

INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD

Purchase & Store Section, Admin Block, New Campus, Sector H-10, Islamabad.

Tel: 051-9019255 Fax: 051-9258073

Tender No. IIUI-_____

TENDER DOCUMENT “Centre for Advanced Electronics & Photovoltaic Engineering (CAEPE)”

“TERMS AND CONDITIONS”

[All pages (BoQs & Terms & Conditions) are mandatory to be signed / stamped, failing which the bid may lead to rejection]

1. Any addition, deletion or modification of any clause of the procurement terms & conditions of International Islamic University Islamabad (IIUI) by any vendor will not be acceptable and may lead to rejection of the bid.
2. Original Manufacturer / Authorized Distributors / Suppliers (*with valid authorization / distribution certificate*) **registered with Income Tax, Sales Tax Department and who are on Active Taxpayers List (ATL) of FBR, are eligible to participate in tender.**
3. Documents along with Pay Order / Demand Draft / Cash Receipt issued by Finance Department of IIUI amounting to **Rs. 1,000/-** as a tender document fee (Non-Refundable) shall be submitted in favor of International Islamic University, Islamabad, to the address given below. (*See No. 13*)
4. The exact completion/delivery time from the date of the purchase / work order will be maximum of **120 days**. The handing over / completion time is of critical importance.
5. **The bid proposal(s) should be inclusive of:**
 - i. **All FREIGHT and PACKAGING CHARGES** (*Items deliverable at Islamabad Airport/Dry Port on “CPT/CFR Basis as per BoQs Format*)
 - ii. **All Taxes**, if prices are quoted on “FOR Basis” as per BoQs Format (*Items deliverable (Free of Cost) to International Islamic University, New Campus, Sector H-10 Islamabad*)
6. **The Payment Terms will be:**
 - i. **For the CPT/CFR quoted items; payment will be made through irrevocable L.C (90:10 Model) in favor of Manufacturer.** Where, 90% under the said model will be released upon receipt of shipment and delivery documents. Remaining 10% will be made / released after successful inspection of the equipment at International Islamic University Islamabad.
 - ii. **For the FOR quoted items; 100% payment will be made after supply and successful inspection of the ordered equipment(s)**

at International Islamic University Islamabad.

7. **For the CPT/CFR quoted items; shipment(s) will be cleared by the International Islamic University, Islamabad from Custom Authorities.**
8. After opening of bids, International Islamic University Islamabad will examine the bids for completeness as per tender document's Terms & Conditions AND Technical Specifications, (As per BoQ)
9. Purchase order (s) will be awarded to the lowest evaluated OR technically recommended bidder (s) on the basis of item wise / subtotal wise / grand total wise according to the nature of BoQs/Compatibility requirements.
10. Procedure of open competitive bidding shall be: **Single Stage One Envelope procedure**
11. Bidders cannot challenge the finding(s) of the Evaluation Committee or ask for reason of disqualification.
12. The bid should be submitted in a sealed envelope up to the specified deadlines for the items for **“Centre for Advanced Electronics & Photovoltaic Engineering (CAEPE)”** (i-e **January 11, 2018**) on or before **10:30 a.m** and will be opened on the respective date **at 11:00 a.m** in the presence of available bidders or their representatives who may like to attend the bid opening.
13. The envelope should be marked as under;

Mr. Javaid Rabbani

Dy. Director (P&S)

Room No. 213, 2nd Floor, Admin Block, New Campus, Sector H-10

International Islamic University Islamabad.

Tel: 051-9019255

14. The envelope shall also bear the word **“CONFIDENTIAL”** and following identification quotation for:
“Supply of Lab Equipment for “Centre for Advanced Electronics & Photovoltaic Engineering (CAEPE)”

Procurement of Lab Equipments for “Centre for Advanced Electronics & Photovoltaic Engineering (CAEPE)”

15. The bid form (BoQs) must be duly filled in, stamped and signed by the authorized representative of the bidder.
16. **If the vendor fails to deliver the goods / services to International Islamic University, Islamabad in time then the penalty will be charged as under: -**
 - i. 02% per month of the total Purchase Order value;
 - ii. If the vendor fails to deliver the goods / services during the extended period (*if allowed*) then the purchase / work order may be cancelled and Earnest money may be forfeited.

17. If the delivered goods / services are not according to the required quality standards / specifications, the same shall be liable to be rejected after inspection. The bidder/vendor will be required to REPLACE as per requirements mentioned in our BoQs at no cost to the IIUI, otherwise the purchase / work order will be cancelled after due date with confiscation of earnest money AND bidder will bear all cost and expenses thereof.
18. All prices should be quoted on both **CPT/CFR Islamabad Basis or FOR (IIUI) Basis or Both.**
19. All prices should be valid for at least **90 days.** Withdrawal or any modification of the original offer within the validity period shall entitle IIUI to forfeit the earnest money in favor of the IIUI and / or put a ban on such vendor for participation in IIUI tenders / works.
20. It is the sole responsibility of the agent / supplier / manufacturer / vendor to comply with the applicable laws, be national or international.
21. In case of any dispute, decision of the President, IIUI will be final and binding upon the parties.
22. The IIUI reserves the right to modify the quantities of goods / services at any time before the award of purchase / work order.
23. **Earnest Money:**
The bidder is required to furnish in form of “Pay Order/Demand Draft” equivalent to **2%** of the total Bid price (in PKR) as Earnest Money in favor of “International Islamic University Islamabad”. Any bid not accompanied by the Earnest Money shall be rejected without any right of appeal.
24. **Retention Money:**
An amount equal to 10% (in PKR) of the total value of the Purchase Order/Contract Price shall be retained by the International Islamic University, Islamabad for the Warranty Period (*Refer to Clause 4 of Special Conditions*) as follows:
- The successful bidder(s) for the CPT/CFR items shall have to be required to submit a “Pay Order/Demand Draft” equal to 10% of the total value of Purchase Order from a Scheduled Bank of Pakistan within 10 days after supply of ordered item(s) for the warranty period.
 - 10% of the total value of the Purchase Order will be withheld by the IIUI from the payment of successful bidders, on FOR Basis supplied items, for the warranty period.
25. The bidder is also required to furnish Company Profile, Client List and Detail of similar Projects/Works along with the proposal.
26. **International Islamic University Islamabad reserves the rights to accept or reject the bid/s, if;**
- Received without earnest money.
 - Received later than the date and time fixed for tender submission.
 - The tender is unsigned/ unstamped.
 - The offer is ambiguous.
 - The offer is conditional.
 - Offer is made by the unauthorized agent/ supplier of the original equipment manufacturer.
 - The offer is from a firm, which is black listed by any Govt. Office.

- The offer is received by telephone/telex/fax/telegram.
- Any unsigned / ambiguous erasing, cutting / overwriting etc. is made.
- Received without Company Profile, Client List and Detail of similar Projects/Works with evidence.
- Without Guarantee / Warrantee of the quoted equipment(s). *(Minimum **twelve (12) months** after the Goods, or any portion thereof as the case may be, have been delivered to and accepted*

27. The bidder should furnish a **CERTIFICATE** on judicial STAMP PAPER worth Rs. 100 as worded below in token of acceptance of all the terms and conditions of the tender. Otherwise the tender will not be considered under any circumstances.

I / We

Company / Vendor Name: _____

- **Postal Address:** _____
- **Tel. No:** _____ **Mob No.** _____
- **NTN# :** _____ **GST#:** _____

The undersigned certify that the terms and conditions as contained in this document, viz **“Terms and Conditions”** are accepted unconditionally and in the event of selection of my/our bid/s; the agreement will be entered into, in the prescribed format attached as **Annex-I**. The Special Conditions that are attached as part of proposed agreement at **Annex-II** are also accepted unconditionally.

Sign & Stamp

Note:

1. Please quote the rates on our BoQs and clearly mention the quoted Make / Model / Country of Origin, otherwise your bid / items may lead to rejection.
2. PRICES quoted in different currencies on CPT/CFR basis will be evaluated after converting them into PKR (local currency) at the EXCHANGE RATE prevailing at the State Bank of Pakistan / Open Market on the date of Opening of Bid(s)
3. In Addition to filling of the attached BoQs, supporting literature of the quoted model must be attached for verification & technical evaluation of the required specification by the bid evaluation committee. In case of any clash found between the quoted model and the literature model, the item/bid may be rejected.
4. Terms & Conditions and BoQs should be attached with the proposal (Technical & Financial Bids), otherwise your tender/bid(s) may be rejected.
5. Please also attach the Certificate supporting being Active Taxpayer as per requirement of FBR.

BoQs for the Supply of Lab Equipment for “Centre for Advanced Electronics & Photovoltaic Engineering (CAEPE)”

S. No	Equipment Name	BoQs/Specifications	Qty.	Make/ Model & Country of Origin	FOR Price (PKR)		CPT/CFR Price	
					Unit Price	Total Price	Unit Price	Total Price
1	Femto/ Picometer	0.01fA, along with all the accessories (cables, cell, electrodes, evaluation kits etc.) as options; Keysight B2983A or equivalent with: <ul style="list-style-type: none"> fA minimum measurement resolution 20,000 readings/s < 20 μV burden voltage 	01					
2	Scanning Electron Microscope	Scanning Electron Microscope (SEM) with Electron optics column, operation and display console, SEM control, software and operation system, Full-automatic vacuum system (diffusion or molecular pump and accessories), Air Compressor, Standard Consumables & Special Tools; Installation & Training; KYKY-EM3900A or equivalent system having: <ul style="list-style-type: none"> Resolution: not less than 3nm Magnification: 6x ~300,000x Accelerating Voltage: 0-30kV (with adjustment step between 10-30kV is ~1kV) Specimen Chamber with appropriate ports for WDS/EDS/ BSE detectors etc. (detectors as separate optional items) and other attachment's installation; Specimen Stage Movable range: X=80mm, Y=60mm, Z=50mm, tilt=-5° ~ +90°, rotation=360° continuously Observable specimen: Φ 80mm Maximum specimen: Φ 110mm	01					
3	X-Ray Diffraction Machine	XRD with Fluorescent attachment: Sources Cu or others; Diffraction Method (Powder in general or better options for Fluorescent attachment); Source Beam Optics to reduce angular divergence in the incident beam: <ul style="list-style-type: none"> X-Ray Tube: Target (Cu and others such as Fe, Co, Cr, Mo, Ag, W and so on); Focus (1\times10mm² or 0.4 \times14mm²); Max. Output Power (over or equal to 2.2kW) X-Ray Generator: Voltage (10~50kV); Max. Output Power (3kW); Current (2~60mA) Goniometer: Working Mode (step scanning, continuous and segmentation scanning); Structure (θs-θd); Min. step angle (0.0001°); 2-Theta repeatability (0.0005°); Scan range 	01					

		<p>(-35°~170°)</p> <ul style="list-style-type: none"> Recording Unit: Detector mode (PC or SC, fluorescence with SDD); Linear Count: (~1×10⁷CPS); Approximate Spectrum Resolution (≤20% (PC) or ≤50% (SC) ≤12% (SDD) General: Alarm mode and Safety protection included; X-Ray Crystal orientation device included as optional item. 						
4	Atomic Force Microscope	<p>for Environmental, Biological and Electronic Applications (Image, measure and manipulate samples in air or liquid environments with additional tips and accessories) with the following specifications:</p> <ul style="list-style-type: none"> Multi-Function Enabled for Atomic Force Microscopy, Scanning Tunneling Microscopy, Lateral Force Microscopy etc. Force Analysis: I-V Curve, I-Z Curve, Force Curve Online real-time 3D image Multi-channel signals for more 01sample details Trace-Retrace scan, Back-Forward scan Granularity and Roughness analysis Automatic Tip-engagement Software-based sample movement Resolution AFM: ~0.26nm lateral, ~0.1nm vertical; STM: ~0.13nm lateral, ~0.01nm vertical; X-Y scan scope:~10μm Z distance:~2μm Image Pixels: 128X128, 256X256, 512X512, 1024X1024 Scan Angle: 0~360° Scan Rate: 0.1~100Hz Appropriate Electronics & Software Sample Size: Up to ~45mm in diameter, ~30mm thick; Multiple Tips for various modes Toolbox 	01					
5	Clean Room	<p>12x15 ; Class 100-1000 ISO; Cleem or equivalent</p> <ul style="list-style-type: none"> Hard-wall clean booth (12 ft wx 15ft lengthx 8 ft height) with all appropriate accessories including of minimum 10 pcs UV Free lights, Minimum 12 FFU set, aluminium bracket, acrylic glass, external controller for electrical components etc. Efficiency: H13, 99.99% @ 0.3 um Preferably Class 100 ISO Power: AC220V; 50Hz, 1 phase, 3KW External door to enter into the available Air shower double blow for at least 2 persons (opening outside) with 	01					

		<p>appropriate motors (minimum 4 sets) and nozzles (minimum 24 pcs)</p> <ul style="list-style-type: none"> • Pass through/passing window with mechanical interlock • Wheels for mobility of the clean booth • 100 high quality clean room garments (Hat, PVC Sole boots, Gloves, Masks) as optional item 						
6	Electrospinning & Electro spraying Unit	<p>Electrospinning & Electrosparying Unit for Nano-Materials - MSK-NFES-4 (With both control models) or equivalent:</p> <ul style="list-style-type: none"> • Software controlled with appropriate interfacing system • Fume hood Integrated with appropriate accessories including the humidity meter • Input Power: 208~240 VAC single phase (Max power consumption: 1500 W) • High Voltage Power Supply: 0 - 30 kV single output, 0.5 mA max current • Dual-channel Syringe Pump • Nozzle • Lamp heater (Max power: 1000 W) • Appropriate Controllers for electrospinning, nano-fiber and/or flat film coating 	01					

NOTE: All the Equipments should be of the same specification/ Make/ Model or their equivalent.

CONTRACT / AGREEMENT

THIS CONTRACT/ AGREEMENT is made on the _____, 201____
BETWEEN

INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD, a Public Sector University of the Government of Pakistan incorporated under the laws of Islamic Republic of Pakistan and having its principal place at Sector H-10 Islamabad (hereinafter called “the Purchaser”),

AND

M/s _____ incorporated under the laws of Pakistan and having its principal place of business at _____, Pakistan (hereinafter called “the Supplier”).

WHEREAS the Purchaser invited bids for Procurement of Lab Equipment for “**Centre for Advanced Electronics & Photovoltaic Engineering (CAEPE)**” under its approved PC-I titled: “**Expansion and Upgradation of International Islamic University Islamabad**” and has accepted a bid/quotation No. _____ dated: _____ submitted by the Supplier for the supply of following item(s) against total **CPT/CFR/FOR Price** _____ (_____) hereinafter called “the Contract Price” and the Purchaser agrees to pay the Supplier/Manufacturer the Contract Price or such other sum(s) as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

Sr. No.	Item Name	Specifications	Qty.	Make/Model/ Country of Origin	Unit Price	Total Price
TOTAL						

The Purchaser and the Supplier agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement:
 - (a) The Tender Document "Terms & Conditions"
 - (b) BoQ
 - (c) The Certificate *(As referred at # 27 of Tender Document)*
 - (d) The Purchase Order
 - (e) The Special Conditions
3. In consideration of the payments to be made by the Purchaser to the Supplier/Manufacturer as indicated in this Agreement, the Supplier hereby covenants with the Purchaser to execute the Goods and Related Services and to remedy defects therein in conformity in all respects with the provisions of the Contract/Purchase Order.
4. The Purchaser hereby covenants to pay the Supplier/Manufacturer in consideration of the supply of the Goods and Related Services therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract/Purchase Order.

Agreement to be executed in accordance with the laws of Islamic Republic of Pakistan on the day, month and year indicated above.

Signed by:

Name:

CNIC:

In the presence of:

Witness,

Signature: _____

Name: _____

CNIC:

Address: _____

Date: _____

Signed by:

Name:

CNIC:

in the presence of:

Witness

Signature: _____

Name: _____

CNIC:

Address: _____

Date: _____

SPECIAL CONDITIONS

1. Specifications and Standards:

- 1.1 The Supplier shall ensure that the Goods and Related Services comply with the technical requirements.
- 1.2 The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.

2. Packing and Documents:

- 2.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated, during transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods final destination and the absence of heavy handling facilities at all points in transit.
- 2.2 The Packing marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Purchase Order, including requirements, if any and in any other instructions ordered by the Purchaser.

3. Transportation:

- 3.1 Unless otherwise specified, responsibility for arranging transportation of the Goods shall be in accordance with the specified Incoterms.

4. Warranty:

- 4.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise by the Purchaser.
- 4.2 Unless otherwise specified in these conditions, the warranty shall remain valid for **twelve (12) months** after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in these conditions or for eighteen (18) months after the date of shipment, from the port, or place of loading in the country of origin, whichever period

concluded earlier.

- 4.3 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.
- 4.4 Upon receipt of such notice, the Supplier shall, **within the 30 days** expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser (IIUI)

5. The Payment Terms will be:

- 5.1 For the CPT/CFR quoted items; payment will be made through irrevocable L.C (90:10 Model) in favor of Manufacturer. Where, 90% in this model will be released upon receipt of shipment and delivery documents. Remaining 10% will be made / released after successful inspection of the equipment at International Islamic University Islamabad.
- 5.2 For the FOR quoted items; 100% payment will be made after supply and successful inspection of the ordered equipment(s) at International Islamic University Islamabad after deduction of 10% retention money as per “Terms & Condition”.

INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD

Purchase & Store Section, Admin Block, New Campus, Sector H-10, Islamabad.

Tel: 051-9019255 Fax: 051-9258073

Tender No. IIUI-_____

TENDER DOCUMENT “SA-Centre for Interdisciplinary Research in Basis Sciences”

“TERMS AND CONDITIONS”

[All pages (BoQs & Terms & Conditions) are mandatory to be signed / stamped, failing which the bid may lead to rejection]

1. Any addition, deletion or modification of any clause of the procurement terms & conditions of International Islamic University Islamabad (IIUI) by any vendor will not be acceptable and may lead to rejection of the bid.
2. Original Manufacturer / Authorized Distributors / Suppliers *(with valid authorization / distribution certificate)* **registered with Income Tax, Sales Tax Department and who are on Active Taxpayers List (ATL) of FBR, are eligible to participate in tender.**
3. Documents along with Pay Order / Demand Draft / Cash Receipt issued by Finance Department of IIUI amounting to **Rs. 1,000/-** as a tender document fee (Non-Refundable) shall be submitted in favor of International Islamic University, Islamabad, to the address given below. *(See No. 13)*
4. The exact completion/delivery time from the date of the purchase / work order will be maximum of **120 days**. The handing over / completion time is of critical importance.
5. **The bid proposal(s) should be inclusive of:**
 - a. **All FREIGHT and PACKAGING CHARGES** *(Items deliverable at Islamabad Airport/Dry Port on “CPT/CFR Basis as per BoQs Format)*
 - b. **All Taxes, if prices are quoted on “FOR Basis” as per BoQs Format** *(Items deliverable (Free of Cost) to International Islamic University, New Campus, Sector H-10 Islamabad)*
6. **The Payment Terms will be:**
 - a. **For the CPT/CFR quoted items; payment will be made through irrevocable L.C (90:10 Model) in favor of Manufacturer.** Where, 90% under the said model will be released upon receipt of shipment and delivery documents. Remaining 10% will be made / released after successful inspection of the equipment at International Islamic University Islamabad.
 - b. **For the FOR quoted items; 100% payment will be made after supply and successful inspection of the ordered equipment(s)**

at International Islamic University Islamabad.

7. **For the CPT/CFR quoted items; shipment(s) will be cleared by the International Islamic University, Islamabad from Custom Authorities.**
8. After opening of bids, International Islamic University Islamabad will examine the bids for completeness as per tender document's Terms & Conditions AND Technical Specifications, (As per BoQ)
9. Purchase order (s) will be awarded to the lowest evaluated OR technically recommended bidder (s) on the basis of item wise / subtotal wise / grand total wise according to the nature of BoQs/Compatibility requirements.
10. Procedure of open competitive bidding shall be: **Single Stage One Envelope procedure**
11. Bidders cannot challenge the finding(s) of the Evaluation Committee or ask for reason of disqualification.
12. The bid should be submitted in a sealed envelope up to the specified deadlines for the items for **"SA-Centre for Interdisciplinary Research in Basis Sciences"** (i-e **January 11, 2018**) on or before **10:30 a.m** and will be opened on the respective date **at 11:00 a.m** in the presence of available bidders or their representatives who may like to attend the bid opening.
13. The envelope should be marked as under;

Mr. Javaid Rabbani

Dy. Director (P&S)

Room No. 213, 2nd Floor, Admin Block, New Campus, Sector H-10

International Islamic University Islamabad.

Tel: 051-9019255

14. The envelope shall also bear the word **"CONFIDENTIAL"** and following identification quotation for:
"Supply of Lab Equipment for "SA-Centre for Interdisciplinary Research in Basis Sciences"

Procurement of Lab Equipments for **"SA-Centre for Interdisciplinary Research in Basis Sciences"**

15. The bid form (BoQs) must be duly filled in, stamped and signed by the authorized representative of the bidder.
16. **If the vendor fails to deliver the goods / services to International Islamic University, Islamabad in time then the penalty will be charged as under: -**
 - a. 02% per month of the total Purchase Order value;
 - b. If the vendor fails to deliver the goods / services during the extended period (*if allowed*) then the purchase / work order may be cancelled and Earnest money may be forfeited.

17. If the delivered goods / services are not according to the required quality standards / specifications, the same shall be liable to be rejected after inspection. The bidder/vendor will be required to REPLACE as per requirements mentioned in our BoQs at no cost to the IIUI, otherwise the purchase / work order will be cancelled after due date with confiscation of earnest money AND bidder will bear all cost and expenses thereof.
18. All prices should be quoted on both **CPT/CFR Islamabad Basis or FOR (IIUI) Basis or Both.**
19. All prices should be valid for at least **90 days.** Withdrawal or any modification of the original offer within the validity period shall entitle IIUI to forfeit the earnest money in favor of the IIUI and / or put a ban on such vendor for participation in IIUI tenders / works.
20. It is the sole responsibility of the agent / supplier / manufacturer / vendor to comply with the applicable laws, be national or international.
21. In case of any dispute, decision of the President, IIUI will be final and binding upon the parties.
22. The IIUI reserves the right to modify the quantities of goods / services at any time before the award of purchase / work order.
23. **Earnest Money:**
The bidder is required to furnish in form of “Pay Order/Demand Draft” equivalent to **2%** of the total Bid price (in PKR) as Earnest Money in favor of “International Islamic University Islamabad”. Any bid not accompanied by the Earnest Money shall be rejected without any right of appeal.
24. **Retention Money:**
An amount equal to 10% (in PKR) of the total value of the Purchase Order/Contract Price shall be retained by the International Islamic University, Islamabad for the Warranty Period (*Refer to Clause 4 of Special Conditions*) as follows:
- The successful bidder(s) for the CPT/CFR items shall have to be required to submit a “Pay Order/Demand Draft” equal to 10% of the total value of Purchase Order from a Scheduled Bank of Pakistan within 10 days after supply of ordered item(s) for the warranty period.
 - 10% of the total value of the Purchase Order will be withheld by the IIUI from the payment of successful bidders, on FOR Basis supplied items, for the warranty period.
25. The bidder is also required to furnish Company Profile, Client List and Detail of similar Projects/Works along with the proposal.
26. **International Islamic University Islamabad reserves the rights to accept or reject the bid/s, if;**
- Received without earnest money.
 - Received later than the date and time fixed for tender submission.
 - The tender is unsigned/ unstamped.
 - The offer is ambiguous.
 - The offer is conditional.
 - Offer is made by the unauthorized agent/ supplier of the original equipment manufacturer.
 - The offer is from a firm, which is black listed by any Govt. Office.

- The offer is received by telephone/telex/fax/telegram.
- Any unsigned / ambiguous erasing, cutting / overwriting etc. is made.
- Received without Company Profile, Client List and Detail of similar Projects/Works with evidence.
- Without Guarantee / Warrantee of the quoted equipment(s). (*Minimum **twelve (12) months** after the Goods, or any portion thereof as the case may be, have been delivered to and accepted*)

27. The bidder should furnish a **CERTIFICATE** on judicial STAMP PAPER worth Rs. 100 as worded below in token of acceptance of all the terms and conditions of the tender. Otherwise the tender will not be considered under any circumstances.

I / We

- i. **Company / Vendor Name:** _____
- **Postal Address:** _____
 - **Tel. No:** _____ **Mob No.** _____
 - **NTN# :** _____ **GST#:** _____

The undersigned certify that the terms and conditions as contained in this document, viz "**Terms and Conditions**" are accepted unconditionally and in the event of selection of my/our bid/s; the agreement will be entered into, in the prescribed format attached as **Annex-I**. The Special Conditions that are attached as part of proposed agreement at **Annex-II** are also accepted unconditionally.

Sign & Stamp

Note:

1. Please quote the rates on our BoQs and clearly mention the quoted Make / Model / Country of Origin, otherwise your bid / items may lead to rejection.
2. PRICES quoted in different currencies on CPT/CFR basis will be evaluated after converting them into PKR (local currency) at the EXCHANGE RATE prevailing at the State Bank of Pakistan / Open Market on the date of Opening of Bid(s)
3. In Addition to filling of the attached BoQs, supporting literature of the quoted model must be attached for verification & technical evaluation of the required specification by the bid evaluation committee. In case of any clash found between the quoted model and the literature model, the item/bid may be rejected.
4. Terms & Conditions and BoQs should be attached with the proposal (Technical & Financial Bids), otherwise your tender/bid(s) may be rejected.
5. Please also attach the Certificate supporting being Active Taxpayer as per requirement of FBR.

BoQs for the Supply of Lab Equipment for “SA-Centre for Interdisciplinary Research in Basis Sciences”

S. No	Equipment Name	BoQs/Specifications	Qty.	Make/ Model & Country of Origin	FOR Price (PKR)		CPT/CFR Price	
					Unit Price	Total Price	Unit Price	Total Price
1	HPLC- High Performance Liquid Chromatography	<ul style="list-style-type: none"> ➤ Operating flow rate range: 0.001 to 9.999 mL/min, maximum operating pressure: 40 MPa, Quaternary gradient pump, ➤ Auto sampler: Injection volume range: 0,1 µL up to 1,0 ml. Sample capacity: 100 with minimum two micro plates, injection modes: full loop injection, partial loop injection and zero sample loss injection. ➤ DAD Detector: able to acquires pectra from 190 – 1000 nm, display 8-channels (Digital)/4 (Analog). ➤ Refractive index detector: Guaranteed lifetime: 20000hrs or more, Temperature range: 30°C – 55°C, Refractive index measuring range: 1.00 – 1.75 RIU. Noise: not higher than +/-2.5 nRIU. Drift: not higher than 200 nRIU/h, Linearity: higher than 1000 RIU. ➤ Fluorescence detector: wavelength: 200 – 650 nm or higher, signal to noise ratio of the raman peak from water must be 1200 or higher. ➤ Column Thermostat: Temperature range: 5 – 85°C, For GPC separations, the thermostat should be capable to include at least one column with a maximum length of 325 mm and a maximum outer diameter of 35 mm. ➤ Accessories: GPC (Optional), SEC, syringes, software with up-to-dated library, computer, printer and accessories. ➤ Make: Japan, Europe, USA, UK or Equivalent 	01					
2	FTIR-Fourier-Transform Infrared Spectrometer	<ul style="list-style-type: none"> ➤ Single-beam Fourier-transform infrared spectrometer with fast scan speed, high accuracy and automatic dehumidifier. ➤ Wavelength range: 12,500 –240cm-1, ➤ Resolution: 1cm-1, 60,000:1 S/N ratio, ➤ Detector: DLATGS detector with temperature control for Middle/Far IR (Standard) MCT (Hg-Cd-Te) with liquid nitrogen cooling for Middle/Near IR, InGaAs for Near IR (Detector InGaAs, DLATGS, MCT, DLATGS). ➤ USB 2.0 interface, ➤ Software with a rapid scan, time course, mapping, Quantitation, peak split, 3D processing etc. ➤ Computer (7th Generation and SSD) and printer. ➤ FTIR accessories: sample cells for solid (Rubbers, powder, Paper, cloth, yarns, Film, plastics, Coating films on metals, Coating films on resins, Semiconductors), liquids (Oil content measurement, nonvolatile 	01					

		<p>organic solvents, volatile organic solvents, aqueous solutions, extract solutions) and gas (Micro/trace samples) and ATR, software with up-to-dated library and all major accessories.</p> <p>➤ Make: Australia, Europe, USA, Japan, UK or Equivalent</p>						
3	E-Quartz Crystal Micro Balance (E-QCM)	<p>➤ QCM instrument which can read frequency of 1-10 MHz AT-cut quartz crystals with ultra-stability</p> <p>➤ maximum resolution (0.02 Hz),</p> <p>➤ Read-out data must be transferred to display unit.</p> <p>➤ Quartz crystal holder/cell (static and flow cell along with tubings)</p> <p>➤ Temperature controlled crystal cell</p> <p>➤ all necessary cables</p> <p>➤ data acquisition software, interface cables, tool kit</p> <p>➤ crystal holder</p> <p>➤ O-rings</p> <p>➤ 10 Au-coated quartz crystals of each frequency (5 and 10 MHz).</p> <p>➤ Computer specifications: Windows original, Intel® Core i7 with 17" diagonal IPS widescreen anti-glare backlit non-touch LCD (1920 x 1080), 4 GB RAM (1 x 4 GB), 500 GB 7200 rpm HDD, Super Multi DVD writer, Intel HD Graphics card, USB, HDMI Ports, Keyboard, mouse, power and data cables and all other major accessories.</p> <p>➤ Make: Australia, Europe, USA, Japan, UK or Equivalent</p>	01					
4	Quartz Crystal Microbalance-D (QCM-D)	<p>➤ Quartz Crystal Microbalance-D system with gold coated QCM-sheets of 5 MHz and 10 MHz</p> <p>➤ fully automated fluid control</p> <p>➤ Fully automated temperature control system +4 °C to +80 °C.</p> <p>➤ Accessories: two Flow Cell, complete software suite for instrument control, signal acquisition, real time display of frequency, damping (dissipation), temperature and pump flow profiles, data storage with an All-in-one PC.</p> <p>➤ Computer specifications: Windows original, Intel® Core i7 with 17" diagonal IPS widescreen anti-glare backlit non-touch LCD (1920 x 1080), 4 GB RAM (1 x 4 GB), 500 GB 7200 rpm HDD, Super Multi DVD writer, Intel HD Graphics card, USB, HDMI Ports, Keyboard, mouse, cables and other major accessories.</p> <p>➤ Make: Australia, Europe, USA, Japan, UK or Equivalent</p>	01					
5	Universal Frequency Counter	<p>➤ 350 MHz baseband frequency,</p> <p>➤ 6 or 15 GHz microwave channels, 12 digits/sec, 20 ps single-shot time resolution,</p> <p>➤ Up to 75,000 and 90,000 readings/sec (frequency and time interval),</p> <p>➤ Basic modulation domain analysis (MDA) and timestamp, pulse/burst microwave measurement</p> <p>➤ Datalog trend plot</p> <p>➤ Cumulative histogram</p>	01					

		<ul style="list-style-type: none"> ➤ Built-in math analysis and statistics ➤ 1M reading memory and USB Flash storage ➤ LXI-C/Ethernet LAN, USB, GPIB ➤ Software and all major accessories ➤ Make: Europe, Europe, USA, Japan, UK or Equivalent 						
6	High Precision LCR-Meter	<ul style="list-style-type: none"> ➤ Frequency: 20 Hz to 10 MHz ➤ Test signal level: 0 to 2 Vrms/0 to 20 mArms, 0 to 20 Vrms/0 to 100 mArms¹, DC bias capability Built-in: 1.5 V, 2 V ➤ Parameters: 330 ms/380 ms @ 20 Hz to 5.6 ms/88 ms @ 2 MHz. ➤ Accessories: electrical connection cables and GPIB/USD/USB control cables, software, dielectric test fixture, liquid test fixture, probe kit ➤ Computer specifications: Windows original, Intel® Core i7 with 17" diagonal IPS widescreen anti-glare backlit non-touch LCD (1920 x 1080), 4 GB RAM (1 x 4 GB), 500 GB 7200 rpm HDD, Super Multi DVD writer, Intel HD Graphics card, USB, HDMI Ports, Keyboard, mouse, power, data cables and all major accessories. ➤ Make: Europe, USA, Japan, UK or Equivalent 	01					
7	Potentiostat/ Galvanostat	<ul style="list-style-type: none"> ➤ Frequency Ranges: 10 MHz to 10 μHz, ➤ Minimum AC Voltage Amplitude: 0.1 mV RMS Sweep, Linear or Logarithmic, iR Compensation, Signal Monitors: E and I, Digital inputs/outputs, 5 TTL logic outputs, 2 TTL logic inputs SYNC ADC, Auxiliary Voltage Input, input impedance 10 kΩ, BNC connector DAC Voltage Output (Standard) ± 10 V range, output impedance 1 kΩ, BNC connector, Data Acquisition: 3 x 18 bit 1 M samples per second ADCs synchronized voltage/current/auxiliary, Time Base Resolution: 1 μs, Automatic Noise Filters, Power Amplifier: Compliance Voltage ± 48 V, Compliance Current ± 4 A, Potentiostat Bandwidth: 3.75MHz, Slew Rate >25 V per μs, Rise Time: (-1.0V to +1.0V) ➤ Voltage Control (potentiostat mode): Applied Voltage Range ± 10 V, Applied Voltage Resolution: for ± 10 mV signal = 305 nV, for ± 100 mV signal = 3 μV, for ± 1 V signal = 30 μV, for ± 10 V signal = 300 μV, Applied Voltage Accuracy: $\pm 0.025\%$ of setting ± 1 mV, Maximum Scan Rate 25 kVs⁻¹, ➤ Current Control (galvanostat mode) Applied Current Range: 0 to ± 4 A, Applied Current Accuracy: $\pm 0.2\%$ of reading, $\pm 0.2\%$ of range ± 2 pA, Minimum Current Resolution: 61 fA, Electrometer: Maximum Input Range ± 10 V, Bandwidth: ≥ 10 MHz (-3 dB), Input Impedance: $\geq 10^{14}$ Ω in parallel with ≤ 2 pF, Leakage Current: ≤ 2 pA, CMRR: 60 dB at 100 kHz ➤ Voltage Measurement: Voltage Range: ± 10 V, Voltage Resolution: 1.5 μV, Voltage Accuracy: $\pm 0.025\%$ of reading ± 1 mV ➤ Current Measurement: Current Ranges: Auto-ranging (13 ranges) 20 A to 40 pA, Current Resolution: 1.2 fA, Current Accuracy (DC) 2 nA 	01					

		<p>to 20 A, Bandwidth 10 MHz with bandwidth limit filter</p> <ul style="list-style-type: none"> ➤ Impedance (EIS) Frequency Ranges: 10 MHz to 10 μHz, Minimum AC Voltage Amplitude: 0.1 mV RMS ➤ Accessories: Rotating Disk Electrode: Operating Temperature 10°C to 40°C, ironless rotor, Speed Control, Speed Range: 100RPM to 8,000RPM, Analytical Cell Kit: Cell Bottom Kit, Cell Collar, Cell Bottom, Top Assembly, Purge Tube, Permanent Disk Electrodes: Glassy Carbon Disk electrodes 5.0 mm in diameter sealed in Teflon, Saturated Calomel Reference Electrode: 3.5 long, 14/20 Standard Taper Joint, 4 mm Porous Glassfrit on the end, Saturated Potassium Chloride filling solution, Platinum Counter Electrode Wire, Electrode Polishing Kit: 1 micron, 0.3 micron and 0.05 micron Micro Polish powder, glass plates for polishing pads, 73 mm diameter Nylon polishing pads and 73 mm diameter Micro cloth polishing pads, software and all major accessories. ➤ Make: Australia, Europe, USA, Japan, UK or Equivalent 						
8	Drying Oven	<ul style="list-style-type: none"> ➤ Drying oven with forced convection ➤ Temperature range 5 °C above ambient temperature up to 300 °C ➤ DS controller with integrated timer 0 to 99 h ➤ Digital temperature setting with an accuracy of one degree ➤ Independent adjustable temperature safety ➤ visual alarm ➤ controlled heating rate ➤ Adjustable front ventilation flap slide and rear exhaust \varnothing 50 mm ➤ Volume 60 liters ➤ 2 chrome-plated racks ➤ Temperature data: Temperature range: 5°C above ambient up to (°C/°F) 300/572, Temperature variation: 0,8 (\pm°C) at 70°C, Temperature fluctuation (\pm°C) 0.3 ➤ Electrical data: Enclosure protection IP 20, software and all major accessories. 	01					
9	Analytical Balance	<ul style="list-style-type: none"> ➤ Type: Digital Microprocessor Controlled ➤ Capacity: 210g ➤ Readability: 0.01mg ➤ Repeatability: $\leq \pm 0.01$ mg ➤ Response time: 3 Second ➤ Calibration: Internal ➤ Weighing Units: mg, g, ➤ with 3 sliding doors, ➤ Display: LCD ➤ Software and all major accessories. ➤ Make: Europe, USA, Japan, UK or Equivalent 	01					

10	Top Loading Balance	<ul style="list-style-type: none"> ➤ Type: Digital Microprocessor Controlled ➤ Capacity: 820-1000g ➤ Readability: 0.001g ➤ Repeatability: $\leq \pm 1$ mg ➤ Response time: 3 Seconds ➤ Calibration: External ➤ Weighing Units: mg, g ➤ Display: LCD ➤ Software and all major accessories. 	01					
11	Class II Biosafety Cabinet	<ul style="list-style-type: none"> ➤ Size: 120mm ➤ Total width (mm): 1370mm ➤ Working space Width: 1240mm, Depth: 650mm, Height: 650mm ➤ Digital Microprocessor controlled Touch screen, automatic on-off for specified hours by user, 3 Different air speed levels ➤ Acoustic & Visual alarm, 99,995% MPPS Hepa filter, according to EN1822 (with life counter) ➤ Motorized Tempered front glass door, Down Flow 0.4 m/s $\pm 20\%$, In Flow 0.4 m/s, Recirculation 1166, Exhaust 408, ➤ Gas Outlet ➤ Water Outlet ➤ Electrical Sockets ➤ UV Lamp ➤ Sound Level 50 db(A) ➤ Voltage (V) 220V, 50-60Hz, with height adjustable base stand ➤ Software and all major accessories. ➤ Make: Europe, USA, Japan, UK or Equivalent 	01					
12	CO₂ Incubator	<ul style="list-style-type: none"> ➤ Water jacket or direct heat temperature management ➤ Incubator Chamber Capacity: 167 Liters ➤ CO₂ Range %: 0 - 20% ➤ CO₂ Sensor Accuracy at 5%: $\pm 0.1\%$ ➤ CO₂ Recovery Rate to 5%: <5 Minutes to 95% of Set point ➤ Relative Humidity at 37°C: Up to 95% ➤ Advanced oxygen sensor ➤ Temperature Range Celsius: Ambient +5°C to 60°C. ➤ Temperature Uniformity Celsius: $\pm 0.25^\circ\text{C}$ at 37°C. ➤ Over Temperature Protection: Yes ➤ Temperature Alarm: Yes ➤ CO₂ Alarm: Yes ➤ Accessories: CO₂ cylinder with gauges, piping and safety valves ➤ Software and all major accessories. 	01					

13	Incubator	<ul style="list-style-type: none"> ➤ Capacity: 150-200 Liters ➤ Heating ; forced air convection ➤ Temperature range; ambient +5-70C ➤ accuracy 0.3C at +37C ➤ Control; Microprocessor PID control ➤ Safety; Over temperature cut-off, ➤ Electrical requirement; 220 V, 50/60Hz ➤ With all major accessories. 	01					
14	Lypholizer	<ul style="list-style-type: none"> ➤ Condenser Temperature -80C to -50C with glass barrels ➤ stainless steel pre cooling racks with metal covers ➤ Condenser Capacity: 4L ➤ Temperature and pressure display ➤ Oil Mist eliminator ➤ Vacuum Pump: 65Lpm ➤ Manifolds systems and stoppering device; 6 port manifold with vacuum valve: Six Flask 100-150ml ➤ software and all major accessories ➤ Make: Europe, USA, Japan, UK or Equivalent 	01					
15	Rotary Evaporator with Integrated vacuum controller	<ul style="list-style-type: none"> ➤ Integrated vacuum controller and auto jack type rotary evaporator with stainless steel water bath ➤ Capacity 1-3 Liters ➤ vertical condenser ➤ Pear shape flasks and round bottom flasks with capacity 1Lit, 2Lit and 3Lit ➤ rotary speed 1-180 rpm ➤ Temperature range; RT+5 - 180C ➤ LCD display ➤ motorized vertical lift ➤ integrated vacuum control ➤ Bath volume 5 Lt ➤ Timer, Clockwise/counter clockwise rotation ➤ Built-in programmable vacuum control ➤ Control on/off of vacuum pump ➤ Chiller with temperature -30 to +135C Reservoir Capacity 15, Liters, LCD display ➤ Software and all major accessories. ➤ Make: Europe, USA, Japan, UK or Equivalent 	01					
16	Fermenter 10L	<ul style="list-style-type: none"> ➤ Temperature range 0-50°C ➤ Speed range 50-500 rpm with agitation motor and cable ➤ 10 Litre working volume microbial vessel in supporting frame with a stainless steel top plate containing 7 x 12mm ports and 7 x 6.3mm ports, together with integral baffles, cooling coil, air sparge tube, long & short dip tubes, heating blanket ➤ Supplied with:- Temperature Sensor Heater for 10 litre vessel Stainless 	01					

		<p>steel condenser 3-way inlet Service Plate. pH range of 0-14 with LED display, calibration controls and 2 peristaltic pumps.</p> <ul style="list-style-type: none"> ➤ pH electrode ➤ Oxygen probe with special port fitting Cable for above 1m long Special port fitting to adapt pH electrode, Oxygen probe with both polarographic and galvanic electrode ➤ Cable With sensitivity controls suitable for use as both a foam or feed pump, complete with peristaltic pump. Supplied with:- Foam probe and cable ➤ Data logging and graphing system comprising a hardware interface and 8 channel software packages ➤ With computer and printer, with air compressor, sampling port with online sampling device (peristaltic pump + cuvette + silicon tubing + connector) with all accessories. ➤ Make: Europe, USA, Japan, UK or Equivalent 						
17	Refrigerator Centrifuge	<ul style="list-style-type: none"> ➤ Max speed 15000-20000rpm ➤ Temperature range; -20 to +40°C ➤ Maximum RCF; 50000xg ➤ Max capacity; 4x1500 ml ➤ data communication; USB port ➤ Display; high resolution colored LCD ➤ Power input; 220-230V ➤ Standard fixed angle rotors to accommodate ; 50 ml, 250 ml, 500ml, 1000ml tubes ➤ Software and all major accessories. ➤ Make: Australia, USA, Japan, UK or Equivalent 	01					
18	Homogenizer	<ul style="list-style-type: none"> ➤ Direct controller ➤ Speed range from 0-35000 rpm ➤ Speed & Power Control Optimized for a Sample ➤ Designed for Liquid and Tissue Sample, Max. 27,000 rpm (without load) ➤ Steeples, working volume 1 ~ 2,500ml ➤ Over Heat Protector, Ambient +5 ~ 50°C, 85%, dispensing tool 1-50 ml probe, 1-100ml probe ➤ Speed & Power Control Optimized for a Sample ➤ High Efficiency Dispersing Tool made of Stainless steel and PTFE ➤ Complete set with all accessories. ➤ Make: Europe, USA, Japan, UK or Equivalent 	01					
19	Nano Drop	<ul style="list-style-type: none"> ➤ Nucleic Acid Quantification ➤ DNA Quantification ➤ RNA Quantification ➤ Protein Quantification ➤ Microvolume Spectrophotometer with cuvet capability, 2048-element 	01					

		<p>linear silicon CCD array, Wave length range 190-840nm with accuracy $\pm 1\text{nm}$, with software and laptop, 1000, 0.5-2.0μL sample volume, Light source: Xenon flash lamp, absorbance accuracy: 0.002 absorbance (1 mm path), cuvette mode, Beam height: 8.5 mm, Heating: $37 \pm 0.5^\circ\text{C}$, Stirrer: 150-850 RPM, Pathlength: 10, 5, 2, 1 mm, Detection Limit: 0.4 ng/μL dsDNA, Maximum Concentration: 750 ng/μL (dsDNA),</p> <ul style="list-style-type: none"> ➤ Software and all major accessories. ➤ Make: Europe, USA, Japan, UK or Equivalent 						
20	Automatic Cryostat (Rotary Microtome)	<ul style="list-style-type: none"> ➤ Section thickness setting: 0.5 to 300 μm ➤ Maximum specimen size: 40 mm x 55 mm, Horizontal specimen feed: 25 mm, Vertical specimen stroke: 59 mm, ➤ Specimen retraction: 50 μm ➤ Specimen precision orientation: by 8°(x/y/z axis) ➤ Trimming: 5 to 150 $\mu\text{m} \pm 0.5 \mu\text{m}$, in steps of 5, 10, 30, 50, 100 and 150 μm ➤ Motorized coarse feed at two speeds: 500 $\mu\text{m/s}$ 1,000 $\mu\text{m/s}$ Cutting motor Cutting speed ranges: 0.1 mm/s to 170 mm/s 0.1 mm/s to 100 mm/s, Vmax210 mm/s ➤ Cryochamber cooling Temperature setting range: 0°C to -40°C, Defrosting: programmable, 1 automatic defrost cycle/24 h duration: from 6 to 12 min; manual defrosting, Freezing shelf temperature: approx. -45°C at an ambient temperature of 22°C, Specimen cooling, Temperature setting range: -10°C to -50°C ($\pm 3\text{K}$) ➤ Defrosting: manual defrosting, software and all major accessories ➤ Make: Europe, USA, Japan, UK or Equivalent 	01					
21	Cell Counter (Automatic Cell Counter)	<ul style="list-style-type: none"> ➤ Cell counting time: Less than 10 s (manual focusing) ➤ Cell Concentration Range: 5×10^4 - 1×10^7 cells/mL ➤ Cell Diameter Range: 3 - 60 μm (optimal: 8 - 30 μm) ➤ Output Information: Total / Live / Dead cell concentration ➤ Image Resolution: 5 Mpixels ➤ Color ➤ Adjustable Parameters: Size, Roundness ➤ Dilution factor ➤ Noise reduction ➤ Declustering ➤ LCD Touch Screen ➤ software and all major accessories ➤ Make: Europe, USA, Japan, UK or Equivalent 	01					

22	Real Time PCR (BIO-RAD)	<ul style="list-style-type: none"> ➤ Maximum ramp rate, °C/sec:5 ➤ Average ramp rate, °C/sec:3.3 ➤ Heating and cooling method: Peltier, Lid, °C: Heats up to 105 degree centigrade ➤ Temperature: Range, °C: 0–100, Accuracy, °C: ±0.2 of programmed target at 90°C, Uniformity, °C: ±0.4 well-to-well within 10 sec of arrival at 90°C, Operational range, °C: 30–100, Programmable span, °C: 1–24 ➤ Optical Detection: Excitation: 6 filtered LEDs, Detection: 6 filtered photodiodes, Range of excitation/emission wavelengths, nm: 450-730, ➤ Multiplex Up to 5 targets per well ➤ Sample capacity, wells:96 ➤ Sample size, µl: 1–50 ➤ software and all major accessories ➤ Make: Europe, USA, Japan, UK or Equivalent 	01					
23	96 Well PCR Thermal Cyclers	<ul style="list-style-type: none"> ➤ Sample capacity: 0.2ml:96 ➤ Frequency, Hz, single phase: 50–60 ➤ High resolution color display ➤ Ports (USB A / USB B)5/1 ➤ Temperature control modes: Calculated and block ➤ Onboard software, Windows CE 6.0 ➤ Sample capacity: 0.5ml: 60 ➤ Sample capacity: 384 well ➤ Maximum heating rate: 3.4°C per second ➤ Block temperature range: 10°C to 100°C (4°C final hold) ➤ Block uniformity at 55°C: ± 0.3°C ➤ Temperature accuracy at 55°C: ± 0.25°C ➤ Gradient: Yes, Adjustable heated lid temperature:35°C to 115°C or off ➤ Heated lid pressure: Adjustable, dependent on consumables ➤ software and all major accessories ➤ Make: Europe, USA, Japan, UK or Equivalent 	01					
24	Autoclave	<ul style="list-style-type: none"> ➤ Minimum Capacity: 85-100 Liters ➤ Cooling fans ➤ Temperature range: 45C to 135C ➤ Temperature Accuracy: +-1C ➤ safety: Yes, input voltage: 220-230V ➤ With all accessories. ➤ Make: USA, Japan, UK or Equivalent 	01					

25	Microscope with Camera	<ul style="list-style-type: none"> ➤ Four accessible focus knobs, should have Bright Field, Phase Contrast, and Fluorescence modes. ➤ Dual cameras: 8M camera for Bright Field imaging, 3.2 M camera for Fluorescence Imaging. ➤ Motorized LED Fluorescence channels ➤ 6-position objective knob ➤ Precision XY stage control ➤ Software preferably should be able to tap to count number of cells, measure length and area, overlay, zoom-in and out, and share data through USB ➤ Provided with PC, printer and accessories ➤ Make: Europe, USA, Japan, UK or Equivalent 	01					
26	Multimode Microplate Reader	<ul style="list-style-type: none"> ➤ Measurement Technology: Absorbance, Fluorescence intensity, Luminescence and Alpha Screen ➤ Measurement Type: End-point, kinetic, spectra, multipoint and kinetic spectra ➤ Plate Type: 6 - 1536 well plates (absorbance 6 - 384 well plates) ➤ Light Source: Xenon flash lamp and LED ➤ Wavelength Selection: Absorbance: double mono chromators; Fluorescence intensity: double excitation and emission mono chromators; Alpha Screen: Filters; Double mono chromators for spectral scanning, Wavelength Range: Absorbance: 200 - 1000nm, Fluorescence intensity: Excitation: 200 - 1000nm, Emission: 270 - 840nm, Luminescence: 360 - 670nm, Alpha Screen: Excitation 680nm, Emission 400 - 660nm, Linearity: 0 - 4Abs (96-well plate) at 450nm, $\pm 2\%$, 0 - 3Abs (384-well plate) at 450nm, $\pm 2\%$, Read-out Range: 0 - 6Abs, Accuracy: 0.003Abs or $\pm 2\%$, at 200 - 399nm (0 - 2Abs), 0.003Abs or $\pm 1\%$, at 400 - 1000nm (0 - 3Abs), Precision: SD < 0.001Abs or CV $< 0.5\%$, at 450nm (0 - 3Abs), Sensitivity: Fluorescence intensity (top reading): < 0.4 fmol, fluorescein/well (black 384-well plate), Luminescence: < 7 amol ATP/well (white 384-well plate), Alpha Screen: < 100 amol phosphotyrosine/well (384-well plate), Dynamic Range: Fluorescence intensity: top reading > 6 decades, Luminescence: > 7 decades, No. of Dispensers: One, Dispense Volume: 2 - 5,000μL (1mL syringe), 5 - 25,000μL (5mL syringe) ➤ Incubator Temperature: up to 45°C ➤ Shaking: Orbital ➤ Measurement Speed: Reads a 96-well plate in 15 sec., a 384-well plate in 45 sec., and a 1536-well plate in 135 sec. (minimum times) ➤ Interface: PC Software 	01					

27	Laboratory Freezer (upright)	<ul style="list-style-type: none">➤ Temperature range: -10 C to -40C➤ Capacity: 400 Liters➤ Input Voltage: 220V➤ Visual/Acoustic alarm➤ Digital Microprocessor Controlled➤ Make: Europe, USA, Japan, UK or Equivalent	01																															
28	GC-MS (Triple Quadrupole Mass Spectrometer)	<ul style="list-style-type: none">➤ GC Main System with Triple Quadrupole Mass Spectrometer Detector, autosampler (air and liquid), TCD detector, FID detector, Software and Computer➤ MS Workstation software should control all GC, autosampler and MS functions➤ It should allow fully automated quantitative and qualitative analyses with standard and optional Custom Reports➤ Provided library data bases should be: NIST, Wiley, Pfleger-Mauer-Weber drug and pesticide library, Rosner Mass Spectral Library of Designer Drugs, Kuhnle Mass Spectral Library of Pharmaceuticals, Agrochemicals, and other custom libraries➤ Accessories, Headspace Sampler, multi functional automatic gas sampler, Direct Sample Inlet Device, syringes, standards, capillary columns (polar and non-polar), packed column, tool kit etc.➤ Mass Spectrometer Specifications: <table><tr><th>Parameter</th><th>Value</th></tr><tr><td>Mode of operation</td><td>El standard, CI optional</td></tr><tr><td>Ion source material</td><td>Noncoated, proprietary inert source</td></tr><tr><td>Ion source temperature</td><td>150 to 350 °C</td></tr><tr><td>Filaments</td><td>Dual filaments for EI</td></tr><tr><td>Electron energy</td><td>10 to 300 eV</td></tr><tr><td>Mass filters (2)</td><td>Proprietary monolithic hyperbolic gold-coated quadrupole</td></tr><tr><td>Mass axis stability</td><td>< ± 0.10 u over 24 hours (10 to 40 °C)</td></tr><tr><td>Quadrupole temperature</td><td>106 to 200 °C</td></tr><tr><td>Mass range</td><td>m/z 10 to 1,050</td></tr><tr><td>Resolution</td><td>Selectable, 0.7 to 2.5 Daltons, default tune Settable, 0.4 to 4.0 Daltons</td></tr><tr><td>Scan rate</td><td>Up to 20,000 u/s</td></tr><tr><td>Detector</td><td>Triple-Axis HED-EM with extended-life EM and dynamically ramped iris</td></tr></table>	Parameter	Value	Mode of operation	El standard, CI optional	Ion source material	Noncoated, proprietary inert source	Ion source temperature	150 to 350 °C	Filaments	Dual filaments for EI	Electron energy	10 to 300 eV	Mass filters (2)	Proprietary monolithic hyperbolic gold-coated quadrupole	Mass axis stability	< ± 0.10 u over 24 hours (10 to 40 °C)	Quadrupole temperature	106 to 200 °C	Mass range	m/z 10 to 1,050	Resolution	Selectable, 0.7 to 2.5 Daltons, default tune Settable, 0.4 to 4.0 Daltons	Scan rate	Up to 20,000 u/s	Detector	Triple-Axis HED-EM with extended-life EM and dynamically ramped iris	01					
Parameter	Value																																	
Mode of operation	El standard, CI optional																																	
Ion source material	Noncoated, proprietary inert source																																	
Ion source temperature	150 to 350 °C																																	
Filaments	Dual filaments for EI																																	
Electron energy	10 to 300 eV																																	
Mass filters (2)	Proprietary monolithic hyperbolic gold-coated quadrupole																																	
Mass axis stability	< ± 0.10 u over 24 hours (10 to 40 °C)																																	
Quadrupole temperature	106 to 200 °C																																	
Mass range	m/z 10 to 1,050																																	
Resolution	Selectable, 0.7 to 2.5 Daltons, default tune Settable, 0.4 to 4.0 Daltons																																	
Scan rate	Up to 20,000 u/s																																	
Detector	Triple-Axis HED-EM with extended-life EM and dynamically ramped iris																																	

		<table><tr><td>MRM speed</td><td>800 transitions/sec</td></tr><tr><td>Minimum MRM dwell</td><td>0.5 msec</td></tr><tr><td>Collision cell</td><td>Linear hexapole</td></tr><tr><td>Collision cell gas</td><td>Nitrogen with helium quench gas</td></tr><tr><td>Collision energy</td><td>Selectable up to 60 eV</td></tr><tr><td>Vacuum system</td><td>Dual stage turbomolecular pump Total gas flow up to 8 mL/min</td></tr></table> <p>➤ Gas Chromatograph Specifications:</p> <table><tr><td>Parameter</td><td>Value</td></tr><tr><td>Injector</td><td>Split/splitless, Multimode inlet, PTV and others</td></tr><tr><td>Autosampler</td><td>ALS, CTC PAL3, Headspace Sampler</td></tr><tr><td>Oven temperature</td><td>Ambient + 4 to 450 °C</td></tr><tr><td>Ramp rate</td><td>120 °C/min (200 +V), 75 °C/min (120 V)</td></tr><tr><td>Retention time locking (RTL)</td><td>RTL-ready, constant flow or pressure</td></tr></table> <p>Make: Europe, USA, Japan, UK or Equivalent</p>	MRM speed	800 transitions/sec	Minimum MRM dwell	0.5 msec	Collision cell	Linear hexapole	Collision cell gas	Nitrogen with helium quench gas	Collision energy	Selectable up to 60 eV	Vacuum system	Dual stage turbomolecular pump Total gas flow up to 8 mL/min	Parameter	Value	Injector	Split/splitless, Multimode inlet, PTV and others	Autosampler	ALS, CTC PAL3, Headspace Sampler	Oven temperature	Ambient + 4 to 450 °C	Ramp rate	120 °C/min (200 +V), 75 °C/min (120 V)	Retention time locking (RTL)	RTL-ready, constant flow or pressure					
MRM speed	800 transitions/sec																														
Minimum MRM dwell	0.5 msec																														
Collision cell	Linear hexapole																														
Collision cell gas	Nitrogen with helium quench gas																														
Collision energy	Selectable up to 60 eV																														
Vacuum system	Dual stage turbomolecular pump Total gas flow up to 8 mL/min																														
Parameter	Value																														
Injector	Split/splitless, Multimode inlet, PTV and others																														
Autosampler	ALS, CTC PAL3, Headspace Sampler																														
Oven temperature	Ambient + 4 to 450 °C																														
Ramp rate	120 °C/min (200 +V), 75 °C/min (120 V)																														
Retention time locking (RTL)	RTL-ready, constant flow or pressure																														
29	ICP-MS (Inductively coupled Plasma Mass Spectrometry Triple Quadrupole	<p>➤ (TQ)ICP-MS Inductively Coupled Plasma Mass Spectrometer with quantification and detection of more than 80 elements, high sensitivity and low detection limit (ppt)</p> <p>➤ Auto-sampler and capacity of more than 100 samples.</p> <p>➤ With standards 1L each</p> <p>➤ PC, software with up-to-dated library and printer</p> <p>Specifications:</p> <table><tr><td colspan="2">Sample Introduction</td></tr><tr><td>Nebulizer</td><td>Concentric borosilicate glass with 400 µL·min-1 flow rate; PFA and high TDS optiona</td></tr><tr><td>Peristaltic Pump</td><td>Software controlled 12 roller 4 channel mini-pump</td></tr><tr><td>Spraychamber</td><td>cyclonic, high purity quartz</td></tr><tr><td>Peltier Cooler</td><td>Software control in range –10 °C to +20 °C</td></tr><tr><td>Injector</td><td>Quartz, 2.5 mm ID Option: 1.0 and 2.0 mm ID</td></tr><tr><td colspan="2">Plasma Ion Source</td></tr><tr><td>Torch</td><td>Push-in, single piece, quartz, demountable, no shield, Automatic gas coupling</td></tr><tr><td>RF Generator</td><td>Digital, solid state RF generator, ~27 MHz Dynamic frequency matching RF power range: 400 W to 1600 W</td></tr><tr><td>Load Coil</td><td>Water-cooled, silver-coated, copper load coil</td></tr></table>	Sample Introduction		Nebulizer	Concentric borosilicate glass with 400 µL·min-1 flow rate; PFA and high TDS optiona	Peristaltic Pump	Software controlled 12 roller 4 channel mini-pump	Spraychamber	cyclonic, high purity quartz	Peltier Cooler	Software control in range –10 °C to +20 °C	Injector	Quartz, 2.5 mm ID Option: 1.0 and 2.0 mm ID	Plasma Ion Source		Torch	Push-in, single piece, quartz, demountable, no shield, Automatic gas coupling	RF Generator	Digital, solid state RF generator, ~27 MHz Dynamic frequency matching RF power range: 400 W to 1600 W	Load Coil	Water-cooled, silver-coated, copper load coil	01								
Sample Introduction																															
Nebulizer	Concentric borosilicate glass with 400 µL·min-1 flow rate; PFA and high TDS optiona																														
Peristaltic Pump	Software controlled 12 roller 4 channel mini-pump																														
Spraychamber	cyclonic, high purity quartz																														
Peltier Cooler	Software control in range –10 °C to +20 °C																														
Injector	Quartz, 2.5 mm ID Option: 1.0 and 2.0 mm ID																														
Plasma Ion Source																															
Torch	Push-in, single piece, quartz, demountable, no shield, Automatic gas coupling																														
RF Generator	Digital, solid state RF generator, ~27 MHz Dynamic frequency matching RF power range: 400 W to 1600 W																														
Load Coil	Water-cooled, silver-coated, copper load coil																														

	Ar Gas Flow Controllers	Three channels: coolant, auxiliary, nebulizer							
	Additional Gas Flow Controllers	Capacity for two further MFCs for gas dilution, oxygen addition, laser ablation etc							
	Plasma TV	HD camera for remote monitoring of plasma status							
	Vacuum System								
	Configuration	Three stage, differential pumping							
	Vacuum Pumps	Split-flow turbo molecular pump, External backing rotary pump							
	Pump Down Time	< 15 min after maintenance							
	Interface								
	Sample Cone	Ni, 1.1 mm diameter orifice; Pt tipped							
	Skimmer Cone	Ni, 0.5 mm diameter orifice; Pt tipped							
	Skimmer Inserts	High sensitivity insert as standard							
	Interface Pump	External, high performance rotary pump							
	Extraction Lens	Single, low voltage, easy access, conical							
	Slide Valve	Software controlled, power failure interlock							
	Ion Optics								
	RAPID Lens	90° ion lens at a single fixed voltage							
	Electrical Connections	Cable free, fixed position, spring mounted gold contacts							
	Q1 Quadrupole								
	Frequency	4 MHz							
	Q2 QCell CRC								
	QCell	Non-consumable, Automatic low mass cut off							
	Standard MFCs	He – max. flow 12 mLmin-1, H ₂ – max. flow 15 mLmin-1 O ₂ , NH ₃ – max.flow 1.2mLmin-1							
	Q3 Quadrupole								
	Frequency	2 MHz							
	Mass Range	2-290 u							
	Scan Speed	> 3700 u/s							
	Mass Stability	< ± 0.025 u per day							
	Mass Analyzer								

		Abundance Sensitivity in TQ Mode	< 0.05 ppm						
		Ion Detection System							
		Detector	Dual mode discrete dynode electron multiplier						
		Minimum Dwell Time	100 μs in pulse and analog						
		Dynamic Range	> 10 orders of magnitude						
		➤ Make: Europe, USA, Japan, UK or Equivalent							

CONTRACT / AGREEMENT

THIS CONTRACT/ AGREEMENT is made on the _____, 201____
BETWEEN

INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD, a Public Sector University of the Government of Pakistan incorporated under the laws of Islamic Republic of Pakistan and having its principal place at Sector H-10 Islamabad (hereinafter called “the Purchaser”),

AND

M/s _____ incorporated under the laws of Pakistan and having its principal place of business at _____, Pakistan (hereinafter called “the Supplier”).

WHEREAS the Purchaser invited bids for Procurement of Lab Equipment for “**SA-Centre for Interdisciplinary Research in Basis Sciences**” under its approved PC-I titled: “**Expansion and Upgradation of International Islamic University Islamabad**” and has accepted a bid/quotation No. _____ dated: _____ submitted by the Supplier for the supply of following item(s) against total **CPT/CFR/FOR Price** _____ (_____) hereinafter called “the Contract Price” and the Purchaser agrees to pay the Supplier/Manufacturer the Contract Price or such other sum(s) as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

Sr. No.	Item Name	Specifications	Qty.	Make/Model/ Country of Origin	Unit Price	Total Price
TOTAL						

The Purchaser and the Supplier agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
 2. The following documents shall be deemed to form and be read and construed as part of this Agreement:
 - (f) The Tender Document "Terms & Conditions"
 - (g) BoQ
 - (h) The Certificate *(As referred at # 27 of Tender Document)*
 - (i) The Purchase Order
 - (j) The Special Conditions
 3. In consideration of the payments to be made by the Purchaser to the Supplier/Manufacturer as indicated in this Agreement, the Supplier hereby covenants with the Purchaser to execute the Goods and Related Services and to remedy defects therein in conformity in all respects with the provisions of the Contract/Purchase Order.
 4. The Purchaser hereby covenants to pay the Supplier/Manufacturer in consideration of the supply of the Goods and Related Services therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract/Purchase Order.
- Agreement to be executed in accordance with the laws of Islamic Republic of Pakistan on the day, month and year indicated above.

Signed by:

For and on behalf of the Purchaser
Name:
CNIC:

In the presence of:
Witness,

Signature: _____

Name: _____
CNIC:
Address: _____
Date: _____

Signed by:

for and on behalf the Supplier
Name:
CNIC:

in the presence of:
Witness

Signature: _____

Name: _____
CNIC:
Address: _____
Date: _____

SPECIAL CONDITIONS

1. Specifications and Standards:

- 1.1 The Supplier shall ensure that the Goods and Related Services comply with the technical requirements.
- 1.2 The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.

2. Packing and Documents:

- 2.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated, during transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods final destination and the absence of heavy handling facilities at all points in transit.
- 2.2 The Packing marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Purchase Order, including requirements, if any and in any other instructions ordered by the Purchaser.

3. Transportation:

- 3.1 Unless otherwise specified, responsibility for arranging transportation of the Goods shall be in accordance with the specified Incoterms.

4. Warranty:

- 4.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise by the Purchaser.
- 4.2 Unless otherwise specified in these conditions, the warranty shall remain valid for **twelve (12) months** after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in these conditions or for eighteen (18) months after the date of shipment, from the port, or place of loading in the country of origin, whichever period concluded earlier.

- 4.3 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.
- 4.4 Upon receipt of such notice, the Supplier shall, **within the 30 days** expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser (IIUI)

5. The Payment Terms will be:

- 5.1 For the CPT/CFR quoted items; payment will be made through irrevocable L.C (90:10 Model) in favor of Manufacturer. Where, 90% in this model will be released upon receipt of shipment and delivery documents. Remaining 10% will be made / released after successful inspection of the equipment at International Islamic University Islamabad.
- 5.2 For the FOR quoted items; 100% payment will be made after supply and successful inspection of the ordered equipment(s) at International Islamic University Islamabad after deduction of 10% retention money as per "Terms & Condition".