

## **Tender # Proc/201**



Tender Documents

### **INTERNATIONAL COMPETATIVE BIDDING**

Supply, Installation, Testing, Commissioning & Comprehensive Hands on Training of:

1. Robots & Robotics Related Devices
2. GPU-based Workstations & Laptops for Artificial Intelligence related Experiments.
3. Internet of Things (IoT) based Smart Lab Devices

Last Date for Submission

July 10, 2019 @ 1300 hours PKT (GMT+5)

Tender Opening Date

July 10,2019 at 1330 hours PKT (GMT+5)

### **Sukkur IBA University**

Airport Road, Sukkur, Pakistan

Email: [hari@iba-suk.edu.pk](mailto:hari@iba-suk.edu.pk)

Web: [www.iba-suk.edu.pk](http://www.iba-suk.edu.pk)

Telephone No. +9271-111-785-422

Technical Information of Equipment:

S. No	Items	Product name	Model	Make of Equipment	Part No	Relationship with principle
01						
02						
03						
04						
05						

Cost Estimation of the Equipment:

S. No	Items	Qty	Product name	Model	Make of Equipment	Part No	Unit Price	Total Cost
01								
02								
03								
04								
05								

## **1. GENERAL TERMS AND CONDITIONS**

The following General Terms and Conditions apply to all the equipment/works under this tender.

The last date of receipt of Bids is as mentioned on face sheet of this document.

### Documents/Details Required.

- 1.1 Documents should be properly signed and stamped by competent authority.
- 1.2. Detail of repair & maintenance facilities
- 1.3. Structure/Organizational Chart.
- 1.4. Affidavit to the effect that the firm has not been blacklisted by any Government/Semi Government Organization.
- 1.5. The Bidder indemnify Sukkur IBA University against all third-party claims of infringement of patent, trademark industrial design rights arising from use of the goods or any part thereof in Pakistan.
- 1.6. Sukkur IBA University or its representative shall have the right to inspect and/or to test the equipment to confirm their conformity to the contract specifications. The Technical Specifications shall specify what inspections and tests Sukkur IBA University may requires and where they are to be conducted. Sukkur IBA University shall notify the contractor, in writing, of the identity of any representatives entrusted for this purpose.
- 1.7. It is mandatory that the Bidders provide the following documents and information with respect to its relationship with Principal.
  - 1.7.1. Name and contact details of Principal/Manufacturer representative who is authorized to verify Vendor's local partnership
  - 1.7.2. Duration and scope of association in the current capacity with the Principal
  - 1.7.3. Copy of the Principal's Certification (along with its validity period), authorizing the Vendor as local partner/representative in Pakistan (if any) to Offer/Bid Principal's equipment and services
- 1.8. The Bidder/Vendor shall provide the following information with respect to its set up:

- 1.8.1. Number of Vendors offices and addresses, thereof, phone and fax numbers and e-mail address as well as names and designations of responsible persons.
- 1.8.2. Number of engineers and technical staff in Vendor's office
- 1.8.3. Profile of technical staff with relevant experience, resume and number of Customers and sites looked after /supported by each.
- 1.8.4. Problem reporting procedure and fault response time in hours for fault rectification, escalation procedures with respect to response or turnaround time in hours.
- 1.9. The Bidder shall provide following information with respect to its Company Profile
  - 1.9.1. Registered Name of the Organization.
  - 1.9.2. Registration status with taxation department
  - 1.9.3. Head Office address.
  - 1.9.4. Management structure & Organization Chart
  - 1.9.5. Name, Address with Telephone/Telex and Fax numbers of the contact Person
- 1.10. Financial status of the Vendor's/Bidder's Organization with supporting documents and last two years annual reports.
- 1.11. Provide a certificate from your bank certifying your sound financial position and credit limit from the bank.
- 1.12. List of clients and their Acceptance of deliverables, showing separately the items provided and value thereof
- 1.13. Sukkur IBA University reserves the right to reject any or all Bids/Offer without assigning any reason or cancel the process at any time as per SPP /PPRA rules.
- 1.14. Sukkur IBA University reserves the right to increase/decrease the quantity of items/scope of the work. Bidder has no right to challenge the decision in Court.
- 1.15 Documentary evidence of claims made in proposal regarding experience, relationship with principal etc.

## **2. PROPOSAL SUBMISSION REQUIREMENTS**

2.1. A bidder can submit bid for single, two or all items, Sukkur IBA University reserves the right to award order on item basis or on overall basis.

2.2. Sealed Bid clearly marked as "**ORIGINAL**" should consist of following two separate and independent parts/envelopes i.e. **1) Technical Proposal 2) Financial Proposal** and should be clearly marked as Technical Proposal/Financial Proposal in bold and affixed to each envelope at a clearly visible location.

### **2.2.1. TECHNICAL PROPOSAL**

2.2.1.1. Technical Proposal must include the complete solution proposed by the Vendor with filled-in specification sheets.

2.2.1.2. After review of the Technical Proposal, promising Vendors will be selected and may be asked to give a demonstration/presentation on their solution virtually or physically if possible.

2.2.1.3. Based on the Technical Proposal and the presentations, Vendors will be selected in order of preference and their Technical Solution will be rated on a scale of 100. The criteria considered will be same as mentioned in technical evaluation criteria list.

2.2.1.4. Financial Proposal of only those Vendors will be considered whose Technical Proposal qualify.

### **2.2.2. FINANCIAL PROPOSAL**

2.2.2.1. Financial Proposal will include the prices quoted on individual item/Equipment basis

2.2.2.2. For each category the quoted prices must include all taxes, customs and freight charges for delivery at the required locations at own risk and cost.

2.2.2.3. These items are required for non-for-profit educational institution. Sukkur IBA, therefore, expects significant educational and volume discounts.

2.2.2.4 the Bidder/Vendor shall furnish **separate earnest money** equivalent to **2%** of the total value of Bid in the form of Bank Draft/ bank pay order/ bank guarantee issued by scheduled bank in Pakistan or foreign bank duly counter guaranteed by a scheduled bank in Pakistan in favor of "**Sukkur IBA University**", valid for **at-least three months** and enclosed along with financial proposal.

2.3. No Bid shall be entertained without earnest money. Earnest money of the successful bidder will be released at the time of submission of Ten percent (10%) Performance Guarantee of the total contract value

2.4. Bid security is required to compensate Sukkur IBA against the consequences of:

2.4.1. Subsequent unauthorized variations and/or modifications of the terms of bid.

2.4.2. Pre-mature withdrawal of the bid before the completion of the bid evaluation

2.4.3. Failure of the bidder to sign the resultant Contract, in the event of such Contract being awarded to it.

2.5. Successful bidder is required to deposit **Ten percent 10%** of total contract value as **Performance Guarantee** in the form of Bank Draft/ bank pay order/ bank guarantee issued by scheduled bank in Pakistan or foreign bank duly counter guaranteed by a scheduled bank in Pakistan in favor of "**Sukkur IBA University** at the time of signing of contract agreement and will be released at the time of delivery of equipment at site.

**2.6. Proposals sent to Sukkur IBA by fax or email will not be accepted.**

2.7. An effort by a Bidder to influence Sukkur IBA, directly or indirectly THROUGH UNFAIR MEANS may result in the rejection of Bidder's Proposal and blacklisting for any future tender of Sukkur IBA.

2.8. Prices quoted will be firm for the entire period of Contract. All prices to be quoted in US \$ OR EURO and must clearly state all applicable taxes which must be included in quoted price.

### **3. HARDWARE AND SERVICE REQUIREMENTS**

Following are the minimum requirements which the bidder/vendor for the equipment:

3.1 The Vendor must install all equipment and components and must ensure that the proposed equipment is fully operational and function properly at all variables.

3.2 Vendor must furnish components, wires, connectors, materials and parts, equipment for the complete installation of the system, in accordance with recommendations of the equipment manufacturer. Installation shall follow standard broadcast wiring and installation practice and shall meet or exceed industry standards for such work.

3.3 Vendor must ensure that all systems are in first class working condition and free of short circuits, ground loops, video noise and excessive system noise or any fault affecting its efficiency/quality/life.

3.4 At time of installation, Vendor must provide owner's manuals, manufacturer's data sheets, and a complete equipment list.

3.5 At the time of installation, Vendor must provide comprehensive system schematics, labeling and showing detailed connections to all equipment.

### **1. SELECTION PROCEDURE**

Sukkur IBA University intent in issuing this document is to award a contract to the lowest and best responsive Vendor/Bidder who meets required standard of specifications and other factors.

Bidders may be required to provide virtual demo (proof of concept) to verify the claims in the Technical Specifications of the Brochures. This would also determine the quality and specifications of the equipment.

Bids will be evaluated as per evaluation criteria mentioned below.

**EVALUATION CRITERIA**

**(1) Technical Evaluation Criteria - Weight age 70 %**

S. No	Bidder Name	Maximum Score	Achieved Score	Remarks
1	Meeting Specifications	35		
2	Similar Projects completed in last three years	10		
3	Experience with Academic Institutions	5		
4	Relationship with Principal	5		
6	Technical Expertise available for Training & Trouble Shooting	15		
7	Warranty/ Guarantee	5		
8	Complains Response Time	5		Time bidder take in responding to complains
10	Lead Time (Order to Delivery Time)	5		
11	Company Profile	10		
12	Cliental Served Profile	5		
	<b>Total</b>	<b>100</b>		

Note: Please attach documentary evidence in support of your claims in technical proposal.

**(2) Financial Evaluation Criteria- Weight age 30 %**



## **2. DELIVERY**

Delivery of devices will be required at Karachi Port (Pakistan). Sukkur IBA University will clear the devices from Custom at Karachi Port and will pay the custom duties etc. payable at Karachi Port (Pakistan)

## **3. WARRANTY**

Following Warranty clauses are applicable:

The successful Bidders shall warrant the equipment and its components to be free from any sort of defects in material and workmanship for a minimum period of 2 year from date of completed installation and shall repair or replace on a timely basis any defective component, assembly or portion free of cost. Technical support should be available on call basis. Competent staff of the bidder will attend every call within 3-4 hours of its notification either on phone or in writing during business hours (9am -5pm). Delay in attending the call and delay in rectification of fault will lead to consequential financial damages to the Vendor/Bidder.

## **4. SERVICES**

Sukkur IBA University shall promptly notify the supplier in writing of any claims arising under this warranty and the Vendor/Supplier will repair/replace the defective stores at reasonable speed but within the specified period and time & without any additional cost, specifications, and/or other Contract commitments

## 5. LIQUIDATED DAMAGES

Liquidated damages shall be applicable as under:

- a) Delay of one week to handover the Equipment  
As per specifications = 0.5% of the total cost
  
- b) Delay of two weeks to handover the equipment  
As per specifications = 1.0% of the total cost
  
- c) Delay of three weeks to handover the  
Equipment as per specifications = 2.0% of the total cost
  
- d) Delay of four weeks to handover the equipment  
As per specifications =4.0% of the total cost

Note: In case of delay beyond four weeks, Sukkur IBA University reserves the right to cancel the order and impose penalty up to 10% of ordered value.

## **6. TERMS OF PAYMENT**

Payment shall be made in the following manner:

Sukkur IBA, being an educational institute, is exempted from GST and whole of custom duty as per S.R.O. 362(I)/2000 in case of imports therefore prefers to open Bank LC directly in favor of principal to avail GST and Custom duties exemption.

1. Please quote the rates on C&F (Cost & Freight) till Karachi port in US \$ or Euro, please clearly mention mode by Air or By Sea.

### **Important Note:**

Please quote for Supply, Installation, and Commissioning, Testing, Comprehensive Hands-on Training of laboratories equipment.

The quote should be as:

1. Cost/ Price of Supply of Items
2. Cost of Installation, Testing & Commissioning
3. Cost of Comprehensive operational and utilization hands on training as mentioned in technical specifications list.

## **7. OTHER TERMS AND CONDITIONS**

Note:

1. Warranty/Guarantee and Product Origin must be mentioned clearly.
2. Sukkur IBA reserves the right to increase or decrease the quantity

## Technical Specifications & Quantity

**Important Note:**

Wherever in below specifications list, any brand name is mentioned, please read with words “Or Equivalent “after brand name. The companies whose products are equivalent or better than products mentioned below are eligible to participate for this open competitive bidding.

<b>1. Robots &amp; Robotics Related Devices</b>			
<b>S No.</b>	<b>Robot/Equipment</b>	<b>Specifications</b>	<b>Quantity</b>
1	NAO V6 humanoid robot or Equivalent (Educator pack)	25 DoF, 58cm tall, with Intel Atom E3845 (1.91Ghz) processor, includes Battery charger, transport case & <b>Choregraphe license</b>	5
2	NAO V6 humanoid robot battery or Equivalent	Lithium ion, voltage/capacity 21.6 V / 2.9 Ah, Max charge voltage 25.2 V, charge current 1.8 A, Max charge / discharge current 2.3 A / 2.0 A, Energy 62.6 Wh	5
3	NAO V6 humanoid robot charger or Equivalent	Input: 100- 240 Vac, 50 / 60 Hz, 1.2A Output: 25.2 Vdc, 2A Max.	5
4	NAO V6 humanoid robot Training or Equivalent	<ul style="list-style-type: none"> <li>• Offline/Online Training of Trainers (TOT)</li> <li>• Beginner to Advanced level training</li> </ul> After completion of the training the users should be able to: <ul style="list-style-type: none"> <li>• Configure, operate, launching activities &amp; interact with the robot</li> <li>• Access robot’s sensors and data</li> <li>• Operate robot’s actuators and access their status</li> </ul>	4
5	Pepper robot (Host edition) or Equivalent	4ft tall, with Charger, Battery & host software license 1 year	1

6	Pepper robot Training or Equivalent	<ul style="list-style-type: none"> <li>• Offline/Online Training of Trainers</li> <li>• Beginner to Advanced level training</li> </ul> <p>After completion of the training the users should be able to:</p> <ul style="list-style-type: none"> <li>• Configure, operate, launching activities &amp; interact with the robot</li> <li>• Access robot's sensors and data</li> <li>• Operate robot's actuators and access their status</li> </ul>	4
5	Codrone Pro (Classroom pack) or Equivalent	Weight 37g (each), with blue-tooth & IR sensors, includes 10 drones, 10 batteries, 10 Blue-tooth boards (BLE), 10 Controller Build Sets, 10 Smart Inventors circuit boards, Software, Transport case	1
6	Erle-Copter kit (Black & Yellow) or Equivalent	<b>Dimensions</b> 370 x 370 x 95 mm <b>Weight</b> 878 grams, with Wi-Fi, autopilot, 8MP camera & GPS	5
7	Ozobot bit robots (Classroom kit) or Equivalent	Pack includes: 18 x Ozobot Bits robots, 3 x Multi-port charger, 1x Teacher's guide, 1x Ozobot tip sheet, 1x Ozobots storage box	1
8	Double robotics telepresence robot V2 or Equivalent	Mobile robot kit includes: One Double Robot V2 with battery, Charging Dock, Audio Kit & 1 Camera Kit	1
9	iPad Air 2 or Equivalent	Size 9.7 inches, Memory 32GB/2GB, iOS 8.1 or higher, include charger & charging cable	1
10	TurtleBot3 Waffle Pi robot or Equivalent	Dimensions: 281 x 306 x 141 mm Weight: 1.8 kg 2 Dynamixel XM430-W210-T servos Micro controller: Raspberry Pi 3	2

		<p>Embedded controller: Open-CR (32-bit ARM® Cortex®-M7)</p> <p>With sensors: Raspberry Pi camera, LiDAR 360° laser scanner, 3-axis gyroscope, 3-axis accelerometer, 3-axis magnetometer</p> <p>Include: battery &amp; charger</p>	
11	Jackal UGV robot or Equivalent	<p>External dimensions: 508 x 430 x 250 mm</p> <p>Weight: 17 kg</p> <p>Processor: Intel Core i5 4570T Dual core, 2.9GHz 2 GB</p> <p>Memory: 4GB/128GB</p> <p>Wireless Game controller, GPS, IMU, On-Board Computer, Wi-Fi Adapter, Accessory Mounting Plates</p> <p>Include battery &amp; charger</p>	2
12	Jackal battery & Charger or Equivalent	<p>Battery: Lithium Ion</p> <p>Capacity: 270-Watt hours</p> <p>24V/20A charger</p>	2
13	Bumblebee BB2 Colour Stereo Camera or Equivalent	Resolution: 640x480, 0.3 MP	2
14	Lynx motion AL5D Robotic Arm kit or equivalent	5 DoF, include HS-485HB Servo motors x 5, Servo motor control, cables and software	5
15	E-Puck 2 Robots or Equivalent	<p>STM32F4 @ 168 MHz (210 DMIPS) micro-controller, 8 proximity and light sensors, distance sensor, BT, Wi-Fi,</p> <p>Include serial cable, battery and charger</p>	10
16	E-Puck 2 Battery or Equivalent	1.8 Ah Li-ion battery	10
17	E-Puck Omivision camera or Equivalent	mounted on the Gumstix extension, Resolution 640x480,	10

		5MP, 18FPS, mini Wi-Fi dongle	
18	E-Puck Range & Bearing Board or Equivalent	Extension module for E-Puck 2	10
19	E-Puck Ground sensor module or Equivalent	3 IR proximity sensors, with I2C serial interface	10
20	E-Puck reflective strip or Equivalent	Mutual detection	10
21	E-Puck motors or Equivalent	20 steps per revolution, with a 50:1 reduction gear	10
22	WeBots Simulator or Equivalent	Premier Service Standard -1 year	1
23	Alphabot2 mobile robots or Equivalent	<b>Weight:</b> 0.48 kg, AlphaBot2-Pi, include, base, 2x servos, wheels, camera, pan tilt kit, Raspberry Pi 3 Model B, IR controller, Batteries, Screw, cables	20
24	MiRo-E Robot or Equivalent	Raspberry Pi 3B+ core, 720p HD cameras, Proximity & accelerometer sensors, include MIROSim access, battery & charger	2
25	4WD Robot Car Kit Arduino or Equivalent	Arduino UNO, Chassis, Motors, wheels, ultrasonic sensors	50
26	Servo motors	Dimension: 40.8 * 20.1 * 38mm, MG996R Micro Servo motor, Operating Voltage: 3.3-7.2V	100
27	Servo motors drivers kit	L: 2-7/8" W: 2" H: 7/8", contains PIC 16C71, Control up to 4 Servos.	50
28	Raspberry Pi 3 Model B+	Quad Core 1.4GHz 64bit CPU, 1GB RAM, Wi-Fi, Blue-tooth, 40-pin extended GPIO, 4 USB 2 ports	50
29	Raspberry Pi Sensors Modules	<ul style="list-style-type: none"> <li>• Camera Module V2 (8-mega-pixel sensor,</li> </ul>	50 (each)

		1080p30) <ul style="list-style-type: none"> <li>• 7inch Capacitive Touch Screen (800×480 high resolution, HDMI)</li> <li>• 3.2-inch Screens</li> <li>• PIR motion sensor</li> <li>• Mic Module</li> <li>• Ultrasonic sensor (HC-SR04)</li> <li>• RF ID reader (RC522 – Inductive RFID card reader)</li> <li>• GPS Module (NEO-6M)</li> <li>• Gyroscope (MPU 6050)</li> <li>• Compass (HMC5883L)</li> <li>• Real time (DS1307 RTC)</li> <li>• Servo board (PCA9685)</li> <li>• ESP8266 NodeMCU</li> <li>• T type 40 pin GPIO connector</li> </ul>	
30	Arduino	Arduino UNO Wi-Fi Rev 2	50
31	Arduino Sensor Modules	<ul style="list-style-type: none"> <li>• LCD (16×2 Character)</li> <li>• 2.8inch TFT LCD Touch Display (240 x 320 pixels)</li> <li>• NFC/RFID Shield (13.56MHz)</li> <li>• Camera (OV2640 2.0MP)</li> <li>• GPS Logger (With GPS &amp; SD card slot)</li> <li>• ESP8266 Wi-Fi module</li> <li>• Infrared-receiver</li> <li>• Ultrasonic sensor (HC-SR04)</li> <li>• Mic module (KY-038)</li> <li>• Speakers (2inch)</li> </ul>	50 (each)
32	Breadboards	400 Tie Point (Terminal Strip, tie-point 300; Distribution Strips, tie-point 100), ABS plastic material.	50



		Completely reusable, Size: 84 × 55 × 8.5 (LxWxH) mm	
33	Breadboard connection wires (Male to Male)	<ul style="list-style-type: none"> <li>• 6 inch</li> <li>• 12 inch</li> </ul> Mixed colour	100 (each)
34	Breadboard connection wires (Male to Female)	<ul style="list-style-type: none"> <li>• 6 inch</li> <li>• 12 inch</li> </ul> Mixed colour	100 (each)
35	Single Strand Connecting wires	Conductor diameter: 0.5mm, length: 5m Colour: <ul style="list-style-type: none"> <li>• Red</li> <li>• Black</li> <li>• Yellow</li> <li>• Green</li> <li>• Blue</li> <li>• Brown</li> </ul>	1 (each)
36	Electronics Tool Kit	Must include: <ul style="list-style-type: none"> <li>• Digital Multimeter</li> <li>• Screwdriver set (45 Pieces)</li> <li>• Pliers</li> <li>• Nose Pliers</li> <li>• Wire stripper</li> <li>• Diagonal cutter</li> <li>• Tweezers</li> <li>• ESD wrist band</li> <li>• Soldering iron (40W)</li> <li>• Soldering Stand</li> <li>• Soldering tips (1/16", 1/8")</li> <li>• Solder core 0.03" diameter (100g)</li> <li>• Solder sucker</li> </ul>	5
37	Variable Power Supply	Voltage: 3-24 V, Current 5A Max	5

**2. GPU-Based Workstations & Laptops for Artificial Intelligence Related Experiments - Devices for AI, Machine Learning and Data Science**

Machine	Specification	Quantity		
Dell Alienware Aurora Desktop Machine or Equivalent	<p>9th Gen Intel® Core™ i7 9700K (8-Core/8-Thread, 12MB Cache, Overclocked up to 4.6GHz on all cores)</p> <p>Windows 10 Pro 64-bit English</p> <p>Dual NVIDIA® GeForce RTX™ 2080 8GB GDDR6 each (NVIDIA NVLink SLI® Enabled) (OC Ready)</p> <p>64GB Dual Channel HyperX™ DDR4 XMP at 3200MHz</p> <p>512GB M.2 PCIe NVMe SSD (Boot) + 2TB 7200RPM SATA 6Gb/s (Storage)</p> <p>Alienware™ 850-Watt Multi-GPU Approved Power Supply with High Performance Liquid Cooling</p>	30		

<b>2. GPU-Based Workstations &amp; Laptops for Artificial Intelligence Related Experiments - Devices for AI, Machine Learning and Data Science</b>				
Machine	Specification	Quantity		
	Qualcomm DW1810 1x1 802.11ac Wi-Fi Wireless LAN and Bluetooth 4.2			
Keyboard	Multi-Media Keyboard	30		
LED Monitors	<a href="#"><u>Dell 24" or equivalent Widescreen LED Monitor ( P2419H)</u></a>	30		
Mouse	Mouse	30		
Dell Alienware Laptop Machine or equivalent	9th Gen Intel® Core™ i7 9700K (8-Core/8-Thread, 12MB Cache, Overclocked up to 4.6GHz on all cores)  Windows 10 Pro 64-bit English  Dual NVIDIA® GeForce RTX™ 2080 8GB GDDR6 each (NVIDIA NVLink SLI® Enabled) (OC Ready)  64GB Dual	5		

**2. GPU-Based Workstations & Laptops for Artificial Intelligence Related Experiments - Devices for AI, Machine Learning and Data Science**

Machine	Specification	Quantity		
	Channel HyperX™ DDR4 XMP at 3200MHz  512GB M.2 PCIe NVMe SSD (Boot) + 2TB 7200RPM SATA 6Gb/s (Storage)  Alienware™ 850- Watt Multi-GPU Approved Power Supply with High Performance Liquid Cooling  Qualcomm DW1810 1x1 802.11ac Wi-Fi Wireless LAN and Bluetooth 4.2			
Printer	Dell or equivalent Printer	2		
Scanner	Dell or equivalent Scanner	2		

<b>3. Internet of Things (IoT) based Smart Lab Devices</b>			
<b>S No.</b>	<b>Item</b>	<b>Specification</b>	<b>Quantity</b>
1	Smart Touch Switch	Compatible with Google Home, Amazon Echo & IFTTT, 3 Gang, Wireless Standard: IEEE 802.11 b/g/n 2.4G, Dimensions: 86*86*35(mm), Input: AC 100-240V 50/60Hz 2A Max, Output: AC 100-240V 50/60Hz	10
2	Smart Power Switch	Compatible with Google Home, Amazon Echo & IFTTT, 1 Gang, Wireless Standard: IEEE 802.11 b/g/n 2.4G, Voltage range: 100-240V AC, Max current: 15A, Max Power: 3500W	10
3	Smart Switch	Compatible with Google Home, Amazon Echo & IFTTT, 1 Gang, Wireless Standard: IEEE 802.11 b/g/n 2.4G, Max Current: 10A; Max Power: 2200W; Power Supply: AC 100-240	20
4	Smart Plug	Compatible with Google Home, Amazon Echo & IFTTT, 1 Gang (Type C), Wireless Standard: IEEE 802.11 b/g/n 2.4G, Max Current: 10A; Max Power: 2200W; Power Supply: AC 100-240 Plug: EU F type / Type C	10
5	Wi-Fi Wireless Switch Smart Home Module for Secondary Development	Compatible with Google Home, Amazon Echo & IFTTT, Wireless Standard: IEEE 802.11 b/g/n 2.4G, Power supply: 5~24V, Weight: 15g, Size 65*34*12(mm)	30
6	Self-locking Wi-Fi Wireless Switch	Compatible with Google Home, Amazon Echo & IFTTT, Wireless Standard: IEEE 802.11 b/g/n 2.4G, Power supply: 5V/12V	30
7	Google Home Smart Speakers or equivalent	Google mini, Colour: Charcoal, Input 5V, Cable & wall plug	5
8	Google mini holders or equivalent	For google mini, Material: Plastic, Colour: Charcoal/Black	5
9	Android Tablets	10.1-inch screen, Android 8.0 or above, Octa	2

		core processor, 4GB RAM, 32/64 GB ROM, Wi-Fi, BT, HDMI port	
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**Important Note:**

Wherever in above specifications list, any brand name is mentioned, please read with words “Or Equivalent “after brand name. The companies whose products are equivalent or better than products mentioned above are eligible to participate for this open competitive bidding.

**8. CLARIFICATION AND AMENDMENT IN RFP DOCUMENT**

A bidder requiring any clarification of the Document may so notify to contacts given below in writing or via email.

Hari Lal Nathani  
Manager Procurement  
Sukkur IBA University  
Airport Road Sukkur, Pakistan  
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UAN : +9271 564 4142



**Sukkur IBA University**  
Airport Road, Sukkur, Pakistan

## INTERNATIONAL COMPETITIVE BIDDING Tender # PROC/201

Sealed bids are invited from manufacturer/authorized distributors/authorized dealers on "Single stage two envelope basis" having vast experience in respective fields for Center of Excellence in Robotics, Artificial Intelligence (AI) and Blockchain.

S.#	ITEMS
1	Robots & Robotics Related Devices
2	GPU-Based Workstations & Laptops for Artificial Intelligence related Experiments
3	Internet of Things (IoT) based Smart Lab Devices

Details are mentioned in the tender documents, which can be downloaded from <http://iba-suk.edu.pk/tenders>. The Last date for the submission of bids is **10<sup>th</sup> July 2019, up to 1300 Hours (PKT GMT+5)**. The technical bids will be opened on the same day at **1330 Hours (PKT GMT+5)** in the presence of bidders or their authorized representatives (who may choose to be present). The Financial proposals of only technically eligible firms will be opened. Bid security i.e. **2%** of the total quoted bid amount (Refundable) in the shape of bank draft/pay order/Bank Guarantee issued by scheduled bank in Pakistan or from a foreign bank duly counter guaranteed by a scheduled bank in Pakistan in favor of Sukkur IBA University must be attached with the bid documents. The Procuring Agency may reject any bid subject to relevant provisions of SPP Rules 2010 and may cancel the bidding process at any time prior to acceptance of bid or proposal as per Rule-25(1) of said rules and as per PPRA rules.

Please send your queries: [hari@iba-suk.edu.pk](mailto:hari@iba-suk.edu.pk)

**REGISTRAR** PID(H) 470/19  
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