

TENDER A: WORKSHOP PRACTICE

Sr. No.	Items	Qty.	Specifications
<b>Equipment</b>			
1.	Circular saw	01	Circular saw: blade diameter: 185mm (7-1/4")
2.	Jig saw	01	Jig saw wood cutting capacity 160mm (6-19/64")
3.	Band saw	01	Band saw: Max. Cutting Depth: 80mm; Max. Cutting Width: 230mm
4.	Table Saw	01	Table Saw: Max. Cutting Depth: 80mm; Max. Cutting Width: 230mm
5.	Surface planner	01	Max Planing Width: 80 mm
6.	Thickness planner	01	Max Thicknessing Capacity: 40 mm
7.	Wood turning lathe	01	Wood turning lathe: Cutting Diameter: 350mm Cutting Lathe: 1000mm with accessories
8.	Bench Grinder	01	No load speed: 2950rpm; Wheel diameter: 150mm
9.	Lathe machine	01	Bed length 3.5', range of spindle speed 50 to 1500 rpm; motor speed minimum 1400 rpm, motor power 1HP, with necessary accessories face plate, steady rest, follow rest, electric motor(1 HP), one taper sleeve, one drip pot for coolant, one set of spanners,, one set of Allen keys, one grease gun, complete electric outfits and one American tool post.
10.	Power hack saw	01	Power heck saw: Maximum cutting capacity: 250mm
11.	Bench drill machine	01	Bench drill machine: Max drilling capacity: 20mm with pair of Vee Blocks and U-Clamps, plain clamp, goose neck clamp, screw heel clamp, finger clamp, double finger clamp, T-Slot bolt, C-clamp, parallel clamp, step back, drill vice, angle plate
12.	Electric Hand Planer	06	No Load, RPM 16,500, Planning Depth: 0" to 1/16" (1.5 mm), Planning Width 0" to 3-1/4", Accessories: Wood razor Blades (2), Edge Guide Fence, Chip Bag, Blade Wrench
13.	Gauge mark machine	01	Steel rebar gauge mark off machine
<b>Workshop Tools</b>			
1.	Cross cut saw	25	Cross cut saw 8tpi or 12tpi crosscut teeth with 0.13mm set, 20-26 inches.
2.	Hand saw	25	Hand saw size: 450mm
3.	Rip Saw	25	Rip saw size: 20-28 inches, 3-6tpi
4.	Hacksaw	25	Heck saw size: 300mm

5.	Tenon saw	25	Tenon saw size:8-14", 10-15 tpi
6.	Spoke shave	5	Spoke shave plane, blade: 2 <sup>1/8</sup> "
7.	Pincer	05	Pincer size:7-8 inch.
8.	Block plane	7	Block plane cost iron body, length:100-200mm
9.	Smoothing plane	25	Smoothing plane, length:100-200mm, blade width:50mm
10.	Jack plane	25	Jack plane, length:350-450mm, blade width:50-75mm
11.	Rabbit plane	5	Rabbit plane, length:100-200mm, blade width:6-50mm
12.	Firmer chisel	50	Blade width:22mm, Length:100-125mm
13.	Mortise chisel	10 set	Mortise chisel: Blade width: 6-25mm, length:200-450mm
14.	Bradawl	10	Bradawl
15.	Gimlet	10	Plain & twisted gimlet
16.	Auger	10	Scotch pattern eyed auger and shell auger
17.	Ratchet brace	01	Ratchet brace with bits
18.	Hand drill	01	Hand drill with bits
19.	Rasp & scraper	10	Rasp (6-14") & scraper
20.	Ball peen hammer	25	Ball peen hammer (450 gm)
21.	Claw hammer	20	Claw hammer (450 gm)
22.	Wooden mallet	10	Wooden mallet (1000gm)
23.	Rubber mallet	05	Rubber mallet (450gm)
24.	Marking gauge	30	Marking gauge (10")
25.	Combination set	10	Combination set (12")
26.	Try square	25	Try square (6")
27.	Miter square	25	Miter square (8-12")
28.	Measuring tape	10	Flexible measuring tape (3m)
29.	Steel ruler	30	Steel ruler (12")

30.	Divider	10	Divider (10")
31.	Try plane	05	Try plane (10")
32.	Carpenter bench vise	10	Carpenter bench vise size:8"
33.	Screwdriver set	10	Screwdriver set of different size (9Pcs)
34.	Sharpening stone	15	Sharpening stone (6"x2"x1")
35.	Hand drill machine	02	Hand drill (3"/8") machine
36.	Flat file	25	Flat file (10") used in fitting shop
37.	Wood box	24	Box made of wooden, size (20"x12"x3")
38.	Axe	5	Axe Head made of high carbon iron with wooden handle. And side axe
39.	Adz	5	Adz
40.	Vernier Caliper	25	Analog, 0-200 mm , least count 0.1
41.	Adjustable reamer set	05	Adjustable reamer set
42.	Outside caliper	25	Outside caliper (10")
43.	Insider caliper	25	Insider caliper (10")
44.	Back ductile saw	2	Back ductile saw; blade length:240mm
45.	Vernier height gauge	02	Vernier height gauge
46.	Vee block	04	Vee block
47.	Center and Dot punch	10 Each	Center and Dot punches
48.	Scriber	10	Scriber, hardened steel, 6-10 inches
49.	Divider	10	Divider
50.	Screwdriver set	03 set	Screwdriver set
51.	Taps set	02 each	Taps set m4, m5, m6, m8, m10, m12, m14, m16
52.	Tap handle set	06.	Tap handle set
53.	Screw pitch gauge	02 set	Screw pitch gauge 60°

54.	Screw pitch gauge	02 set	Screw pitch gauge 55°
55.	Radius gauge	02 set	Radius gauge 1-7,7.5-14mm
56.	Allen key set	01 set	Allen key set 1-10mm
57.	Double ended open spanner	02 set	Double ended open spanner set 6-32mm
58.	Ball peen hammer	10	Ball peen hammer 500gm
59.	Cross peen hammer	06	Cross peen hammer 500gm
60.	Number punch set	01 set	Number punch set
61.	Letter punch set	01 set	Letter punch set
62.	Flat file	25	Flat wood rasp file 200mm
63.	Round file and Half round file	10 Each	Round file 200mm and Half round file 200mm
64.	Files	25 Each.	Rough cut file (20 teeth per inch.), Smooth cut file (50 teeth per inch.), Knife edge file (10-20cm)
65.	Needle file set	25	Needle file (4-8 inches)set
66.	Triangular and Square file	10 Each	Triangular file (8 inches), Square file (8inches)
67.	File brush set	10	File brush
68.	Flat chisel	06	Flat chisel
69.	Hand vice	06	Hand vice
70.	Adjustable wrench	06	Adjustable wrench 12"
71.	Try angle file	10 No.	Try angle file 200x2
72.	Combination pliers	02	Combination pliers
73.	Toolbox	10	Toolbox
74.	Digital micrometer	05 each	Digital micrometer 0-25mm; 25-50mm
75.	Surface plate and Anvil	01 Each	Cast iron Surface plate 12x19 inches and Mild Steel Anvil (200kg)
76.	Bench vise	10	Cost iron Bench vise size 3-4 inches

77.	M/S Flat	25	Size: 60mmx15mmx95mm
78.	Cutting bare	01	Cutting bare
79.	Pliers	12	Commonly used plier in wood working
80.	Ripping bar	01	Ripping bar length 12-36 inches
81.	Crowbar	01	Crowbar length:4ft.
82.	Gauge	01	Sheet metal and wire gauge
	Total Cost		4.0M

Note:

1. Quoted hardware must be compatible with lab power supplies and other equipment as per requirement.
2. Equipment shall be delivered with all necessary supplies and accessories required for installations and start-up.
3. The vendor shall demonstrate and document upon installation that the system meets all performance specifications.

TENDER B: ENVIRONMENTAL ENGINEERINGLABRATORY

Sr. No.	Items	Qty.	Specifications
<b>Equipment</b>			
1.	COD meter	01	COD meter with COD reactor and vials of low and midrange
2.	COD Photometer	01	COD photometer with digester and reagent, vials, cooling rack
3.	Multiparameter Photometer	01	The instrument can measure alkalinity, Hardness, Ca, Mg, Iron, Nitrate, Nitrite and Chlorine. Supplied with sample cuvettes and caps, cloth for wiping cuvettes, adaptor and instruction manual. Reagents for alkalinity, Hardness, Ca, Mg, Iron, Nitrate, Nitrite and Chlorine., Set of spare cuvettes (2Nos.)
4.	Colorimeter	01	Range up to 500 PCU, supplied with sample cuvettes with caps, battery, instruction manual.
5.	Lab. Magnetic stirrers with hot plate	01	Surface temperature :0-250 °C; Stirring speed:0-1400 rpm; Stirring capacity: 0.5-2L; Heating power variable control with LED indicator; Magnetic stirrer variable control with LED indicator Workable on 220V 1Ph 50~60 Hz
6.	Particulate Air Quality Monitoring kit	01	Real-time direct reading of particulate mass concentrations along with temperature and relative humidity Selection of particulate settings PM2.5, PM4, PM10, Battery life ≥ 4 hrs. Measurement Parameters: MIN. MAX, LEVEL; Included Sensors: Relative Humidity, Temperature, Particulates Available Sensors: CO, CO2, O2
7.	Desiccator	01	simple desiccator (Glass). Plate size>300mm with facility for vacuum desiccation
8.	Digital Noise Meters	01	Digital Noise Meters
9.	Lab. Refrigerator	01	Cfc free, Single Door, Capacity:(min. 150 liters), temperature range +0-10°C with Chemical storage cabinet
10.	Washing Bottles	12	Washing bottles (500ml)
<b>Glass wares:</b>			
1.	Kjeldahl Flask(800mL)	12	High quality flask which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
2.	Kjeldahl Flask(500mL)	12	High quality flask which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
3.	Kjeldahl Flask(300mL)	12	High quality flask which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
4.	Titration Funnel	24	Material: Glass, capacity 50-100mL
5.	filter paper (0.45µm)	12	Resistant to weak acids & base ,100 pcs
6.	filter paper (0.2µm)	12	Resistant to weak acids & base ,100 pcs
7.	Laboratory dishes (porcelain)	12	Laboratory dishes (porcelain)
8.	Pipette Sucker	2 Each	Pipette Sucker (2ml,5ml,10ml)

9.	Indicator bottles	4	Indicator bottles
10.	Graduated Burette with stand	24	Accuracy :0.01ml Max volume:50ml
11.	Pipette (2-20 $\mu$ L)	24	Single channel, borosilicate glass/Plastic
12.	Pipette (20-200 $\mu$ L)	24	Single channel, borosilicate glass/Plastic
13.	Pipette (200-1000 $\mu$ L)	24	Single channel, borosilicate glass/Plastic
14.	Automatic burettes	12	Automatic burettes 50ml with plastic bottles
15.	Certified Pipettes	12 Each	Certified Pipettes (1 ml,2ml,5ml,10ml)
16.	Beaker (1litre)	24	High quality glass beakers which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
17.	Beaker (500 mL)	24	High quality glass beakers which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
18.	Beaker (250mL)	24	High quality glass beakers which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
19.	Beaker (100 mL)	24	High quality glass beakers which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
20.	Beaker (50 mL)	24	High quality glass beakers which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
21.	Graduated Cylinder (1L)	24	High quality glass cylinders which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
22.	Graduated Cylinder (250 mL)	24	High quality glass cylinders which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
23.	Erlenmeyer flask (50ml)	24	High quality flask which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
24.	Erlenmeyer flask (100ml)	24	High quality flask which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
25.	Erlenmeyer flask (250ml)	24	High quality flask which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
26.	Erlenmeyer flask (500ml)	24	High quality flask which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
27.	Volumetric Flask (250 ml)	24	High quality flask which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
28.	Volumetric Flask (500 ml)	24	High quality flask which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
29.	Volumetric Flask (1 L)	24	High quality flask which can endure heating over the open flame of an alcohol lamp, lab burner, or hot plate
30.	Glass Rods	12	Glass Rods
	Total Cost		1.20M

Note:

1. Quoted hardware must be compatible with lab power supplies and other equipment as per requirement.
2. Equipment shall be delivered with all necessary supplies and accessories required for installations and start-up.
3. The vendor shall demonstrate and document upon installation that the system meets all performance specifications.

TENDER C: STRUCTURE LABORATORY

Sr. No	Item	Qty.	Specifications
1.	Cut-off machine	01	Cut-off machine to cut steel to a suitable length along with cold bending machine for steel bars through 90° and 180° with suitable mandrels and holder to bend rebars (ASTMA615) of diameter(10,13,16,19,22,25mm)
2.	Extensometer	02	Axial Extensometer confirming to ASTM Class B2. Clip on, until failure. 200mm gauge length. On Site Calibration is also required. Fits round samples up to 25 mm diameter (1.0 inch) Compatible with existing Universal Testing Machine (Capacity:2000KN)
	Total Cost:		6.63M

Note:

- a. All items must be of USA, Japan, Germany, UK, France, Italy, Spain, Belgium, Netherland, Finland, Switzerland & Sweden's manufacturer.
- b. Quoted hardware must be compatible with lab power supplies and other equipment as per requirement.
- c. Equipment shall be delivered with all necessary supplies and accessories required for installations and start-up.
- d. The vendor shall demonstrate and document upon installation that the system meets all performance specifications.
- e. Comprehensive documentation including Safety/Installation Guidelines and Operation/Experiment Manuals should accompany the product, both in Hard and Soft/CD/eBook formats for all items.



## GENERAL TERMS AND CONDITIONS

1. The Bidders shall compulsorily produce a certificate that it will continue to support the terms and conditions accepted by the Bidder and will comply with these terms and conditions in any circumstances. Failure to produce such certificate will make the Bidder liable to be rejected.
2. Prices should be quoted on FOR basis only.
3. The Bidder shall have at least five (05) years of work experience regarding the relevant field in Pakistan for successful delivery and commissioning of such equipment duly supported by the relevant documents in this regard.
4. Safe delivery and successful commissioning of the equipment at the University College of Engineering & Technology, The Islamia University of Bahawalpur shall be the responsibility of the contractor. If the items supplied are not according to the required specification/make it will have to be replaced by the firms on their own cost.
5. Agreement on stamp paper @ 0.25 percent of total cost should be submitted by the firm.
6. If the acceptance letter of a tender issued during the validity period of the tender is not accepted by the Bidder or the Bidder remains unable to comply with the supply order, the bid security shall be forfeited. Furthermore, the bid security shall be forfeited in the following cases.
  - a) In case the offer is withdrawn, amended or revised during the validity period of the tender.
  - b) In case the Bidder fails to execute the order strictly in accordance with the terms and conditions laid down in the order.
7. The successful Tenderer/the Contractor against each Item(s) shall furnish a Performance Security as under:
  - a) Within twenty (20) days of the receipt of the Acceptance Letter from the Purchaser, in the form of Bank Guarantee from the Principal / Demand Draft / Pay Order / Call Deposit Receipt, in the name of the Treasurer, The Islamia University of Bahawalpur, issued by a Scheduled Bank operating in Pakistan, for a sum equivalent to 10% of the contract value denominated in Pak Rupees.
  - b) The Performance Security shall be confiscated, on occurrence of any / all of the following conditions and it will be retained for the initial period of warranty (01Year): -
    - i. If the Contractor commits a default under the Contract;
    - ii. If the Contractor fails to fulfill the obligations under the Contract;
    - iii. If the Contractor violates any of the terms and conditions of the Contract.
    - iv. If the Contractor remains unable to comply with the terms and conditions of the contract as mentioned in the Tender Document.
8. Technical Proposal shall compulsorily comprise the following, without quoting the price:
  - a) Technical Proposal Form.
  - b) 02% Bid Security of the estimated cost as mentioned in the Tender.
  - c) Covering letter duly signed and stamped by authorized representative.
  - d) The Bidders shall compulsorily produce a certificate that it will continue to support the terms and conditions accepted by the Bidder and will comply with these terms and conditions in any circumstances. Failure to produce such certificate will make the Bidder liable to be rejected.
  - e) The Bidder shall attach the relevant evidence of having at least five (05) years of work experience regarding the relevant field in Pakistan for successful delivery and commissioning of such equipment duly supported by the relevant documents in this regard.
  - f) Technical Brochures /Literature
  - g) Technical proposal shall be submitted in ring binding to ensure the safety and security of all the documents submitted by the Bidder.
  - h) The Tenderer shall also enclose soft copies of the Technical Proposal, including all Forms, Annexes,

Schedules, Charts, Drawings, Documents, Brochures, Literature, etc., in the form of MS Word Documents, MS Excel Worksheets and Scanned images, with the hardcopies.

- 9.** Where a reference is made to any specifications or national or international standard, equal or higher quality will be acceptable. In case your offer conforms to the standards other than quoted in the tender document, you are required to submit the required evidence of equivalence by the recognized forum and a copy of each of the standard.
- 10.** The Contractor shall furnish the user documentation, the operation manuals, and training manuals for each appropriate unit of the supplied items and other information pertaining to the performance of the items, in hard copy format and in soft copy format.
- 11.** The bidder shall ensure the warranty, after sale service and supply of the spare parts must be guaranteed. All the supplies must be covered comprehensively for after sale & service both labor and parts for the period of warranty of 01 year after the issuance of Taking-over Certificate in respect of items or any portion thereof as the case maybe.
- 12.** Any clarification may be sought from the contractors and the Bidders may be asked to give the presentation of their product.
- 13.** Bidders are advised not to quote different options for a single item (only one option is to be quoted).
- 14.** Warranty Requirements are asunder;
  - i) The Contractor shall warrant to the Purchaser that the equipment supplied by the Contractor, under the Contract are genuine, brand new, non- refurbished, un-altered in any way. The component(s) of any item(s) found dead on arrival /defective shall be replaced with new item(s) or component(s) by the contractor as such and shall in no way be referred to the warranty.
  - j) The Contractor shall provide Manufacturer's warranty of parts and workmanship for minimum period of one year after the issuance of Taking-over Certificate in respect of the items or any portion thereof, as the case may be, which will include: Free on-site repair / replacement of defective / damaged parts, labor and transportation expense of any kind, within four weeks of intimation.
  - k) The Contractor shall clearly mention the Terms and Conditions of service agreements for the items supplied after the expiry of initial warranty period of one year.
- 15.** The taking-over certificates will be issued after the supply of the items (including installation, configuration, deployment, commissioning, testing, and training of the delivered items).
- 16.** Validity of rate should be for 120 days from the date of opening of tenders.
- 17.** The vendors will be responsible for any damages during Transit/Delivery. They will also be responsible for any accident and their consequent damages.
- 18.** The Contractor shall arrange and undertake a comprehensive training program for the staff nominated by the Principal UCET, to ensure that they shall acquire a good working knowledge of the operation, and general maintenance of the equipment to be supplied under the Contract.
- 19.** The responsibility for the quality, quantity, correctness and adherence to the Specifications etc. of the Equipment shall lie solely and squarely on the Supplier /Contractor.

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

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

Designation: \_\_\_\_\_

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

**ATTACHMENTS:**

Bid Money with the Technical Proposal (02% of the Estimated Cost) (Yes /No)

Affidavit for Non-Black listing (Yes /No)

Bid Validity Certificate. (Yes /No)

Duly Signed terms & conditions (Yes /No)

All the other documents mentioned in the Tender Document. (Yes /No)

All the other documents mentioned in the General Terms & Conditions. (Yes /No)

NOTE: Bid shall be signed by the bidder/authorized person for bidder.