **Clause – 12: Examination of supply before covering up**

- (A) No part of the supplies shall be covered up or put out of view/beyond the reach without giving notice of not less than five days to The Procuring Agency whenever any such part of the supplies or foundations is or are ready or about to be ready for examination and The Procuring Agency shall, without delay, unless he considers it unnecessary and advises the Supplier accordingly, attend for the purpose of examining and measuring such part of the supplies or of examining such foundations;
- (B) If any supply is covered up or placed beyond the reach of measurement without such notice having been given, the same shall be uncovered at the Supplier's expense, and in default thereof no payment or allowance shall be made for such supply, or for the materials with which the same was executed.

#### **Clause – 13: Risks Management**

The Supplier shall be responsible for all risks of **loss of or damage to physical property or facilities or related services at the premises and of personal injury and death which arise during and in consequence of its performance of the contract**. If any damage is caused while the supply is in progress or become apparent within **three months** of the grant of the certificate of completion, final or otherwise, the Supplier shall make good the same at his own expense, or in default The Procuring Agency may cause the same to be made good by other suppliers, and deduct the expenses from retention money lying with The Procuring Agency.

#### **Clause-14: Measures for prevention of fire and safety measures**

The Supplier shall not set fire to any standing jungle, trees, bush-wood or grass without a written permit from the Executive Engineer. When such permit is given, and also in all cases when destroying, cutting or uprooting trees, bush-wood, grass, etc by fire, the Supplier shall take necessary measures to prevent such fire spreading to or otherwise damaging surrounding property. The Supplier is responsible for the safety of all its activities including protection of the environment on and off the site. Compensation of all damage done intentionally or unintentionally on or off the site by the Supplier's labor shall be paid by him.

#### **Clause – 15: Disputes**

All disputes arising in connection with the present contract, and which cannot be amicably settled between the parties, the decision of the Superintending Engineer of the circle/officer/one grade higher to awarding authority shall be final, conclusive and binding on all parties to the contract upon all questions relating to the meaning of the specifications, designs drawings, and instructions, hereinbefore mentioned and as to the quality of supply Manship, or materials used on the supply or as to any other questions, claim, right, matter, or thing whatsoever in any way arising out of, or relating to the contract design, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the supplies, or the execution, of failure to execute the same, whether arising, during the progress of the supply, or after the completion or abandonment thereof.

**Clause –16: Site Clearance** if Satisfactory approved by Engineer.

**Clause –17: Financial Assistance /Advance Payment**

(A) **Mobilization advance:** No Mobilization **M**

**Clause –18: Refund of Security Deposit/Retention Money**

The security shall be refunded after six months of complete supply(Completion Certificate) and ensuring removal of all defects.

**Supplier**

**Executive Engineer/Procuring Agency**

## BOQ- Price Schedule

### Part-I Equipments for Microbiology Laboratory

Sr.No	Items	Discription	Model No Origin	Qty	Unit	Unit Price	Total Amount
1		2	3	4	5	6	7
1	<b>Shaking Water Bath</b>	<p><b>SHAKING WATER BATH .</b>  TFT LCD displays , Built-in chip memory storage mode. Using microcomputer program PID automatic temperature control,  Capacity : 10-20 ltrs  Temperature Range: RT + 5 ~ 100°C  Temperature Stability: ± 0.5 °C  Speed range : 20 - 200 rpm  Oscillation mode Reciprocating Amplitude : 26 mm  Power Voltage : 230 V, 50/60 Hz  <b>GERMANY /UK /USA / CHINA /EQUVAILENT</b></p>		1	Nos		
		<p><b>OSCILLATOR / SHAKER</b>  Speed : Adjustable With Timer  Range: 0-2600r/m,  Power Source : 220V AC, 50Hz, 20 W  <b>GERMANY/ UK/CHINA / EQUVALENT</b></p>		1	Nos		
2	<b>Electric Oven / Hot Air Oven</b>	<p><b>ELECTRIC OVERN / HOT AIR OVEN</b>  Capacity: 108 Ltr.  Temperature range: 5 °C above ambient 220 °C, Temperature control accuracy: ± 1.0 °C,  Digital temperature set up and display,  Number of shelves: 2-perforated stainless steel, built in programmed timer.   <b>GERMANY/ UK/CHINA / EQUVALENT</b></p>		2	Nos		
3	<b>Refrigerator</b>	<p><b>FULL SIZE CAPACITY 16 CFT</b>  <b>DAWLANCE/PEL/HAIER/</b>  <b>EQUVALENT</b></p>		3	Nos		

<p><b>Balance.</b></p>	<p><b><i>ANALYTICAL BALANCE.</i></b>  Maximum Capacity 220 g  Readability 0.001 g or 0.0001g  Pan Size 3.5 in (90mm)  Display:Backlit Liquid Crystal Display (LCD) Communication:RS232 / USB  top housing, removable stainless steel pan, removable glass draftshield with sliding top door,  software lockout and reset menu, user-selectable communication settings and data print options, user-definable project and user IDs, software overload/underload indicator, stability indicator" Internal Calibration InCal™ - Semi Automatic  Units of Measurement Milligram; Gram; Ounce; Carat; Pennyweight; Ounce Troy; Newton; Grain; Taiwan Tael; Custom  Power Output:12 VDC 0.5A Product Safety: IEC/EN 61010-1; CAN/CSA C22.2 61010-1; UL 61010-1  Electromagnetic Compatibility: IEC/EN 61326-1 Class B, Basic  Environments; FCC Part 15 Class A; Canada ICES-003 Class A, Compliance  Marks: CSA  <b>GERMANY/ UK/EQUVALENT</b></p>		1	Nos		
	<p><b><i>PRECISION LABORATORY BALANCE.</i></b>  Maximum Capacity: 5200 g  Readability 5 g  Pan Size (75mm)  Display:Backlit Liquid Crystal Display (LCD)  Top housing, removable stainless steel pan, User-Manual , settings,  Power Output:12 VDC 0.5A  Product Safety: IEC/EN 61010-1; CAN/CSA C22.2 61010-1; UL 61010-1  Electromagnetic Compatibility: IEC/EN 61326-1 Class B, Basic  Environments; FCC Part 15 Class A; Canada ICES-003 Class A, Compliance  Marks: CSA  <b>GERMANY/ UK/EQUVALENT</b></p>		1	Nos		

		<p><b>PRECISION LABORATORY BALANCE.</b>  Maximum Capacity: 5200 g  Readability : 1g  Pan Size (75mm)  Display:Backlit Liquid Crystal Display (LCD)  Top housing, removable stainless steel pan,  User-Manual , settings,  Power Output:12 VDC 0.5A  Product Safety: IEC/EN 61010-1;  CAN/CSA C22.2 61010-1; UL 61010-1  Electromagnetic Compatibility: IEC/EN 61326-1 Class B, Basic  Environments; FCC Part 15 Class A;  Canada ICES-003 Class A, Compliance  Marks: CSA</p> <p><b>GERMANY/ UK/EQUVALENT</b></p>		1	No		
5	<b>Distillation Plant</b>	<p>Output (l/h):50LTR  Conductivity (µS/cm) 1.0-2.0  Resistivity (MΩ-cm) 0.5-1.0  Temperature (°C) 25-35 Pyrogen Free  Water pressure 3-100psi  Electrical supply 220 - 240V, 50-60Hz  Maximum power (kW) 7  Borosilicate Glass Or equivalent  Installation and all accessories must be included 3 years Warranty  Operational, preinstallation, installation, Maintenance, service, Spare parts manuals, PPM checklist, software and system backup in soft copy to be supplied  All consumables/spare required replacement within 10 years of normal operation must be quoted optionally.  OEM: US/Japan/EU or fulfilling (CE/FDA/MHWL + ISO 13485, IEC 61010-1)</p>		2	Nos		
6	<b>Laminar Flow Cabinet. External/Glass-II A2, Biological Safty Cabinet.</b>	<p>External dimensions: 1200 x 875 x 1500mm, working zone: 1120 x 680 x 1200 recommended maximum exhaust:  Required Fume Hood, required minimum exhaust: Required Fume Hood, Main body: Phenolic Resin Laminates, air foil: Stainless Steel Grade 304, with removeable or adjustable front glass sheild,  UV lamp, LED lamp, electric sockets for other equipment use inside the cabinet,  HEPA Filter with 99.999 % efficiency at 0.3 µm, Material of Work Table 304  Stainless Steel, LED Display, material of the body with Cold-rolled steel with anti-bacterial powder coated Power Supply AC 220 V ± 10 %, 50 / 60 Hz; 110 V ± 10 %, 60 Hz. BIOBASE/EQUIVALENT</p>		1	Nos		
7	<b>Autoclave</b>	<p>Working volume: 100-150 L, Working diameter: 300 x 710mm, temperature range: 105-135 °C, Built in timer: 1-250ins pressure guage: 0-0.4 mpa  BIOBASE/EQUIVALENT</p>		2	Nos		

8	<b>Colony Counter</b>	<p>BIOBASE/EQUIVALENT  Counter capacity: 0 ~ 999 Light source  lamp power: 16W Increase: 3/9 times Total  power consumption: &lt;20 W Power supply:  220V ± 10%, 50 Hz Volume: 268 × 225 ×  90 mm  Weight: 1.5 kg The J-2 automatic colony  counter is a digital display of a type of  semi- automated bacterial test instrument.  It consists of a counter, a probe, a counting  pool, and so on. The counter is designed  and manufactured using a CMOS  integrated circuit. In the background pool  of black color, an energy- saving round  fluorescent lamp is used to illuminate the  side illumination, and the colony contrasts  sharply. Depending on the test procedure  for bacterial counting, the instrument  display is designed to measure a three-digit  one. When the number of colonies growing  in a petri dish exceeds 300, the test sample  should be diluted and processed to ensure  accuracy in counting. The tool can reduce  the experimenter's labor intensity, improve  work efficiency and work quality.  Products are widely used in food,  beverages, pharmaceuticals, biological  products, sanitary products, drinking water,  industrial wastewater, clinical specimens in  the bacterial count test. It is an  indispensable tool for medical and epic  stations, environmental monitoring  stations, sanitary and hygienic control and  inspection services, hospitals, biological  goods, inspections of medicines, food  factories, daily chemical plants,  universities and research centers.</p>		2	Nos		
9	<b>Hot Plate</b>	<p>Hotplate with magnetic stirrer with  excellent heat resistance and anti-corrosive  aluminum casting body with high class  powder coating. Top made of ceramic  coated stainless steel. Stirring of liquids up  to 20 liters. Electronic speed controlling  Technical Specifications  Maximum Temperature : Up to 400°C  Stirring Speed : Up to 1500 rpm Stirring  Capacity : Up to 20 Liters Top Plate :  CeramicCoated  Power supply : 220 volts 50/60 Hz  BIOBASE/EQUIVALENT</p>		2	Nos		

10	<b>High Speed Refrigerated Centrifuge with Roters. EPENDROFF TUBE (Microfuge) 18000 RMP</b>	<p><b>Centrifuge Machine. (High speed Refrigerated )</b>  Speed Range up to 15,000 rpm  Maximum RCF : 21,953 g  Maximum Capacity  Class A" (Rotor): 44 x 1.5 / 2.0 ml,  12 x 5 ml  Class B"Rotor : 30 x 1.5 ml / 2.0ml  Sealable;; 12 x 5 ml  Sealable; 4 x 8 place PCR Strips</p> <p>Refrigeration Range: -20 °C to 40 °C,  Cools down from 23°C to 4°C  in less than 10 minutes quickl  Construction : Brushless quiet motor,  High sample throughout, multi-safety  control, personal program function  Display LCD : with backlight Lid lock  Motor driven Rotor Recognition Running  Time Class B"Rotor Compatibility Angle  30 x 1.5 ml / 2.0ml  Sealable; Angle 12 x 5 ml Sealable; Angle  4 x 8 place PCR Strips</p>		1	Nos		
		<p><b>Micro-Centrifuges Machine. (High Speed Adjustable )</b>  Speed Range up to 12,000 rpm  Maximum RCF : 2,800 g  Maximum Capacity  Class A" (Rotor): 12 x 0.5 ml, tube  6 x 1.5 ml and 2.0 ml  Power Source : 220V AC, 50Hz, 110  Adapter</p> <p><b>USA/ GERMANY/ UK/ EQUIVALENT</b></p>	ZPC-06AV-0203 LW Scientific USA	1	Unit		
11	<b>High Speed Refrigerated Centrifuge with Roters. CONICAL TUBE 18000 RMP</b>	<p><b>Microhematocrit Centrifuges Machine.</b>  Functions: ● High light transmission  ● Brightly illuminated line  Hematocrito Centrifuges Machine.  ● max Valume: 4 75mm Capaliery Tube  ● Variable speed: 10,000 RPM  Microfiltration of HPLC samples  DNA preparations  Power :- 220V AC adapter power cord</p> <p><b>USA/ GERMANY/ UK/ EQUIVALENT</b></p>	CTL-HEMM-GLDR LW Scientific USA	2	Unit		
12	<b>Magnetic Stirrer With Hot Plate</b>	<p><b>Magnetic Stirrer with Hot Plate.</b>  Temp: 0-100 °C,  Power: 220V,AC,50Hz  <b>EU/ USA/ CHINA / EQUIVALENT</b></p>	CHINA HOVERLABS	2	Nos		

13	<b>pH Meter</b>	<p>measuring range 2.000 to 20.000 Ph  Resolution 0.1/0.01/0.001 pH Accuracy <math>\pm</math> 0.002 pH  Pre-Defined Buffer Groups 5  display "6.5" large display in multiple languages" ORP, RmV Measuring Range <math>\pm</math> 2000.0mV Resolution 0.1 mV  Units mV, RmV"  Temperature Range:-10.0 to 125.0 °C  Resolution : 0.1 °C, 0.1 °F  calibration "Calibration Points :Up to 5 points Calibration Sign: Slope/offset &amp; Face Measurement End-point "Modes Auto-stop, Timed, Continuous  Datalog for measurement 1000 sets data points with time and date stamp user password 10 User ID for password management  Datalog for measurement 1000 sets data points with time and date stamp Datalog for calibration 10 sets"  keypad Capacitive touch  Connect to PC via RS232 and USB,  Connect to Printer via RS232 Password management "Communication RS232, USB Device (included), GLP/GMP data output with real-time clock pH electrode input BNC  Temperature input NTC 30 k<math>\Omega</math>  Power Supply Universal, 100-240 VAC, 50-60 Hz HANNA/EQUIVALENT</p>	2	Nos		
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14	<b>Spectrophotometer UV/Vis (A)</b>	<p>True double beam optics with aberration corrected concave blazed holographic grating in Czerny Turner mounting for high energy throughput and high-quality monochromatic light.</p> <p>Wide wavelength range of 1100nm to 190nm. High resolution 1nm spectral bandwidth. Stray light specification of 0.03%T at 220 nm by NaI and 340nm by NaNO<sub>2</sub>. Wavelength accuracy of + 0.1 nm for D 2 spectral line. Wave length reproducibility of + 0.1nm. Fast Scan speed adjustable for high speed Kinetic studies. Wide Photometric range of -4 to +4 Abs and 0 to 400 %T.</p> <p>High Photometric Accuracy of + 0.002 Abs at 0.5 Abs. Very low baseline drift of 0.0003 Abs/hour High baseline flatness of +0.0005 Abs over entire wavelength Ultra-low Photometric noise of ;0.00005 Abs, Dual source – high intensity Tungsten-Halogen and Deuterium lamp with automatic change over.</p> <p>High sensitivity matched pair Silicon Photodiode. long path rectangular cell holder which holds cuvettes in pair Stand-alone operation and complete control through PC with UV Software.</p> <p>Quartz Cuvettes: Size 10mm, 20mm, 30mm, 70mm, 100mm in pair. PEEK/EQUIVALENT</p>		1	Nos		
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15	<b>Vortex Mixture</b>	<p>with Certificate &amp; Traceability: Controlled by Serial Number, Certificate, Delivery-information, and Traceable Data Base System</p> <p>Ideal for Mixing Solutions in Test Tubes or Small Flasks with Circular, Oscillating Movement</p> <p>Variable Speed Control Allows Slow Speed Shaking Action up to High Speed Vortexing CE Certified</p> <p>PL(Product Liability) Insurance</p> <p>Gentle Mixing to re-suspending Pellet</p> <p>Supplied with Ø 76 mm Platform and Pop-Off Cup</p> <p>Realize High Power, Stable Motion with Low Noise</p> <p>Tough Metal Housing Provides a Stable Platform for all types of Mixing</p> <p>3-position Power Switch Operates with Continuous Action or "Touch On" Control</p> <p>Aluminum Die-casting with Powder Coating Various Shapes, Sizes and Materials of the Head allows for mixing of almost all Common Tubes or Containers</p> <p>BIOBAS/ EQUVALENT</p>	3	Nos		
16	<b>Homogenizer With Direct Controller</b>	<p>“HG-15A”, up to 27,000 rpm, 1~2,500ml with Analog Stepless Control System, High Efficiency Dispersing Tools, High-Speed High-Quality-Low NPackage-Set : “HG-15A-Set-A”-with (3) “HT1018” Dispersing Tool(Rotor Φ12.8, Stator Φ18),</p> <p>◆Package-Set : “HG-15A-Set-A”-“CL200” Clamp, “ST110” Standard Plate Stand</p> <p>◆Package-Set : “HG- 15A-Set-B”-with (4) “HT1025” Dispersing Tool(Rotor Φ20, Stator Φ25),</p> <p>◆Package-Set : “HG-15A-Set-A”-“CL200” Clamp, “ST110” Standard Plate Stand</p> <p>◆Package-Set : - Package Dimension and Weight exclude “ST110” Standard Plate Stoise</p> <p>KOREA/EQUIVALENT</p>	1	Nos		
17	<b>BUNSEN BURNER</b>	STRIAGHT WITH HEAVY BASE LOCAL	12	Nos		

18	<b>ANEROBIC JAR</b>	Transparent anaerobic culture jar of 3.5 litre capacity which is made of polycarbonate. The lid of the jar is made of aluminium pressure die casting fitted with pressure valve, vacuum valve, safety valve & compound pressure cum vacuum gauge, three finger aluminium clamp and sealing O ring and air/gas chuck. Sigma/Merck Equaivalent		4	Nos		
19	<b>MEMBERINE FILTERATION ASSEMBLY WITH MOTOR AND ACCESSORIES</b>	Vacuum filtration apparatus for HPLC solvent purification, particulate analysis, bacteriological studies, radiochemical determinations, quantitative gravimetric analysis, and similar applications. Clamp seals filter membrane between flanges on funnel top and funnel stem. Includes: Funnel top, funnel and vacuum motor, USA/EQUIVALENT		1	Nos		
20	<b>Microscope .</b>	<b>Stero Microscope .</b> Binocular Stereo Microscope Eyepiece: WF10X / 20mm Objective: 4X / 58mm EU/ USA/ CHINA / EQUIVALENT	ST-30 YONG-JING China	1	Nos		
21	<b>Microscope .</b>	<b>Zoom Stero Microscope.</b> · Eyepieces: WF10X · Zoom Objective: 1X - 4X · Power Supply: 220V / 50Hz EU/ USA/ CHINA / EQUIVALENT	ZTX-E HUAGUANG China	1	Nos		
		<b>Binocular Microscope</b> Rotatable, Interpupillary Distance 48-75mm With Digital Eyepiece Adapter, Eyepiece: Wide Field WF10x, WF15x, WF25x, Nosepiece: Quadruple Nosepiece, Objective: Achromatic Objective 4x/0.1, W.D.=25mm 10x/0.25, W.D.=11mm, 40x/0.6(S), W.D.=3.8mm, 65X 100x/1.25(S,Oil), W.D.=0.1mm, Stage: Double Layer Mechanical Stage, 130x130mm, moving range 70x30mm, Focusing: Low Position Coaxial Coarse & Fine Focusing. Fine Focusing Scale 0.002mm, With Tension Adjustment, With Up Limit, Condenser: N.A.1.25 Abbe Condenser, Iris Diaphragm, With Filter Holder, Light Source: Built-in Illumination LED, Brightness Adjustable. can be connected with deskstop. <b>EU/ USA/ CHINA / EQUIVALENT</b>		4			

		<p><b>Head: Binocular Rotatable, Interpupillary</b> Distance 48-75mm With Digital Eyepiece Adapter, Eyepiece: Wide Field WF10x, WF15x, WF25x, Nosepiece: Quadruple Nosepiece, Objective: Achromatic Objective 4x/0.1, W.D.=25mm 10x/0.25, W.D.=11mm, 40x/0.6(S), W.D.=3.8mm, 65X 100x/1.25(S,Oil), W.D.=0.1mm, Stage: Double Layer Mechanical Stage, 130x130mm, moving range 70x30mm, Focusing: Low Position Coaxial Coarse &amp; Fine Focusing. Fine Focusing Scale 0.002mm, With Tension Adjustment, With Up Limit, Condenser: N.A.1.25 Abbe Condenser, Iris Diaphragm, With Filter Holder, Light Source: Built-in Illumination LED, Brightness Adjustable. can be connected with dektop. <b>EU/ USA/ CHINA / EQUIVALENT</b></p>		10		
22	<b>Incubator.</b>	<p><b>Laboratory Incubator</b> Temperature Range:-10 °C to 100 °C, Capacity: 100-250 liter, Voltage: 120, 230 or 240 V Applications: Basic Research, Food/Beverage, and Microbiology. Temperature range: +5 °C above ambient temperature to +100 °C, High temperature accuracy thanks to APT.line™ technology, Natural convection, Controller with LCD display, Electromechanical control of the exhaust air flap, Inner door made of tempered safety glass, 2 chrome-plated racks, Stackable, Class 3.1 integrated independent temperature safety device (DIN 12880) with visual alarm, Ergonomic handle design, USB port for recording data <b>EU/ USA/ CHINA / EQUIVALENT</b></p>		4	Nos	

23	<b>CO2 Incubator with Accessories.</b>	<p>Capacit: 50-100 liter.Temperature range: +6 °C above ambient temperature to +50 °C,</p> <p>Humidity range: 90 to 95% RH,</p> <p>CO<sub>2</sub> control range: 0 to 20 vol.% CO<sub>2</sub>,</p> <p>Tried-and-tested anti-contamination concept with 180 °C hot air sterilization,</p> <p>Humidification system with condensation protection,</p> <p>CO<sub>2</sub> gas mixing jet with Venturi effect,</p> <p>CO<sub>2</sub> sensor with infrared technology,</p> <p>LCD to display temperature and CO<sub>2</sub> along with additional information and alarms,</p> <p>Internal data logger, measured values can be read out in open format via USB.</p> <p>(Binder or equivalent)</p>		1	Nos		
24	<b>Incinerators</b>	<p>Function: sterilization of wireloop and needles,</p> <p>Applications: laboratory of microbiology, bacteriological,</p> <p>Temperature control: high-temperature</p> <p>Configuration: compact, benchtop, Quartz incinerator tube, with electric element and thermally insulated with ceramic fiber.</p> <ul style="list-style-type: none"> <li>• Protective external grid made of stainless steel. Epoxy resin oven painted base.</li> <li>• Start up pilot light.</li> <li>• Sterilization by infrared rays.</li> <li>• Organic material is incinerated by introducing it into an incandescent quartz tube, avoiding splashing of infectious microorganisms.</li> </ul>		3	Nos		
25	<b>Sonicator</b>	<p>Table top model</p> <p>Lid of SS for ultrasonic cleaner</p> <p>Inner SS Tank of approx 5 Litres capacity.</p> <p>Drain in rear bottom.</p> <p>Digital timer control of approximately 60 minutes</p> <p>Operating Ultrasonic frequency: 25-30 KHz and 35-40 KHz</p> <p>Built in heater of 20 to 70 deg C</p> <p>Digital temperature monitor</p> <p>To supply inset baskets made of SS, perforated for holding goods to be cleaned – 2 nos.</p>		1	Nos		

26	<b>Hemocytometer.</b>	<b>Hemocytometer.</b> Range: 0.100mm, 0.0025mm Bright-Line Counting Chamber. <i>USA/ EQUIVALENT</i>		2	Nos.		
27	<b>Counter (Key Type Differential)</b>	<b>5- Key Type Differential Counter</b> Key Model blood cell differential counters. <i>USA/ EQUIVALENT</i>		4	Unit		
28	<b>Analog &amp; Digital Trainer.</b>	<b>Analog &amp; Digital Trainer.</b> • High level, high quality digital-analog trainer • Combines all essential function of analog and digital experiment <i>EU/ USA/ CHINA/ EQUIVALENT</i>		1	Unit		
						<b>Total Including Taxes (Rs)</b>	

<b>Part-II. Glassware</b>				
<b>S.N.</b>	<b>Description</b>	<b>Qty/Size</b>	<b>Unit Price</b>	<b>Total Amount</b>
1	Media Sterilizing bottles (250ml, 500ml, 1000ml) pyrex	5 each		
2	Conical flasks (250ml, 500ml, 1000ml)	10 each		
3	Screw capped Test tubes (small and large) pyrex	100 each		
4	Petri plates (90mm, 120mm) pyrex	100 each		
5	Measuring cylinder glass (100ml, 500ml)	3 each		
6	Glass slides	50 box		
7	DWK life science reagents bottles	40		
8	Dropping bottles (100ml) plastic	40		
9	Pasteur Pipettes	1 pack of 250		
10	Pasteur Pipettes rubber bulb	20		
11	Beaker 100ml, 250ml, 500ml (Fischer brand)	5 each		
12	Measuring cylinder plastic (1000ml)	4		
13	Haemocytometer for WBCs and RBCs counting	10 each		
14	Pipettes 1ml, 5 ml, 10ml	10 each		

<b>Part-III Chemicals</b>				
<b>S.NO.</b>	<b>Description</b>	<b>Qty/Pack size</b>	<b>Unit Price</b>	<b>Total Price</b>
1	Nutrient Broth	500g		
2	Nutrient Agar	500g		
3	McConkeys Agar	500g		
4	Eosine-Methylene Blue Agar	500g		
5	Muller-Hinton Agar (MHA)	500g		
6	Simon Citrate Agar	500g		
7	Hydrogen peroxide	100ml		
8	Sabouraud Dextrose Agar	500g		
9	Agar Technical	500g		
10	Agarose	500g		
11	NaCl	500g		
12	Mannitol	500g		
13	Glucose	Kg		
14	Sucrose	Kg		
15	Tannic Acid	25g		
16	Lactose	Kg		
17	Methanol	4Litre		
18	Acetone	2.5 Litre		
19	Ethanol	2.5 Litre		
20	Hydrochloric Acid	820ml		
21	Lactophenol Blue	100ml		
22	Paraffin oil (Mineral oil)	Liter		
23	Crystal Violet	100g		
24	Iodine Crystal	100g		
25	Cedar Wood Oil	Liter		
26	Malachite Green	100g		
27	Safranin	25g		
28	Glycerol	2.5Litres		
29	Hydrogen Peroxide	500ml		
30	Tryptone	500g		
31	Peptone	500g		

32	Sodium Chloride	500g		
33	Alpha-Naphthol	250g		
34	Methyl Red	25g		
35	NaOH	500g		
36	KOH	Kg		
37	Sulphanilic Acid	50g		
38	Phenol Red	25g		
39	Xylene	Litre		
40	Motic Micrope Lense Paper	Packet (500pcs)		
41	Filter paper Whatman	Packet (100pcs)		
42	Milipore membrane filters (0.2 and 0.45 Micron)	50 pcs each		
43	Filter Tips (Micropipette tips) 10ul, 20ul, 100ul, 1000ul	I Packet each		
44	Blood lancets	1Packet		
45	Disposable Gloves latex	1Packet		
46	Wireloops	20		
47	Cotton roll	5		
48	Syringes 3ml BD	10 Strips		
49	Droppers	1 packet		
50	Tube rack wooden/steel/plastic	20		
51	Sanitizer/dettol/spirit	5		
52	Fisher brand Triangular tripod stand	10		
	<b>Total</b>			
	<b>Grand Total</b>			

**Supplier**

**Executive Engineer/Procuring Agency**



## Mandatory Conditions / Requirements (Component wise):

- Bidder must be Authorized distributor / Partner of the quoted items.  
Letter / Certificate of Manufacturer is required.
- All items of BOQ need to be filled.

## Bid Evaluation Criteria:

**Technical evaluation** will be done based on following parameters for eligibility of the Bidder: -

Minimum score required to qualify is 70%

S.N.	Technical Evaluation Criteria	Points
i.	Experience of supplying similar nature goods during	
	last 10 years or above	25
	Last 5 years upto 9 years	20
	Less than 05 years	15
ii.	Experience of supplying similar nature goods to universities/HEIs:	
	05 or more projects more than Rs. 5 million worth	10
	03 or 04 projects more than Rs. 05 million worth	7
	Less than 03 projects of worth Rs. 5 million or more	5
iii.	Experience of supplying similar nature goods of worth:	
	05 or more projects of worth Rs. 50 million or above each project	15
	03 to 04 projects of worth Rs. 50 million or above each project	10
	Less than 03 projects of worth Rs. 50 million or above each project	8
iv.	The Average Annual Turnover of last three years:	
	Above Rs. 50 million	10
	From Rs. 30 million to 50 million	08
	Less than Rs. 30 million	05

v.	Tax returns of Last 05 years <i>(one mark on each year)</i>		5
vi.	Professional Tax Certificate		05
vii.	Incorporation of a bidder as:		25
	Private limited/Public Listed	25	
	Partnership/Joint Venture/ Single Member Company	20	
	Sole Proprietor	15	
viii.	The Bidder has offices in Karachi or in interior Sindh:		05
	Yes	05	
	No	0	

**Note:** The evaluation criteria shall assessed win the light of provided documentary evidence i-e; The Audited Financial Statement, Supply orders, Completion Certificates, Satisfactory Reports, Incorporation/Registration certificates, Tax Returns etc.

**Supplier**

**Executive Engineer/Procuring Agency**

On date of opening of Bid, These List of Documentary Evidence for Determining Eligibility of the Bidders & Evaluation of bid.

<b>Required Documentation</b>	<b>Checklist</b>	<b>Relevant Page</b>	<b>Supporting Documents</b>
(To Be Filled by the Procuring Agency)	(To be initialed by the Bidder against each document)	Page Number in the Bid (To be filled by the Bidder)	(To be filled by the Bidder with name of the documents that are submitted to meet the requirement)
<b>Column:1</b>	<b>Column:2</b>	<b>Column:3</b>	<b>Column:4</b>
NTN Certificate			
GST Certificate			
SRB Certificate			
Chamber of Commerce			
Professional Tax Certificate			
On Active Taxpayers List of FBR (income tax, Sales Tax)			
On Active Taxpayers List of SRB			
Registration/Incorporation/Business Certificate			
Complete Company profile			
Operational offices in Karachi.			
Firm's past performance			
Affidavit to the effect that the respective bidder is not blacklisted and rendered ineligible for corrupt and fraudulent practices by any Government (Federal, Provincial or Local) or a public sector organization.			
Letter of Original Manufacturer's /			

Distributor's / Partner authorization			
Bid Validity period of 90 days			
Compliance with Schedule of requirement			
Submission of required amount of bid security with Financial Bid			
Compliance with Technical Specifications & scope of supply			
Manufacturer's warranty: Minimum One year and onsite support			
Technical brochures/data sheets			
Original Bidding Documents duly signed/stamped			
Proof document of Rs. 10 million yearly turn over for the last 3 consecutive years.			
Proof document / copies of last 3yrs audited balance sheets			

**Supplier**

**Executive Engineer/Procuring Agency**