

**Tender Fee: Rs. 2,000/-
(Non-Refundable)**

TENDER FORM

Tender # IT/17/24-25 Provide and Supply Equipment for Telecommunication Research Lab

Date of Issue : **March 27, 2025**
Last Date of Submission : **April 18, 2025 (03:00 PM)**
Date of Opening of Tender : **April 18, 2025 (03:30 PM)**

Company Name: _____

NTN: _____, **SRB Registration Number:** _____

GST Registration Number: _____

Pay Order / Demand Draft # _____, **Drawn on Bank** _____

Amount of Rs. _____, **Dated:** _____

Notice Inviting Tender (NIT)

Tender Notice

The Institute of Business Administration (IBA) Karachi, invites online bids on SPPRA EPADS from tax-compliant suppliers, registered with the relevant tax authorities and SPPRA EPADS, for the following tender:

Tender Title (Ref. No.)	Procedure	Bid Security
Provide and Supply Equipment for Telecommunication Research Lab (IT/17/24-25)	Single Stage One Envelope	2%
Tender Fee & Dates		
<ul style="list-style-type: none"> ▶ <i>Tender Fee:</i> Rs. 2,000/- ▶ <i>Issuance start date:</i> March 27, 2025, from 9 AM ▶ <i>Issuance end date and time:</i> April 18, 2025, till 3 PM ▶ <i>Submission date and time:</i> March 27, 2025, to April 18, 2025, from 9:00 AM to 3:00 PM ▶ <i>Opening date and time:</i> April 18, 2025 at 3:30 PM 		

Tender documents can be downloaded from the IBA and SPPRA EPADS websites. The tender fee challan to be generated from the IBA website at <https://tenders.iba.edu.pk> and deposited at any branch of Meezan Bank Ltd.

Tender Document/Bid (with a copy of Bid Security/Earnest Money and supporting documents) should be submitted/uploaded on SPPRA EPADS <https://portalsindh.eprocure.gov.pk/>. The original Bid Security along with the Original Bid (duly signed and stamped) must be delivered to IBA, Karachi on below mentioned address before bid opening schedule. Bids will be opened on the same date and venue in the presence of the bidders' representatives who may wish to attend.

Please ensure that bid security, in the form of a Pay Order or Demand Draft, is submitted in favor of 'IBA Karachi' along with the tender.

N.B. (1) IBA Karachi reserves the right to reject any bid or cancel the bidding process subject to the relevant provision of SPP Rules 2010.

(2) Only uploaded bid along with supporting documents will be accepted. In case there is a contradiction between bidder's EPADS submitted bid and manually submitted bid, bid submitted on EPADS will be considered valid for evaluation purpose.

REGISTRAR

IBA, Main Campus, Karachi University Enclave, Karachi-75270
UAN: 111-422-422, Fax: (92-21) 99261508
Contact Person: Sr. Executive Procurement on 38104700, Ext: 2152
Email: tenders@iba.edu.pk, IBA Website: <https://tenders.iba.edu.pk>
SPPRA EPADS Website: <https://portalsindh.eprocure.gov.pk/>

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1. Introduction

Dear Tenderer

Thank you for the interest you have shown in response to the IBA's advertisement which has floated on IBA & SPPRA websites on March 27, 2025, to "Provide and Supply Equipment for Telecommunication Research Lab".

The Institute of Business Administration, Karachi (IBA) is the oldest business school outside North America. It was established in 1955 with initial technical support provided by the Wharton School of Finance, University of Pennsylvania. Later, the University of Southern California (USC) set up various facilities at the IBA & several prominent American professors were assigned to IBA. The course contents, the curriculum, the pedagogical tools & the assessment & testing methods were developed under the guidance of reputed scholars from these two institutions. IBA has zealously guarded the high standards & academic traditions it had inherited from Wharton & USC while adapting and adjusting them over time.

We expect to avail services/works/items of high standards that meet our prime & basic specifications through this transaction.

Please contact Senior Executive Procurement on 021 38104700 ext: 2152 for any information and query.

Thank you.

-sd-

Registrar

2. Instructions

(a) Sign & Stamp

It is necessary to fill in the Tender Form meticulously and sign & stamp every page. Moreover, attach the required supporting documentation according to the requirement. The tender document will be accepted ONLY on the IBA's prescribed Tender Document available on IBA's Website.

(b) Filling of Tender Form

It is mandatory to fill the Tender Form in writing in ink or type. Do not leave any column/item blank. If you want to leave the item/column un-answered please, write 'Doesn't Apply/Doesn't Arise'. If you need more space, please attach a paper & clearly mention the item/column name or number etc that referred to the column/item of the Tender Form.

(c) Collection of Tender

Tender documents can be downloaded from the IBA and SPPRA EPADS websites. The tender fee challan to be generated from the IBA website at <https://tenders.iba.edu.pk> and deposited at any branch of Meezan Bank Ltd.

(d) Tender Number

Please mention "Tender Number" at the top left corner of the envelopes. IBA, Karachi may reject any bid subject to the relevant provision of SPP Rules 2010 and may cancel the bidding process at any time before acceptance of bid or proposal as per Rule-25(i) of said rules.

(e) Communication

Any request for clarification regarding technical specifications should be submitted in writing to:

Contact Person (IBA):	Senior Executive Procurement Institute of Business Administration, Main Campus, University Enclave, Karachi
Tel #:	021 38104700; Ext 2152
Email:	tenders@iba.edu.pk

Stamp & Signature

(f) Submission of Documents and Address

Tender Document/Bid (with a copy of Bid Security/Earnest Money and supporting documents) to be submitted on SPPRA EPADS <https://portalsindh.eprocure.gov.pk/> by April 18, 2025 till 3:00 PM. The original Bid Security along with the Original Bid (duly signed and stamped) be delivered to IBA, Karachi on above mentioned address before bid opening schedule.

(g) Rights

Competent authorities reserve the right to accept or reject any quotation/tender without any reason thereof. Also, the Authority reserves the right to change/alter/ remove any item or article or reduce/enhance quantity without assigning any reason. IBA also reserves the right to issue a Purchase Order for any single item to different lowest responsive bidders or for all the items to any lowest responsive bidder.

(h) Point of Delivery

Supply will be delivered at IBA Store Main Campus University Enclave Karachi. IBA is not liable to pay any Custom duty, Levies, Taxes, Demurrage or any other charges, Warehousing, Logistics etc.

(i) Clarification / Proof

Please submit copies of certificates of registration with the Sales Tax and Income Tax departments. The manufacturer/firms/companies/distributors/suppliers should also provide copy(ies) of the certificate(s) etc as proof of their claim.

Stamp & Signature

3. Bidding Data

- (a) **Name of Procuring Agency:** Institute of Business Administration, Karachi.
- (b) **Brief Description of Works:** Provide and Supply Equipment for Telecommunication Research Lab.
- (c) **Procuring Agency's address:** IBA Main Campus, University Enclave, Karachi.
- (d) **Amount of Bid Security:** Bid Security of 2% of the total amount/cost will be submitted along with Tender Documents in the shape of PAY ORDER / DEMAND DRAFT only in the name of the Institute of Business Administration, Karachi.
- (e) **Period of Bid Validity (days):** Forty Five (45) Days.
- (f) **Deadline for Submission of Bids along with time:** The last date of submitting the Tender Document in a sealed envelope is April 18, 2025, by 03:00 PM in the Tender Box placed at the Security Office, Gate # 4, IBA Main Campus, University Enclave, Karachi. The Tender will be opened on the same day at 03:30 PM in the presence of representatives who may care to attend.
- (g) **The Venue, Time, and Date of Bid Opening:** The Tender will be opened on April 18, 2025, at 03:30 PM at IBA Main Campus, University Enclave, Karachi in the presence of representatives who may care to attend.
- (h) **Time for Completion from written order of commencing:** 30 days.
- (i) **Liquidity damages:** Liquidity damages at the rate of 2% per month of the total contract amount will be imposed on delayed delivery.
- (j) **Deposit Receipt No:** _____ **Dated:** _____
Amount (in words and figures): _____
Pay Order / Demand Draft #: _____, **Amount: Rs.** _____
Drawn on Bank: _____, **Dated:** _____

Stamp & Signature

4. Terms & Conditions

a. Bid Security

Bid Security, in the shape of a bank draft/pay order in the name of “**Institute of Business Administration**” Karachi, equivalent to 2% of the total cost of bid, should be submitted along with the tender documents.

b. Performance Security

Successful bidder should provide 5% Performance Security of total value of the Letter of Intent/Acceptance in the form of Pay Order or bank guarantee prior to the signing of the Contract. The Performance Security shall extend at least three months beyond the Date of Delivery/Completion of the contract.

c. Validity of the Tender

All proposals and prices shall remain valid for a period of 45 days from the closing date of the submission of the proposal. However, the Manufacturer/firms/companies/distributors/ suppliers are encouraged to state a longer period of validity for the proposal.

d. Currency

All currency in the proposal shall be quoted in Pakistan Rupees (PKR).

e. Ownership

The ownership of all products and services rendered under any contract arising as a result of this tender will be the sole property of IBA.

f. Arbitration and Governing Law

This tender and any contract executed under this tender shall be governed by and construed in accordance with the laws of Pakistan. The IBA and all Bidder responding to this tender and parties to any contract executed according to this tender shall submit to the exclusive jurisdiction of the Pakistani courts. The arbitration proceeding will be governed by the Arbitration Act, of 1940, and the substantive and procedural law of Pakistan. The venue shall be Karachi.

g. Support Capabilities

The Bidder should indicate the support capabilities for all the hardware provided during the course of the warranty.

h. Acceptance of Tender

The IBA reserves the right not to accept the lowest and to annul the bidding process without assigning any reason whatsoever. IBA Karachi may ask to provide a demo unit that the supplier quoted in the tender. After the final inspection of the unit, the decision will be made.

Stamp & Signature

i. Compliance to specifications

The Bidder shall provide information as per requirements given in BoQ. However, Bidder can submit multiple solutions. Bidder may not propose/supply any kind of refurbished hardware equipment/components in their proposals.

j. Cancellation

IBA reserves the right to cancel any or all of the above items if the material is not in accordance with its specifications or if the delivery is delayed.

k. Invoice

The invoice/bill should be submitted to Purchase Department.

l. Stamp Duty

Stamp duty 0.35% against the total value of the Letter of Acceptance will be levied accordingly.

m. Delivery Time

The supply should be completed at IBA, Karachi within 45 days after receiving of LoA.

n. Payment

Payment will be made within 30 working days, after the complete supply of required items as per the Bill of Quantity and submission of the commercial invoice at IBA.

o. Award of Tender

This tender can be awarded on itemized basis.

p. Liquidity Damages

Liquidity damages at the rate of 2% per month of the total contract amount will be imposed on delayed delivery or work, up to 10% of the total contract value.

q. Increase in Price

No increase in the value of the above-mentioned items will be accepted on account of either unit price, total price, any or all other charges, duties, taxes, the scope of supply and or any other head of account shall be allowed.

r. Genuinity

Only genuine or original Items will be accepted. Any counterfeit or substandard item will not be allowed or accepted.

Stamp & Signature

5. Integrity Pact

- (a) Its intention is not to obtain the Provide and Supply work of any Contract, right, interest, privilege, or other obligation or benefit from the IBA or any administrative or financial offices thereof or any other department under the control of the IBA through any corrupt practice(s).
- (b) Without limiting the generality of the forgoing the Bidder represents and warrants that it has fully declared the charges, fees, commission, taxes, levies etc, paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within the IBA directly or indirectly through any means any commission, gratification, bribe, gifts, kickback whether described as consultation fee or otherwise, with the object of obtaining or including the Provide and Supply or service contract or order or other obligations whatsoever from the IBA, except that which has been expressly declared pursuant hereto.
- (c) The Bidder accepts full responsibility and strict liability for making any false declaration/statement, not making full disclosure, misrepresenting facts or taking any action likely to degrade the purpose of declaration, representation and warranty. It agrees that any contract/order obtained aforesaid shall without prejudice to any other right & remedies available to the IBA under any law, contract, or other instruments, stand void at the discretion of the IBA.
- (d) Notwithstanding any right and remedies exercised by the IBA in this regard, Bidder agrees to indemnify the IBA for any loss or damage incurred by it on account of its corrupt business practice & further pay compensation to the IBA in any amount equivalent to the loss of any commission, gratification, bribe, gifts, kickback given by the company/firm/supplier/agency/bidder as aforesaid for the purpose of obtaining or inducing Provide and Supply/work/service or other obligation or benefit in whatsoever from the IBA.

Note:

This integrity pact is a mandatory requirement other than auxiliary services/works.

Stamp & Signature

6. Bidder Qualification Criteria

Sr. No.	Mandatory Eligibility Criteria	Remarks Yes / No	Required Supporting Documents
1.	Relevant experience of at least last three (03) years		One Relevant Purchase Order/Contract of each year
2.	Last 3 years' turnover with a minimum of 5 million (per year) on average		Annual Income Tax Return of last three years
3.	Active Income Taxpayer at the time of submission of the bid		NTN and STRN registration certificates
4.	Active Sales Taxpayer		Copy of Last month's Sales Tax & Services Tax return

Note: Bidder must upload all the Supporting Documents on SPPRA EPADS for evaluation. Any missing documents may affect the bid evaluation.

Stamp & Signature

7. Bill of Quantity

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
1	<p>Portable Wireless/Bluetooth Speaker</p> <ul style="list-style-type: none"> Batteries: 1 CR2 batteries Control Method: Voice Color: Black Model: SoundTouch 30, 738102 or equivalent Brand: Bose or equivalent <p>Reference: https://www.bose.co.nz/en_nz/support/products/bose_speakers_support/bose_smarthome_speakers_support/soundtouch-30-wireless-music-system.html?srsId=AfmBOop0-eWSmPq09Odv3HwvV24auSs3BQueflx_3Xdri4b6_8TCb0rd</p> <p>With standard OEM warranty</p>			2 Units		
2	<p>Thermostat</p> <ul style="list-style-type: none"> Display: 2.4" QVGA IPS liquid crystal display (240 x 320 pixels) with digital brightness enhancement film and mirrored glass lens Sensors: Motion, Temperature, Humidity, Capacitive touch, Ambient light Power consumption: Less than 1 kWh/month Battery backup: 2 AAA 1.5V alkaline batteries Connectivity: Wi-Fi: 802.11b/g/n 2.4 GHz, 802.11a/n 5 GHz Wi-Fi, Wireless interconnect: Bluetooth Low Energy Multi-zone control Matter certified Voice control <p>Brand: GoogleNest Thermostat or equivalent</p> <p>Reference: https://store.google.com/us/product/nest_thermostat?hl=en-US</p> <p>With standard OEM warranty</p>			1 Unit		

Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
3	<p>Speaker</p> <ul style="list-style-type: none"> • Built in Google Assistant • Connectivity: 802.11b/g/n/ac (2.4 GHz/5 GHz) Wi-Fi • Smart Home Compatibility • External adapter: 30W, 24V • Speakers & mics: 75 mm woofer and 19 mm tweeter • Sensors: Capacitive touch controls (3 touch) • Processor: Quad Core A53 1.8 GHz • Supported operating systems Home: Android <p>Brand: Google Nest Audio or equivalent</p> <p>Reference: https://store.google.com/us/product/nest_audio?hl=en-US With standard OEM warranty</p>			1 Unit		
4	<p>LED Screen</p> <ul style="list-style-type: none"> • Camera: 6.5 MP cam., 127° view and auto-framing, • Quick Gestures: Face Match technology mic + camera switch • Display: 10" HD touchscreen (1280 x 800) • Power cable: 1.5 m • Speakers & Mic • Google Assistant: built in • Stereo speaker system (2x 18mm 10W tweeters, 1x 75mm 30W woofer), Far-field microphones, Ultrasound sensing, Voice Match technology • Sensors: Ambient EQ light sensor • Connectivity: 5.0 support, 802.11b/g/n/ac (2.4GHz/5GHz) Wi-Fi, Bluetooth® 5.0 • Chromecast: built in • Power: 30W power adapter, DC Power Jack • Operating System: Android, iOS <p>Brand: Google Nest Hub Max or equivalent</p> <p>Reference: https://store.google.com/us/product/google_nest_hub_max?hl=en-US With standard OEM warranty</p>			1 Unit		

 Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
5	<p>Wireless Access Point</p> <ul style="list-style-type: none"> • Auto, WiFi optimise • Coverage: Up to 2200 square feet per router • Expandable IEEE 802.11s mesh Wi-Fi • Scalable and flexible system • Automatic Wi-Fi optimization • Proactive band steering: 802.11k/v • Auto-QoS for video calls • Device prioritization, up to 8 hours • Self-monitors and diagnoses network issues • Smart home connectivity • Matter, Thread border router built-in (802.15.4 at 2.4 GHz), Bluetooth® Low Energy (BLE) • support higher-power 6 GHz channels • Performance: Wi-Fi 6E, 802.11ax Wi-Fi standard · AXE5400 - combined speeds up to 5.4 Gbps · 2x2 (6 GHz) · 2x2 (5 GHz) · 2x2 (2.4 GHz) · Wi-Fi 6E is up to 2x faster than Wi-Fi 6 • Security built in: WPA3 encryption • Secure booting and software updates help protect Nest Wifi Pro from running unauthorized software and router hacks • Automatic security and software updates • Ports and connectors: Two Ethernet ports support 1 Gbps wired speeds per router <p>Brand: Google Nest Wifi Pro or equivalent</p> <p>Reference: https://store.google.com/us/product/nest_wifi_pro?hl=en-US</p> <p>With standard OEM warranty</p>			3 Units		

Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
6	<p>CCTV Camera</p> <ul style="list-style-type: none"> • Indoor, wired • Voice Assistant • 2-megapixel, color sensor 135° diagonal field of view 6x digital zoom 16:9 aspect ratio • Video Up to 1080p (1920 x 1080) at 30 frames/sec 24/7 live view HDR Night vision H.264 encoding • Video History up to 3 hours of event • Captures and stores video clips of activity within the past 3 hours • With a Nest Aware subscription • Audio: High-quality speaker and microphone Full-duplex 2-way audio with noise cancellation • Night Vision: Up to 15 ft (4.6 m) illumination 2 high-power 850 nm infrared LEDs • Wireless: 802.11a/b/g/n/ac (2.4GHz/5GHz) Wi-Fi WEP, WPA, WPA2, WPA3 encryption supported Bluetooth Low Energy (BLE) • Security: On-device machine learning Secure boot Automatic security updates 128-bit AES encryption with TLS/SSL • Power: Attached 10 ft (3.0 m) power cable with USB-A connector Included 7.5W USB-A power adapter • Mounting Options Table: top Mounts to wall with integrated wallplate and 2 screws <p>Brand: Google Nest Cam (indoor, wired) or equivalent</p> <p>Reference: https://store.google.com/us/product/nest_cam_indoor?hl=en-US</p> <p>With standard OEM warranty</p>			1 Unit		

Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
7	<p>Smoke Detector</p> <ul style="list-style-type: none"> • Sensors: Split-Spectrum smoke sensor, Electrochemical carbon monoxide sensor Temperature, Humidity, Occupancy (120° field of view up to 20 feet), Ambient light, Accelerometer • Battery: Three long-life backup AA batteries • Wireless: 802.11b/g/n (2.4GHz) Wi-Fi, 802.15.4 (2.4GHz), Bluetooth Low Energy • summary • Operating Temperature: 40°F (4 °C) to 100°F (38 °C) • Audio: 80 dB @ 3 ft (1 m) @ 1kHz, Speaker loudness: 80 dB @ 3 ft (1 m) @ 1kHz <p>Brand: Google Nest Smoke Alarm or equivalent</p> <p>Reference: https://store.google.com/us/product/nest_protect_2nd_gen?hl=en-US</p> <p>with official warranty</p>			1 Unit		
8	<p>USB Cable / USB Accelerator</p> <ul style="list-style-type: none"> • ML accelerator: Google Edge TPU coprocessor: 4 TOPS (int8); 2 TOPS per watt • Connector: USB 3.0 Type-C* (data/power) <p>Brand: Google Coral USB Accelerator or equivalent</p> <p>Reference: https://coral.ai/products/accelerator/</p> <p>With standard OEM warranty</p>			2 Units		

Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
9	<p>Computer Motherboard</p> <ul style="list-style-type: none"> • MSD, LED, USB-C, Eth., 4 X USB A, DP & cam., 19V • AI Performance: 67 TOPS • GPU: 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores • GPU Max Frequency : 1020 MHz • CPU: 6-core Arm Cortex -A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3 • CPU Max Frequency : 1.7 GHz • Memory: 8GB 128-bit LPDDR5 102 GB/s • Storage: (SD Card Slot & external NVMe via M.2 Key M) • Video Encode: 1080p30 supported by 1-2 CPU cores • Video Decode: 1x 4K60 (H.265), 2x 4K30 (H.265), 5x 1080p60 (H.265), 11x 1080p30 (H.265) • CSI Camera: 2x MIPI CSI-2 22-pin Camera Connectors • PCIe: M.2 Key M slot with x4 PCIe Gen3, M.2 Key M slot with x2 PCIe Gen3, M.2 Key E slot • USB: USB Type-A Connector: 4x USB 3.2 Gen2, USB Type-C Connector for UFP • Networking: 1xGbE Connector • Display: 1x DisplayPort 1.2 (+MST) connector • Other I/O: 40-Pin Expansion Header (UART, SPI, I2S, I2C, GPIO), 12-pin button header, 4-pin fan header, microSD Slot, DC power jack • Power: 7W - 15W – 25W <p>Brand: NVIDIA: Jetson Orin Nano Developer Kit 8GB or equivalent</p> <p>Reference: https://developer.nvidia.com/embedded/learn/get-started-jetson-orin-nano-devkit</p> <p>With standard OEM warranty</p>			1 Unit		

Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
10	<p>Computer Motherboard</p> <ul style="list-style-type: none"> • NXP i.MX 8M SoC (quad Cortex-A53, Cortex-M4F) • CPU: NXP i.MX 8M SoC (quad Cortex-A53, Cortex-M4F) • GPU: Integrated GC7000 Lite Graphics • ML accelerator Google Edge TPU coprocessor: 4 TOPS (int8); 2 TOPS per watt • RAM: 4 GB LPDDR4 • Flash memory: 8 GB eMMC, MicroSD slot • Wireless: Wi-Fi 2x2 MIMO (802.11b/g/n/ac 2.4/5GHz) and Bluetooth 4.2 • USB: Type-C OTG; Type-C power; Type-A 3.0 host; Micro-B serial console • LAN: Gigabit Ethernet port • Audio: 3.5mm audio jack (CTIA compliant); Digital PDM microphone (x2); 2.54mm 4-pin terminal for stereo speakers • Video: HDMI 2.0a (full size); 39-pin FFC connector for MIPI-DSI display (4-lane); 24-pin FFC connector for MIPI-CSI2 camera (4-lane) • GPIO: 3.3V power rail; 40 - 255 ohms programmable impedance; ~82 mA max current • Power: 5V DC (USB Type-C) <p>Brand: Google Coral Dev Single-Board Computer or equivalent</p> <p>Reference: https://coral.ai/products/dev-board/</p> <p>With standard OEM warranty</p>			1 Unit		

Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
11	<p>Computer Motherboard</p> <ul style="list-style-type: none"> • Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.8GHz • 8GB LPDDR4-3200 SDRAM • 2.4 GHz and 5.0 GHz IEEE 802.11ac wireless, Bluetooth 5.0, BLE • Gigabit Ethernet • 2 USB 3.0 ports; 2 USB 2.0 ports. • Raspberry Pi standard 40 pin GPIO header (fully backwards compatible with previous boards) • 2 × micro-HDMI® ports (up to 4kp60 supported) • 2-lane MIPI DSI display port • 2-lane MIPI CSI camera port • 4-pole stereo audio and composite video port • H.265 (4kp60 decode), H264 (1080p60 decode, 1080p30 encode) • OpenGL ES 3.1, Vulkan 1.0 • Micro-SD card slot for loading operating system and data storage • 5V DC via USB-C connector (minimum 3A*) • 5V DC via GPIO header (minimum 3A*) • Power over Ethernet (PoE) enabled (requires separate PoE HAT) • Operating temperature: 0~50 degrees C <p>Brand: Raspberry Pi 4 Model B Single or equivalent Reference: https://www.raspberrypi.com/products/raspberry-pi-4-model-b/</p> <p>With standard OEM warranty</p>			5 Units		

Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
12	<p>PC Stick Mini Computer</p> <ul style="list-style-type: none"> • Collection: Intel® Neural Compute Sticks • Processor Included: Intel® Movidius™ Myriad™ X Vision Processing Unit 4GB • Pre-Installed Operating System: OS Ind. • Supported Operating Systems: Windows 10, 64-bit*, Ubuntu 16.04*, CentOS 7.4* • Processor Base Frequency: 700 MHz <p>Brand: Movidius NCS 2 with Myriad X VPU; Intel Movidius Neural Compute Stick 2 with Myriad X Vision Processing Unit or equivalent</p> <p>Reference: https://www.intel.com/content/www/us/en/products/details/processors/movidius-vpu/movidius-myriad-x/products.html With standard OEM warranty</p>			2 Units		
13	<p>Motion Sensor</p> <ul style="list-style-type: none"> • Protocols: ZigBee • Range: 15 – 40m • Power Source: Battery • Battery Count & Type: CR-2450, 1-count • Operating Requirements: Samsung Smart Things hub • Location: Indoor use only • Temperature (Degrees): 0 to 40°C • Battery Life: Up to 2yrs <p>Brand: Samsung Motion Sensor or equivalent</p> <p>Reference: https://www.samsung.com/uk/smarthings/sensor/smarthings-motion-sensor-gp-u999sjvlbea/?srsltid=AfmBOorKnBqPaaM1WrS5z6s4fDJNtGHDgEZrnI3K5XOkX0Q4hPZbj_C With standard OEM warranty</p>			3 Units		

 Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
14	<p>Plug/Top/Smart Plug</p> <ul style="list-style-type: none"> • Communication Features • Protocol: ZigBee HA 1.2 • Range: 40+m LOS • Power: Rated Voltage: 240 VAC, 50Hz (13A) • Certifications: FCC, ZigBee, CE • Operating Temperature: 0 to 40 °C • Shipping/Storage Temperature: -20 to 50 °C • Humidity Range: 0 to 90 % RH. (non-condensing) • • OS Compatibility: iOS 7.0, Android 4.0, Windows Phone 8.1 or greater <p>Brand: Samsung Smart Plug or equivalent</p> <p>Reference: https://www.samsung.com/uk/smartthings/outlet/?srsltid=AfmBOoqNxBtfc4K0vSa7pEOZKSiv6XTb6K9xQvE8WYT21OCWREvCp6K2</p> <p>With standard OEM warranty</p>			3 Units		
15	<p>Water Leak Sensor</p> <ul style="list-style-type: none"> • Operating Temperature Range : 0-40 °C • Connectivity: Zigbee • Battery: Removable <p>Brand: Samsung Water Leak Sensor or equivalent</p> <p>Reference: https://www.samsung.com/uk/smartthings/sensor/smartthings-water-leak-sensor-gp-u999sjvlcea/?srsltid=AfmBOoqXDCCExB2AUsaPlhBQJP-UnoNA8jpdYVzNb4asmHy_WK5vqL50</p> <p>With standard OEM warranty</p>			3 Units		

 Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
16	<p>• Multipurpose Sensor Batteries: CR-2450, 1-count • Protocols : ZigBee • Range (Ft.) : 50-130 ft • Power Source: Battery • Battery Count & Type : CR-2450, 1-count • Operating Requirements: Samsung SmartThings hub • Location: Indoor • Temperature (Degrees F) : 32 to 104° • Battery Life : Up to 2yrs Brand: Samsung Multipurpose Sensor or equivalent</p> <p>Reference: https://www.samsung.com/us/smart-home/smartthings/sensors/samsung-smartthings-multipurpose-sensor-f-mlt-us-2/</p> <p>With standard OEM warranty</p>			3 Units		
17	<p>Push Button / Smart Button</p> <p>• Interface: Zigbee 3.0 • Packaging Contents: Product, Battery, Quick Start Guide, Health and Safety Guide, 3M adhesive strips Brand: Samsung Smart Button or equivalent</p> <p>Reference: https://www.samsung.com/uk/smartthings/button/smartthings-button-gp-u999sjvleea/?srsltid=AfmBOopLeHNqgpc3-M9KA-sF1iOp58mt7oWfY QkxSabVA6V Vcwq6Fs</p> <p>With standard OEM warranty</p>			5 Units		

Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
18	<p>Mesh Hub</p> <ul style="list-style-type: none"> • Smart Things Hub • Protocols: ZigBee, Z-Wave, IP, and other wireless protocols • Range (Ft.): 50-100 ft • Power Source: A/C with battery backup • Battery Count & Type : 4, AA batteries • Operating Requirements: Broadband Internet, & Internet router with Ethernet port • Location: Indoor use only • Battery Life: Up to 2 hrs (backup only) • Compatible Brands : Honeywell, Philips Hue, Kwikset and more <p>Brand: Samsung Smart Things Hub or equivalent Reference: https://www.samsung.com/us/smart-home/smartthings/hubs/samsung-smartthings-hub-f-hub-us-2/</p> <p>With standard OEM warranty</p>			2 Units		
19	<p>Weight Scale, Digital</p> <ul style="list-style-type: none"> • LED Display, Units in pounds & kilograms • Users: Log unlimited profiles with automatic user recognition • Measure range from 6.6 lbs to 400 lbs • Compatibility: iOS 12 or higher, Android 7.0 or higher, Compatible with Apple Watch • Connectivity: Bluetooth <p>Brand: RENPHO Elis 1+ Smart Body Scale or equivalent</p> <p>Reference: https://renpho.com/products/elis-1-plus-smart-body-scale?_pos=3&_fid=73605f5f2&_ss=c?variant=42286660649132</p> <p>With standard OEM warranty</p>			1 Unit		

Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
20	<p>LED Monitor / S3 Widescreen</p> <ul style="list-style-type: none"> • Viewable Screen Size: 31.5", Mode: Full HD • Panel Technology : Vertical Alignment (VA) • Response Time: 1 ms • Aspect Ratio: 16:9, Pixel Pitch: 14.3 mil • Viewing Angle: 178° (H), 178° (V) • Backlight Technology: LED • Mount Type: Wall Mountable • H-Frequency : 31.47 kHz to 192.69 kHz - HDMI • V-Frequency : 48 Hz to 165 Hz - HDMI • Curvature : 1500R • Active Display Area (mm) : 698x393 • Frequency (Horizontal/Vertical) : HDMI: 31.469KHz-192.692KHz/48Hz-165Hz • Display Port: 31.469~192.692KHz/48~165Hz • VESA Mount Standard: 100 x 100 • Maximum Resolution: 1920 x 1080 • Standard Refresh Rate: 165 Hz • Color Supported: 16.7 Million Colors • Color Depth: 8-bit • Dynamic Contrast Ratio : 100,000,000:1 • Brightness: 250 Nit • Tearing Prevention Technology : AMD FreeSync™ Premium (HDMI VRR) • Color Gamut : 72% NTSC • Native Contrast Ratio : 3,000:1 • HDMI Version : 2.0 • Headphone, Display Port Version : 1.4 <p>Brand: Acer Nitro ED320QR S3 Widescreen LCD Monitor or equivalent Reference: https://www.acer.com/us-en/monitors/gaming/nitro-ed0/pdp/UM.JE0AA.301</p> <p>With standard OEM warranty</p>			2 Units		

 Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
21	<p>Tablet Computer</p> <ul style="list-style-type: none"> • CPU Speed : 2.4GHz, 2GHz, Octa-Core • Display Size: 10.9" (277.0mm) • Resolution: 2304 x 1440 (WUXGA+) • TFT, Color Depth: 16M, S-Pen Support • Camera Resolution: 8.0 MP, Front: 12.0 MP • Video Recording & Playing Resolution: UHD 4K (3840 x 2160) @ 30fps • Storage/Memory: 8 GB, 256 GB • External Storage: MicroSD (Up to 1TB) • USB Version: USB 2.0 • Location Technology: GPS, Glonass, Beidou, Galileo, QZSS • Earjack: USB Type-C • Wi-Fi: 802.11 a/b/g/n/ac/ax 2.4G+5GHz, HE80, MIMO, 1024-QAM, Wi-Fi Direct • Bluetooth Version: Bluetooth v5.3 • Bluetooth Profiles: A2DP, AVRCP, DI, HID, HOGP, OPP, PAN • PC Sync.: Smart Switch (PC version) • OS: Android, Form Factor • Sensors: Accelerometer, Fingerprint, Gyro, Geomagnetic, Hall, Light • Battery Capacity (mAh, Typical): 8000 • Video Playing Format: MP4, M4V, 3GP, 3G2, AVI, FLV, MKV, WEBM • Audio Playing Format: MP3, M4A, 3GA, AAC, OGG, OGA, WAV, AMR, AWB, FLAC, MID, MIDI, XMF, MXMF, IMY, RTTTL, RTX, OTA <p>Brand: Samsung Galaxy Tab S9 FE or equivalent</p> <p>References: https://www.samsung.com/ae/tablets/galaxy-tab-s/galaxy-tab-s9-fe-wifi-gray-256gb-sm-x510nzaemea/ https://www.gsmarena.com/samsung_galaxy_tab_s9_fe-12517.php</p> <p>With standard OEM warranty</p>			3 Units		

 Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
22	<p>Multimedia Projector</p> <ul style="list-style-type: none"> • Projection System, 3LCD Technology, RGB liquid crystal shutter, LCD Panel, 0,62" with C2 Fine • Color Output: 4.600 Lumen-3.200 Lumen (economy) In accordance with IDMS15.4 • White Output: 4.600 Lumen-3.200 Lumen (economy) In accordance with ISO 21118:2020 • Resolution: 1080p, Enhancement: Full HD • Aspect Ratio: 16:09 • On-Screen Pixel Count: 2,073,600 • Contrast Ratio: 5.000.000: 1 • Light source: Laser • Durability: 20.000 hours High, 30.000 hours Eco • Keystone Correction: Auto vertical: ±30°, Manual horizontal ±30° • Colour Reproduction: Upto 1.07 billion • Optical: Throw Ratio: 1,32 - 2,12:1 • Zoom Manual, Factor:1 - 1,62 • Projection Lens Zoom Ratio: 1,32 - 2,12 : 1 • Optical Lens, Screen Size: 31" - 310", Offset: 10:01 • Interfaces: USB 2.0-A, USB 2.0, RS-232C, Ethernet interface (100 Base-TX / 10 Base-T), Wi-Fi Direct, VGA in (2x), VGA out, Composite in, Miracast, Jack plug out, Jack plug in (2x), Cinch audio out, Microphone input, HDMI (HDCP 2.2) (2x), Wireless LAN IEEE 802.11a/b/g/n/ac • Network Protocol • HTTPS, IPv6, SNMP, ESC/VP.net, PJLink • Loudspeaker: 16 Watt • Positioning: Ceiling Mounted, Desktop, Floor, Wall Mounted <p>Brand: EPSON LCD PROJECTOR EB-L260F; EPSON EB-L260F or equivalent</p> <p>https://www.epson.eu/en_EU/products/projector/portable/eb-l260f/p/38514</p> <p>With standard OEM warranty</p>			1 Unit		

 Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
23	<p>Blood Pressure Monitor</p> <ul style="list-style-type: none"> • Wireless Sync, Wi-Fi, Bluetooth • BPM Connect can be installed on a smartphone or a tablet, via the Withings App available on iOS (iOS 14 and higher) and Android (10.0 and higher) • Display: LED matrix screen • Unlimited storage on cloud • Up to 8 measurements on-device between synchronizations • Rechargeable battery, Charge via micro-USB cable, Battery life: up to 6 months • • Metrics: Blood pressure monitor, Systolic & Diastolic blood pressure, Heart rate <p>Brand: WiFi Blood Pressure Monitor (Withings - BPM Connect) or equivalent</p> <p>Reference: https://www.withings.com/eu/en/bpm-connect?srsId=AfmBOooUG3IqtY6RoA8ICpLuKTMle-hPeyJMu9ikWPeGJuAQ3Xj8Krm1</p> <p>With standard OEM warranty</p>			1 Unit		
24	<p>Glucose Meter</p> <ul style="list-style-type: none"> • 100-Kit 1 blood glucose meter, 1 lancing device, 100 lancets, 100 test strips, Carrying case • Quick start guide, User manual, USB charging cable <p>Brand: iHealth Gluco+ Wireless Smart Glucose Meter or equivalent</p> <p>Reference: https://ihealthlabs.com/products/ihealth-gluco-wireless-smart-glucose-monitor?srsId=AfmBOoq05fwzr05r6dq32je1o8LDDwJmt6IA0z4w7Blg5wmgVIGmSce1</p> <p>With standard OEM warranty</p>			2 Units		

 Stamp & Signature

Sr. No.	Items Description	Quoted Model	Quoted Brand	Qty	Unit Price	Total Price
25	<p>Glucose Test Strips</p> <ul style="list-style-type: none"> • Enzyme Type: GDH-FAD • Shelf-life: 24 months • Range & Accuracy: Result range: 20 mg/dL ~600 mg/dL (1.1 mmol/L~33.3mmol/L) <p>Blood source: Fresh capillary whole blood Blood volume: Min. 0.7 micro liter</p> <ul style="list-style-type: none"> • Operation & Storage: Between 39°F ~ 86°F(4° C to 30° C) and 10% ~ 85% relative humidity. <p>Operating conditions: 50 ° -95 ° F (10 ° C- 35 ° C)</p> <p>Brand: iHealth Blood Glucose Test Strips or equivalent</p> <p>Reference: https://ihealthlabs.com/products/ihealth-blood-glucose-test-strips-2019-version?srsId=AfmBOopzV-ueGaxr3kVBqUW2ChSKhfuzbCBmloP2kKpkGvQ6jy_g6IW</p> <p>With standard OEM warranty</p>			3 Units		
Total Amount						
18% GST						
Grand Total Amount						

Grand Total Rupees (in words) _____

Stamp & Signature

It is hereby certified that the terms and conditions have been read, agreed upon and signed.

M/s _____

Contact Person _____

Address _____

Tel # _____ Fax _____

Mobile _____ Email _____

Stamp & Signature

8. General Conditions of Contract

THIS AGREEMENT is executed at KARACHI, on this day _____, 2025.

BETWEEN

M/s. Institute of Business Administration, Karachi through its Registrar, located at Main Campus, University Enclave, Karachi, hereinafter called and referred to as "IBA" (which expression shall wherever the context so permits, be deemed to include its legal representatives, executors, successors and assigns) of the FIRST PART.

AND

M/s. _____, having its office at _____, hereinafter referred to as "THE SUPPLIER" (which expression shall wherever the context so permits be deemed to include its legal representatives, executors, successor and assign), through its proprietor Mr./Ms. _____, holding CNIC No. _____ on the SECOND PART.

WHEREAS "IBA" intends to obtain a Provide and Supply Equipment for Telecommunication Research Lab vide tender # IT/17/24-25 (IBA requirement) up to the satisfaction and handing over the material(s) to the "IBA" having accepted the offer in a finished form complete in all respect.

NOW IT IS HEREBY AGREED & DECLARED BY AND BETWEEN THE PARTIES AS FOLLOWS:

WITNESSETH

"IBA" hereby offers to appoint "THE SUPPLIER" as their supplier for the specific purpose of "Provide and Supply Equipment for Telecommunication Research Lab". "THE SUPPLIER" hereby agrees to the offer of the "IBA" in acceptance of the terms and conditions herein below forth.

Article I

DUTIES & SCOPE OF SUPPLY & SERVICES AND AGREEMENT

- 1.1 "THE SUPPLIER" agrees to provide & Provide and Supply Equipment for Telecommunication Research Lab to "IBA" whenever and wherever form is required as per the terms & conditions of this Agreement.
- 1.2 "THE SUPPLIER" will coordinate their work with the Associate Registrar ICT, of the "IBA" who will assist "THE SUPPLIER" in the supervision of the proposed Provide and Supply Equipment for Telecommunication Research Lab.
- 1.3 "THE SUPPLIER" will visit the Procurement Department located at Main Campus, University Road, Karachi as & when required with prior appointment.
- 1.4 All logistic charges will be borne by "THE SUPPLIER".
- 1.5 Delivery time must be within 30 days after receiving the Letter of Intent/Acceptance.

Article II

PAYMENT

- 2.1 Payment will be made within 30 working days after the complete delivery and submission of invoice.

Article III

WARRANTY

- 3.1 Standard OEM Warranties.

Article IV

REMUNERATION

- 4.1 The cost offered by the SUPPLIER is Rs. _____ (inclusive of all taxes) Provide and Supply Equipment for Telecommunication Research Lab vide tender # IT/17/24-25 variation may occur. The cost is inclusive of labor /transportation/supplies/taxes/levies/custom duties etc.
- 4.2 Liquidity damages at the rate of 2% per month, of the total agreed on payment as per the Letter of Intent/Acceptance, of the total cost, will be imposed in case of delayed delivery services. Services will be deemed completed in finished form as per specification and "THE SUPPLIER" have to deliver the required number of Provide and Supply Equipment for Telecommunication Research Lab to IBA.
- 4.3 Performance Security 5% of the total amount of the Letter of Intent/Acceptance will be provided by "THE SUPPLIER".
- 4.4 Stamp Duty @ 0.35% of the cost of the Letter of Intent/Acceptance will be deposited in the Government treasury by the SUPPLIER. This paid Stamp Duty challan would be submitted along with the Bill / Invoice.

Article V

ARBITRATION

- 5.1 In case of any dispute, difference or and question which may at any time arise between the parties hereto or any person under them, arising out in respect of this letter of intent or this subject matter hereof shall be referred to the Registrar of the IBA for arbitration/settling of the dispute, failing which the decision of the court law in the jurisdiction of Karachi binding to the parties. The Arbitration proceedings will be governed by the Arbitration Act, 1940 and the Substantive and procedural law of Pakistan. The venue shall be Karachi.

Article VI

TERMINATION

- 6.1 "IBA" may terminate this agreement if the job is not executed according to the requirement at any time after issuing a 15 days' notice.

Article VII

INDEMNITY

- 7.1 "THE SUPPLIER" in its individual capacity shall indemnify and keep IBA and any person claiming through IBA fully indemnified and harmless from and against all damages, cost and expenses

caused to or incurred by “THE SUPPLIER”, as a result of any defect in the title of IBA or any fault, neglect or omission by the “THE SUPPLIER” which disturbs or damage the reputation, quality or the standard of services provided by “IBA” and any person claiming through the IBA.

Article VIII

NOTICE

- 8.1 Any notice given under this AGREEMENT shall be sufficient if it is in writing and if sent by courier or registered mail.

Article IX

SEVERABILITY

- 9.1 If any terms covenant or condition of this agreement shall be deemed invalid or unenforceable in a court of law or equity, the remainder of this agreement shall be valid & enforced to the fullest extent permitted by prevailing law.

Article X

INTEGRITY PACT

- 10.1 The intention not to obtain the procurement/work of any Contract, right, interest, privilege, or other obligation or benefit from the IBA or any administrative or financial offices thereof or any other department under the control of the IBA through any corrupt practice(s).
- 10.2 Without limiting the generality of the forgoing the M/s. _____ represents and warrants that it has fully declared the charges, fees, commission, taxes, levies etc, paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within the IBA directly or indirectly through any means any commission, gratification, bribe, gifts, kickback whether described as consultation fee or otherwise, with the object of obtaining or including the procurement or service contract or order or other obligations whatsoever from the IBA, except that which has been expressly declared pursuant hereto.
- 10.3 M/s. _____ accepts full responsibility and strict liability for making any false declaration/statement, not making full disclosure, misrepresenting facts or taking any action likely to degrade the purpose of declaration, representation and warranty. It agrees that any contract/order obtained aforesaid shall without prejudice to any other right & remedies available to the IBA under any law, contract, or other instruments, be stand void at the discretion of the IBA.
- 10.4 Notwithstanding any right and remedies exercised by the IBA in this regard, M/s. _____ agrees to indemnify the IBA for any loss or damage incurred by it on account of its corrupt business practice & further pay compensation to the IBA in any amount equivalent to the loss of any commission, gratification, bribe, gifts, kickback given by the M/s. _____, as aforesaid for the purpose of obtaining or inducing procurement/work/service or other obligation or benefit in whatsoever from the IBA.

Article XI

MISCELLANEOUS

- 11.1 The terms and conditions of the AGREEMENT have been read over to the parties which they admit to be correct and abide by the same.
- 11.2 The validity of the contract will be effective from the date of issue of the Letter of Intent/Acceptance.
- 11.3 All terms and conditions of tender vide # IT/17/24-25 will be an integral part of this agreement.

IN WITNESS WHEREOF both the parties hereto have set & subscribed their respective hands to this agreement at Karachi on the date as mentioned above.