

COMSATS Institute of Information Technology

Lahore Campus, Defence Road, Off Raiwind Road, Lahore

Tender No. CIIT-TN-13-16-772 Case # 1925

TERMS AND CONDITIONS

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

- 1. Any addition, deletion or modification of any clause of the procurement terms & conditions of CIIT by any vendor will not be acceptable and may lead to rejection of the bid.
- 2. Only registered Suppliers, who are on Active Taxpayers List (ATL) of FBR, are eligible to participate in tender.
- 3. The contract will be executed and handed over in satisfactory conditions up to the entire satisfaction of COMSATS Institute of Information Technology, Lahore Campus.
- 4. Documents along with Pay Order / Demand Draft amounting to **Rs. 500/-** as a tender documents fee (Non-Refundable) shall be submitted in favor of COMSATS Institute of Information Technology, Lahore to the address given below. No bid will be accepted without tender documents' fee.
- 5. Part / Advance payments is not allowed.
- 6. The exact completion/delivery time from the date of the purchase / work order will be <u>15 days</u>. The handing over / completion time for this contract is of critical importance.
- 7. Your bid proposal should be inclusive of freight and all other taxes delivered at COMSATS Institute of Information Technology, Lahore Campus's premises.
- 8. After opening of bids, COMSATS Institute of Information Technology, Lahore Campus will examine the bids for completeness as per tender document.
- 9. Purchase order (s) will be awarded to the lowest or technically recommended bidder (s) on the basis of item wise / subtotal wise / grand total wise according to the nature of BoQs.
- 10. The bid should be submitted in a sealed envelope up to <u>December 21, 2016</u> on or before <u>1400hrs</u> and will be opened on the same date at 1430hrs in the presence of available bidders.
- **11.** COMSATS Institute of Information Technology, Lahore Campus, will follow the PPRA rule of **single stage two envelope procedure**;
 - i. The bid shall comprise a single package containing <u>two separate envelopes</u>. Each envelope shall contain separately the <u>financial proposal</u> and the <u>technical proposal</u>;
 - ii. The envelopes shall be marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold and legible letters to avoid confusion;
 - iii. Initially, only the envelope marked "TECHNICAL PROPOSAL" shall be opened;

- iv. The envelope marked as <u>"FINANCIAL PROPOSAL"</u> shall be retained in the custody of the procuring agency without being opened;
- v. The procuring agency shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements;
- vi. During the technical evaluation no **amendments** in the technical proposal shall be permitted;
- vii. The financial proposals of bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance;
- viii. After the evaluation and approval of the technical proposal the procuring agency, shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically nonresponsive shall be returned un-opened to the respective bidders;
- ix. and
- x. The bid found to be the lowest evaluated bid shall be accepted.
- 12. Bidders cannot challenge the finding of the evaluation or ask for reason of disqualification.
- 13. The envelope should be marked as under;

Secretary, Purchase Committee COMSATS Institute of Information Technology, Lahore Campus

Defence Road, Off Raiwind Road, Lahore.

Tel: 042-111-001-007, Ext: 875

- 14. The envelope shall also bear the word "CONFIDENTIAL" and following identification quotation of "Network Items for Up gradation of Wireless Networks at Fatima Jinnah Hostel and Management".
- 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 CIIT-Lahore in time then the penalty will be charged as under:
 - a. 1% per day of the invoice price for 5 working days.
 - b. 2% per day of the invoice price for further 5 working days.
 - c. If the vendor fails to deliver the goods / services during the extended period then the purchase / work order may be cancelled, earnest money and payment 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 vendor would be required to supply as per requirements mentioned in our BoQs, otherwise the purchase / work order will be cancelled after due date with confiscation of earnest money.
- 18. Deduction of Income Tax and any other tax will be deducted at source according to Government prevailing rules.
- 19. Payment will be made on submission of Invoice in the name of "COMSATS Institute of Information Technology, Lahore Campus" with a copy of delivery challan (s) after the complete order has been supplied,

inspected and accepted which includes delivery / installation, and COMSATS acceptance / inspection thereof.

- 20. All prices should be quoted on F.O.R (Pak Rupees).
- 21. All prices should be valid for at least <u>60 days.</u> Withdrawal or any modification of the original offer within the validity period shall entitle CIIT to forfeit the earnest money in favor of the CIIT and / or put a ban on such vendor participation in CIIT tenders / works.
- 22. It is the sole responsibility of the agent / supplier / manufacturer to comply with the applicable laws, be national or international.
- 23. In case of any dispute, decision of the Director, CIIT will be final and binding upon the parties.
- 24. The CIIT reserves the right to modify the quantities of goods / services at any time before the award of purchase / work order.
- 25. <u>05%</u> of the total value of the <u>invoice</u> will be retained as security by COMSATS Institute of Information Technology, Lahore Campus, and will be released after <u>One Year</u>, which will be counted from the date of delivery / completion of work / supply.
- 26. The bidder is required to furnish in form of <u>Bank deposit / CDR / Pay order equivalent to 2% of the total Bid price as Earnest Money crossed in favor of "COMSATS Institute of Information Technology, Lahore Campus"</u>. Any bid not accompanied by Earnest Money shall be rejected without any right of appeal.
- 27. COMSATS Institute of Information Technology, Lahore Campus reserves the rights to accept or reject the bid if:
 - i. Received without earnest money
 - ii. Received later than the date and time fixed for tender submission
 - iii. The tender is unsigned/unstamped
 - iv. The offer is ambiguous
 - v. The offer is conditional
 - vi. Offer is made by the unauthorized agent/ supplier of the original equipment manufacturer.
 - vii. The offer is from a firm, which is black listed by any Govt. Office.
 - viii. The offer is received by telephone/telex/fax/telegram.
 - ix. Any unsigned / ambiguous erasing, cutting / overwriting etc. is made.
- 28. The bidder should furnish a certificate 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.
- 29. The undersigned affirm that the terms and conditions as contained in this document have been read and accepted and that in the event of selection of my/our rate the agreement in the prescribed form will be entered into:

•	Company / Vendor Name:
•	Postal Address:
•	<u>Tel. / Mobile:</u> <u>Email:</u>
•	<u>NTN# : </u>

- Signature:
- Please also attach the Certificate supporting being Active Taxpayer as per requirement of FBR.

Technical Portion

BoQs of Network Items for Up gradation of Wireless Networks at Fatima Jinnah Hostel and Management, CIIT-Lahore

No change in the BoQs (Specs & Qty.) of CIIT, as detailed below, is allowed. Any additional information may be mentioned in the blank columns (i.e. model / brand or Price). Any modification in CIIT's BoQ may lead to rejection of bid (fully or partially).				Quoted Model Brand with meeting the all
Sr .#	Items Name with Specifications	Qu	antity	specifications
1	RUCKUS Zone Flex R310 or Equivalent Technology: Wireless Broad Compatibility: a/b/g/n/ac Wireless Bands: 2.4 & 5 GHz Simultaneously Transmission and Receive Power: 23 dBm for 2.4 GHz, 24 dBm for 5 GHz Data throughput: 300 Mbps (2.4GHz) and 867 Mbps (5GHz) Channelization Support: 20 MHz, 40 MHz and 80 MHz Beam Flex Technology: Beam Flex and Transmit beam forming capable. Gain up to 4dB. Antennas: Adaptive Antenna that provides up to 128 unique antennas with 64 Patterns Per Band. Ports: One 10/100/1000 Mbps Ethernet port Bssid: up to 8 per radio (16 per AP) Spatial Stream: Two Stream MIMO 2x2:2 POE: Power over Ethernet supported (802.3af) & passive POE Warranty: 1 Year onsite warranty Mounting Kit: Ruckus Mounting or Equivalent Security Cage: Cage to secure it from Stolen. (Sample can be check) Compatibility: work in standalone mode and controller based environment (Controller Ruckus Smart Zone 100) POE: RUCKUS POE 902-0162-EU00 or Equivalent	20	Nos.	
2	Model Ruckus Smart zone 100 (P01-S104-XX00) or equivalent Features • Support Guest network and policies. • Ruckus SPoT LBS Location support • Band balancing • Customizable dashboard • Band Steering, • Air time fairness • WLAN time scheduling • User Roles • Device Policy Control • Multi-hop Speed Flex for mesh testing • Force DHCP • Restful/JSON API Physical Characteristics • 250 Watts AC input requirements • 4 Gigabit Ethernet ports • 1RU rack-mountable chassis footprint • Redundant fans • Easy discovery from PC using UPnP Capacity	01	Nos.	

• Managed APs: Standalone (1024), Cluster (3000) • WIANN (SISSID); Standalone (2000) (ulster (6000)) • Concurrent Stations: Standalone (up to 25000), cluster (up to 60000) Applications • Hotspot: WISPr, Wi-Fi CERTIFIED, Pass point • Guest Access: Supported • Captive portal: Supported • Voice: 302.11e/WMM, U-APSD, Tunneling to AP Network Architecture • IPs: IPv4, IPv6, dund-stack • Vlans: 4,000 • Redundancy: 3+1 cluster redundancy • DHCP Server: Supported Management • Configuration Interface: Web user interface, CLI, SNMP v1, v2, v3 • AAA: RADIUS (primary and backup) • AP Provisioning: L3 or L2 auto-discovery, Auto-software upgrade, Automatic channel optimization • Client Provisioning: Auto proxy configuration • Client Provisioning: Auto proxy configuration • Client Provisioning: Auto proxy configuration • Client Provisioning: Socurity • Security Standards: WPA, WPA2, 802.111 • Encryption: TkIP, APS • Authentication: 802.15, MAC address • User Database: Internal database up to 25,000 users and External: RADIUS, 1DAP, Active Directory • Access Centrol: L2 (MAC address-based), L3/4 (IP and Protocol based), L2 client isolation, Management interface access control, Time-based WIANS, Device type access policies • Wireless Intrusion Detection (WIDS/WIFS); Rogue AP detection / prevention, Evil-twin/AP spoofing detection and Ad buc detection Multimedia and Quality of service • 802.11E/WMM: Supported • Client Load Balancing: Automatic Licenses for Access Points: 50 Access Point Licenses for Ruckus R300, R310 and T372, Compatibility Controller should compatible with existing infrastructure based on Ruckus access points R300, R310 and Ruckus 7372 Warranty: I vear onsite warranty Data Rack (Local Made) or equivalent: 27 VI Standard 19°, Vented Rear Door Glass Front Door, Two fixed and four railing trays, Ventilation Fans, 3 Rack mountable DDUS 9 PORTUNIVERSAL SOCKET, 30 Cage NUTTS.					CIIT-LHR-PUR-Tender-001
Concurrent Stations: Standalone (up to 25000), cluster (up to 60000) Applications Hotspot: WISPr. Wi-Fi CERTHFIED, Pass point Guest Access: Supported Captive portal: Supported Voice: 802.11eWMM, U-APSD, Tunneling to AP Network Architecture PP: IPv4, IPv6, dual-stack Vlans: 4,000 Redundancy: 3+1 cluster redundancy DHCP Server: Supported Management Configuration Interface: Web user interface, CLI, SNMP v1, v2, v3 AAA: RADIUS (primary and backup) AP Provisioning: 1.3 or 1.2 auto-discovery, Auto-software upgrade, Automatic channel optimization Client Provisioning: Auto proxy configuration Security Security Standards: WPA, WPA2, 802.11i Encryption: TkIP, AES Authentication: 802.1s, MAC address User Database: Internal database up to 25,000 users and External: RADIUS, LDAP, Active Directory Access Control, 1.2 client isolation, Management interface access control, Time-based W1-ANS, Device type access policies Wircless Intrusion Detection (WIDS/WIPS): Rogue AP detection / prevention, Evil-twin/AP spoofing detection and Ad hoc detection Multimedia and Quality of service 802.11E/WMM: Supported Client Load Balancing: Automatic Licenses for Access Points: 50 Access Point Licenses for Ruckus R300, R310 and 7372. Compatibility Controller should compatible with existing infrastructure based on Ruckus access points: 50 Access Point Licenses for Ruckus R300, R310 and 7372. Compatibility Controller should compatible with existing infrastructure based on Ruckus access points: 50 Access Point Licenses for Ruckus R300, R310 and 7372. Compatibility Controller should compatible with existing infrastructure based on Ruckus access points: 50 Access Point Licenses for Ruckus R300, R310 and 7372. Compatibility Controller should compatible with existing infrastructure based on Ruckus access points: 50 Access Point Licenses for Ruckus R372 Warranty: I Vear					
60000) Applications + Hotspot: WISPr, Wi-Fi CERTIFIED, Pass point Guest Access: Supported Captive portal: Supported Wesh: Supported Voice: 802.11c/WMM, U-APSD, Tunneling to AP Network Architecture IP: PP-4, IPv6, dual-stack Vlans: 4,000 Redundancy: 3+1 cluster redundancy DHCP Server: Supported Anagement Configuration Interface: Web user interface, CLI, SNMP VI, v2, v3 AAA: RADIUS (primary and backup) AP Provisioning: L3 or L2 auto-discovery, Auto-software upgrade, Automatic channel optimization Client Provisioning: Auto proxy configuration Analytics: Smart Cell Insight allows for custom report generation with up to seven years of network data, 30 days' local storage for built in reporting Security Security Standards: WPA, WPA2, 802.11i Encryption: TKIP, AES Authentication: 802.15, MAC address User Database: Internal database up to 25,000 users and External: RADIUS, LDAP, Active Directory Access Control: L2 (MAC address-based), L34 (IP and Protocol based), L2 (ient isolation, Management interface access control, Time-based WLANs, Device type access policies Wireless Intrusion Detection (WIDS/WIPS): Rogue AP detection / prevention, Evil-twin/AP spoofing detection and Ad hoc detection Multimedia and Quality of service 802.11E/WMM: Supported Rate Limiting: Supported Client Load Balancing: Automatic, heuristics and TOS based or VLAN-defined Rate Limiting: Supported Client Load Balancing: Automatic Licenses for Access Points: S0 Access Point Licenses for Ruckus R300, R310 and Ruckus 7372 Warranty: I Year onsite warranty Data Rack (Local Made) or equivalent: 270 Standard 19°, Vented Rear Door Glass Front Door, Two fixed and four railing trays, Ventilation Fans, 3 Rack mountable PDU 8 PORTUNIVERSAL SOCKET, 30 Cage NUTTIS.					
Applications + Hotspot: WISPr, Wi-Fi CERTIFIED, Pass point Guest Access: Supported Captive portal: Supported Voice: 802.11c/WMM, U-APSD, Tunneling to AP Network Architecture • IP: IPv4, IPv6, dual-stack Vlans: 4,000 Redundancy: 3+1 cluster redundancy DHCP Server: Supported Management Configuration Interface: Web user interface, C.I.I, SNMP v1, v2, v3 - AAA: R.ADIUS (primary and backup) - AP Provisioning: L3 or L2 auto-discovery, Auto-software upgrade, Automatic channel optimization - Client Provisioning: Auto proxy configuration - Analytics: Smart Cell Insight allows for custom report generation with up to seven years of network data, 30 days' local storage for built in reporting Security - Security Standards: WPA, WPA2, 802.11i - Encryption: TKIP, AES - Authentication: 802.1x, MAC address - User Database: Internal database up to 25,000 users and External: RADIUS, LDAP, Active Directory - Access Control: 12 (MAC address-based), L3/4 (IP and Protocol based), L2 client isolation, Management interface access control, Time-based WLANs, Device type access policies - Wireless Intrusion Detection (WIDS/WIPS): Rogue AP detection / prevention, Evil-twin/AP spoofing detection and Ad hoc detection / prevention, Evil-twin/AP spoofing detection and Ad hoc detection / prevention, Evil-twin/AP spoofing detection and Ad hoc detection / Prevention, Evil-twin/AP spoofing detection and Ad hoc detection / Prevention, Evil-twin/AP spoofing detection and Ad hoc detection / Prevention, Evil-twin/AP spoofing detection and Ad hoc detection / Prevention, Evil-twin/AP spoofing detection and Ad hoc detection / Prevention, Evil-twin/AP spoofing detection and Ad hoc detection of the prevention of the					
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Guest Access: Supported Capitive portal: Supported Wesh: Supported Voice: 802.11e/WMM, U-APSD, Tunneling to AP Network Architecture IP: IPv4, IPv6, dual-stack Volans: 4,000 Redundancy: 3+1 cluster redundancy DHCP Server: Supported Management Configuration Interface: Web user interface, CLI, SNMP v1, v2, v3 AAA: RADIUS (primary and backup) AP Provisioning: L3 or L2 auto-discovery, Auto-software upgrade, Automatic channel optimization Client Provisioning: Auto proxy configuration Analytics: Smart Cell Insight allows for custom report generation with up to seven years of network data, 30 days' local storage for built in reporting Security Security Standards: WPA, WPA2, 802.11i Encryption: TKIP, AES Authentication: 802.1x, MAC address User Database: Internal database up to 25,000 users and External: RADIUS, LDAP, Active Directory Access Control: 12 (MAC address-based), 13/4 (IP and Protocol based), 12 client isolation, Management interface access control, Time-based WLANs, Device type access policies Wireless Intrusion Detection (WIDSWIPS): Rogue AP detection / prevention, Evil-twinAP spoofing detection and Ad hoc detection of prevention, Evil-twinAP spoofing detection and Ad hoc detection in the supported Software Queues: Per traffic type (4), per client Traffic Classification: Automatic, heuristics and TOS based or VLAN-defined Rate Limiting: Supported Client Load Balancing: Automatic Licenses for Access Points: OAccess Point Licenses for Ruckus R300, R310 and 7372. Compatibility Controller should compatible with existing infrastructure based on Ruckus access points R300, R310 and Ruckus 7372 Warramty: I Year onsite warranty Data Rack Llocal Made) or equivalent; 27U Standard 19", Vented Rear Door Glass Front Door, Two fixed and four railing trays, Ventilation Fans, 3 Rack mountable PDU 8 PORTUNIVERSAL SOCKETI, 30 Cage MUTIS.					
Captive portal: Supported Mesh: Supported Voice: 802.11c/WMM, U-APSD, Tunneling to AP Network Architecture 1P: PPA; PV6, dual-stack Vlans: 4,000 Redundancy: 3+1 cluster redundancy DHCP Server: Supported Management Configuration Interface: Web user interface, C.I.I, SNMP v1, v2, v3 AAA: RADIUS (primary and backup) AP Provisioning: 1.3 or 1.2 auto-discovery, Auto-software upgrade, Automatic channel optimization Client Provisioning: Auto proxy configuration Analytics: Smart Cell Insight allows for custom report generation with up to seven years of network data, 30 days' local storage for built in reporting Security Security Standards: WPA, WPA2, 802.11i Encryption: TKIP, AES Authentication: 802.1x, MAC address User Database: Internal database up to 25,000 users and External: RADIUS, LDAP, Active Directory Access Control: L2 (JMCA address-based), L3/4 (IP and Protocol based), L2 client isolation, Management interface access control: Time-based WLAN, Device type access policies Wireless Intrusion Detection (WIDS/WIPS): Rogue AP detection / prevention, Evil-twin/AP spoofing detection and Ad hoc detection Multimedia and Quality of service 802.11E/WMM: Supported * 802.1EWMM: Supported * Rate Limiting: Supported * WI.AN Prioritization: Supported * WI.AN Prioritization: Supported * Client Load Balancing: Automatic Licenses for Access Points: 30 Access Point Licenses for Ruckus R300, R310 and 7372. Compatibility Controller should compatible with existing infrastructure based on Ruckus access points R300, R310 and Ruckus 7372 Warranty: I Year onsite warranty Data Rack (Local Made) or equivalent: 27U Standard 19", Vented Rear Door Glass Front Door, Two fixed and four railing trays, Ventilation Fans, 3 Rack mountable PDU 8 PORTUNIVERSAL SOCKET, 30 Cage NUTTS.		<u> </u>			
**Mesh: Supported **Voice: 802.11e/WMM, U-APSD, Tunneling to AP Network Architecture **1P: IPv4, IPv6, dual-stack **Vlans: 4,000 **Redundancy: 3+1 cluster redundancy **DHCP Server: Supported Management **Configuration Interface: Web user interface, CLI, SNMP v1, v2, v3 **AAA: RADIUS (primary and backup) **AP Provisioning: 1.3 or 1.2 auto-discovery, Auto-software upgrade, Automatic channel optimization **Client Provisioning: 1.3 or 1.2 auto-discovery, Auto-software upgrade, Automatic channel optimization **Client Provisioning: 1.3 or 1.2 auto-discovery, Auto-software upgrade, Automatic channel optimization **Client Provisioning: 1.3 or 1.2 auto-discovery, Auto-software upgrade, Automatic value provisioning: 1.3 or 1.2 auto-discovery, Auto-software upgrade, Automatic value provisioning: Security **Security Standards: WPA, WPA2, 802.11i **Encryption: TKIP, AES **Authentication: 802.11, MAC address **User Database: Internal database up to 25,000 users and External: RADIUS, I.DAP, Active Directory **Access Control: 1.2 (MAC address-based), 1.3/4 (IP and Protocol based), 1.2 client isolation, Management interface access control, Itime-based WLANs, Device type access policies **Wireless Intrusion Detection (WIDS/WIPS): Rogue AP detection / prevention, Evil-twin/AP spoofing detection and Ad hoc detection Multimedia and Quality of service **802.11E/WMM: Supported **Software Queues: Per traffic type (4), per client **Traffic Classification: Automatic, heuristics and TOS based or VLAN-defined **Rate Limiting: Supported **WLAN Prioritization: Supported **WLAN Prioritiza					
- Voice: 802.11eWMM, U-APSD, Tunneling to AP Network Architecture - IP: IPv4, IPv6, dual-stack - Vlans: 4,000 - Redundancy: 3+1 cluster redundancy - DHCP Server: Supported Management - Configuration Interface: Web user interface, CLI, SNMP v1, v2, v3 - AAA: RADHUS (primary and backup) - AP Provisioning: 13 or 1.2 auto-discovery, Auto-software upgrade, Automatic channel optimization - Client Provisioning: Auto proxy configuration - Analytics: Smart Cell Insight allows for custom report generation with up to seven years of network data, 30 days' local storage for built in reporting Security - Security Standards: WPA, WPA2, 802.11i - Encryption: TKIP, AES - Authentication: 802.1s, MAC address - User Database: Internal database up to 25,000 users and External: RADHUS, LDAP, Active Directory - Access Control: L2 (MAC address-based), L3/4 (IP and Protocol based), L2 client isolation, Management interface access control, Time-based WLANs, Device type access policies - Wireless Intrusion Detection (WIDS/WPS): Rogue AP detection / prevention, Evil-twin/AP spoofing detection and Ad hoc detection - Multimedia and Quality of service - 802.11EWMM: Supported - Software Queues: Per traffic type (4), per client - Traffic Classification: Automatic, heuristics and TOS based or VI.AN-defined - Rate Limiting: Supported - WLAN Prioritization: Automatic - Licenses for Access Points: - Software Queues: Per traffic type (4), per client - Traffic Classification: Automatic - Licenses for Access Points: - Software Queues: Per traffic type (4), per client - Traffic Classification: Automatic - Client Load Balancing: Automatic - Licenses for Access Point Licenses for Ruckus R300, R310 and 7372 Compatibility - Controller should compatible with existing infrastructure based on Ruckus access points R300, R310 and Ruckus 7372 - Warranty: I Vear onsite warranty - Data Rack (Local Made) or equivalent: - 27U Standard 19", Vented Rear Door Glass Front Door, Two fixed and four railing trays, Ventilation Fans, 3 Rack mountable - PDU 8 PORTUNIVERSA		• •			
Network Architecture 1P: 1P4, 1P54, Gual-stack Vlans: 4,000 Redundancy: 3+1 cluster redundancy DHCP Server: Supported Management Configuration Interface: Web user interface, CLI, SNMP v1, v2, v3 AAA: RADHUS (primary and backup) AP Provisioning: L3 or L2 auto-discovery, Auto-software upgrade, Automatic channel optimization Client Provisioning: Auto proxy configuration Analytics: Smart Cell Insight allows for custom report generation with up to seven years of network data, 30 days' local storage for built in reporting Security Security Standards: WPA, WPA2, 802.11i Encryption: TKIP, AES Authentication: 802.1s, MAC address User Database: Internal database up to 25,000 users and External: RADIUS, LDAP, Active Directory Access Control: L2 (MAC address-based), L3/4 (IP and Protocol based), L2 client isolation, Management interface access control, Time-based WLANs, Device type access policies Wireless Intrusion Detection (WIDS/WIPS): Rogue AP detection / prevention, Evil-twin/AP spoofing detection and Ad hoc detection Multimedia and Quality of service 802.11E/WMM: Supported Software Queues: Per traffic type (4), per client Traffic Classification: Automatic, heuristics and TOS based or VLAN-defined Nate Limiting: Supported WLAN Prioritization: Supported Nos. 1922 Warranty: Vear onsite warranty Data Rack (Local Made) or equivalent: 27U Standard 19", Vented Rear Door Glass Front Door, Two fixed and four railing trays, Ventilation Fans, 3 Rack mountable PDU 8 PORTUNIVERSAL SOCKET, 30 Cage RVILTS.		**			
• IP: IP-4, IP-6, dual-stack • Vlans: 4,000 • Redundancy: 3+1 cluster redundancy • DHCP Server: Supported Management • Configuration Interface: Web user interface, CLI, SNMP v1, v2, v3 • AAA: RADIUS (primary and backup) • AP Provisioning: L3 or L2 auto-discovery, Auto-software upgrade, Automatic channel optimization • Client Provisioning: Auto proxy configuration • Client Provisioning: Auto proxy configuration • Client Provisioning: Auto proxy configuration • Analytics: Smart Cell Insight allows for custom report generation with up to seven years of network data, 30 days' local storage for built in reporting Security • Security Standards: WPA, WPA2, 802.11i • Encryption: TKIP, AES • Authentication: 802.1x, MAC address • User Database: Internal database up to 25,000 users and External: RADIUS, LDAP, Active Directory • Access Control: 1.2 (MAC address-based), L3/4 (IP and Protocol based), L2 (ident isolation, Management interface access control, Time-based WLANs, Device type access policies • Wireless Intrusion Detection (WIDS/WIPS): Rogue AP detection / prevention, Evil-twin/AP spoofing detection and Ad hoc detection Multimedia and Quality of service • 802.11E/WMM: Supported • Software Queues: Per traffic type (4), per client • Traffic Classification: Automatic, heuristics and TOS based or VLAN-defined • Rate Limiting: Supported • WLAN Prioritization: Supported • WHAN Prioritization: Supported • Client Load Balancing: Automatic Licenses for Access Points: 50 Access Point Licenses for Ruckus R300, R310 and 7372. Compatibility Controller should compatible with existing infrastructure based on Ruckus access points R300, R310 and Ruckus 7372 Warranty: I Year onsite warranty Data Rack (Local Made) or equivalent: 27U Standard 19 th , Vented Rar Door Glass Front Door, Two fixed and four railing trays, Ventilation Fans, 3 Rack mountable PDU 8 PORTUNIVERSAL SOCKET, 30 Cage NUTTS.					
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• Traffic Classification: Automatic, heuristics and TOS based or VLAN-defined • Rate Limiting: Supported • WLAN Prioritization: Supported • Client Load Balancing: Automatic Licenses for Access Points: 50 Access Point Licenses for Ruckus R300, R310 and 7372. Compatibility Controller should compatible with existing infrastructure based on Ruckus access points R300, R310 and Ruckus 7372 Warranty:1 Year onsite warranty Data Rack (Local Made) or equivalent: 27U Standard 19", Vented Rear Door Glass Front Door, Two fixed and four railing trays, Ventilation Fans, 3 Rack mountable PDU 8 PORTUNIVERSAL SOCKET, 30 Cage NUTTS.		**			
VLAN-defined • Rate Limiting: Supported • WLAN Prioritization: Supported • Client Load Balancing: Automatic Licenses for Access Points: 50 Access Point Licenses for Ruckus R300, R310 and 7372. Compatibility Controller should compatible with existing infrastructure based on Ruckus access points R300, R310 and Ruckus 7372 Warranty: 1 Year onsite warranty Data Rack (Local Made) or equivalent: 27U Standard 19", Vented Rear Door Glass Front Door, Two fixed and four railing trays, Ventilation Fans, 3 Rack mountable PDU 8 PORTUNIVERSAL SOCKET, 30 Cage NUTTS.					
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fixed and four railing trays, Ventilation Fans, 3 Rack mountable PDU 8 PORTUNIVERSAL SOCKET, 30 Cage NUTTS.					
PDU 8 PORTUNIVERSAL SOCKET, 30 Cage NUTTS.	3		03	Nos.	
		-			
		Note:			
4 Vendor will be bound to Configure and integrate with existing 01 Job	4		01	Job	
infrastructure and also provide the Training to CHT Lahore		•			
staff		staff			

COMSATS institute of information Technology, Lahore TENDER ISSUANCE Date:-----

Note:

Financial Portion

BoQs of Network Items for Up gradation of Wireless Networks at Fatima Jinnah Hostel and

Management, CIIT-Lahore

Any / bra	change in the BoQs (Specs & Qty.) of CIIT, as detailed below, additional information may be mentioned in the blank colunt and or Price). Any modification in CIIT's BoQ may lead to rely or partially).	model	Rates to be quoted inclusive of all (applicable) taxes			
Sr. #	Items Name with Specifications	Quantity		Quoted Model / Brand	Unit Price (Rs.)	Total Amount (Rs.)
01	RUCKUS Zone Flex R310 or Equivalent Technology: Wireless Broad Compatibility: a/b/g/n/ac Wireless Bands: 2.4 & 5 GHz Simultaneously Transmission and Receive Power: 23 dBm for 2.4 GHz, 24 dBm for 5 GHz Data throughput: 300 Mbps (2.4GHz) and 867 Mbps (5GHz) Channelization Support: 20 MHz, 40 MHz and 80 MHz Beam Flex Technology: Beam Flex and Transmit beam forming capable. Gain up to 4dB. Antennas: Adaptive Antenna that provides up to 128 unique antennas with 64 Patterns Per Band. Ports: One 10/100/1000 Mbps Ethernet port Bssid: up to 8 per radio (16 per AP) Spatial Stream: Two Stream MIMO 2x2:2 POE: Power over Ethernet supported (802.3af) & passive POE Warranty: 1 Year onsite warranty Mounting Kit: Ruckus Mounting or Equivalent Security Cage: Cage to secure it from Stolen. (Sample can be check) Compatibility: work in standalone mode and controller based environment (Controller Ruckus Smart Zone 100) POE: RUCKUS POE 902-0162-EU00 or Equivalent	20	Nos.			
02	Model Ruckus Smart zone 100 (P01-S104-XX00) or equivalent Features • Support Guest network and policies. • Ruckus SPoT LBS Location support • Band balancing • Customizable dashboard • Band Steering, • Air time fairness • WLAN time scheduling • User Roles • Device Policy Control • Multi-hop Speed Flex for mesh testing • Force DHCP • Restful/JSON API Physical Characteristics • 250 Watts AC input requirements • 4 Gigabit Ethernet ports • 1RU rack-mountable chassis footprint • Redundant fans • Easy discovery from PC using UPnP Capacity	01	Nos.			

				Cl	IT-LHR-PU	R-Tender-001
	• Managed APs: Standalone (1024), Cluster (3000)					
	• WLANs (BSSIDs):Standalone(2000) cluster (6000)					
	• Concurrent Stations: Standalone (up to 25000), cluster					
	(up to 60000)					
	Applications					
	• Hotspot: WISPr, Wi-Fi CERTIFIED, Pass point					
	• Guest Access: Supported					
	• Captive portal: Supported					
	• Mesh: Supported					
	• Voice: 802.11e/WMM, U-APSD, Tunneling to AP					
	Network Architecture					
	• IP: IPv4, IPv6, dual-stack					
	• Vlans: 4,000					
	• Redundancy: 3+1 cluster redundancy					
	• DHCP Server: Supported					
	Management					
	• Configuration Interface: Web user interface, CLI,					
	SNMP v1, v2, v3					
	• AAA: RADIUS (primary and backup)					
	• AP Provisioning: L3 or L2 auto-discovery, Auto-software					
	upgrade, Automatic channel optimization					
	• Client Provisioning: Auto proxy configuration					
	• Analytics: Smart Cell Insight allows for custom report					
	generation with up to seven years of network data, 30 days' local storage for built in reporting					
	Security					
	• Security Standards: WPA, WPA2, 802.11i					
	• Encryption: TKIP, AES					
	• Authentication: 802.1x, MAC address					
	• User Database: Internal database up to 25,000 users and					
	External: RADIUS, LDAP, Active Directory					
	• Access Control: L2 (MAC address-based), L3/4 (IP and					
	Protocol based), L2 client isolation, Management interface					
	access control, Time-based WLANs, Device type access					
	policies					
	• Wireless Intrusion Detection (WIDS/WIPS): Rogue AP					
	detection / prevention, Evil-twin/AP spoofing detection					
	and Ad hoc detection					
	Multimedia and Quality of service					
	• 802.11E/WMM: Supported					
	• Software Queues: Per traffic type (4), per client					
	• Traffic Classification: Automatic, heuristics and TOS					
	based or VLAN-defined					
	• Rate Limiting: Supported					
	• WLAN Prioritization: Supported					
	• Client Load Balancing: Automatic					
	Licenses for Access Points:					
	50 Access Point Licenses for Ruckus R300, R310 and 7372.					
	Compatibility Controller should compatible with existing infrastructure					
	Controller should compatible with existing infrastructure based on Ruckus access points R300, R310 and Ruckus					
	7372					
	Warranty: 1 Year onsite warranty Data Back (Least Made) or agriculture		-			
	Data Rack (Local Made) or equivalent: 27U Standard 10" Vented Pear Dear Class Front Dear					
03	27U Standard 19", Vented Rear Door Glass Front Door,	03	Nos.			
03	Two fixed and four railing trays, Ventilation Fans, 3 Rack mountable PDU 8 PORTUNIVERSAL SOCKET, 30 Cage	03	1105.			
	NUTTS.					
	NU113.	l	1	<u> </u>	<u> </u>	

COMSATS institute of information Technology, Lahore TENDER ISSUANCE Date:-----

CIIT-LHR-PUR-Tender-001

04	Vendor will be bound to Configure and integrate with existing infrastructure and also provide the Training to CIIT Lahore staff	01	Job		-	
Grand Total Amount (Rs.)						

Special Terms and conditions:

- Please submit the technical and financial bid (s) on our prescribed BoQs and clearly mention the quoted model brands, otherwise your bid (s) may be rejected and also attach the terms and conditions (signed, stamped) with both bids.
- Kindly attach the tender fee with Technical Bid and Bid money / CDR with Financial Bid.
- Purchase / Work order will be awarded on Turnkey / Grand Total Amount basis.
- Multiple rates of an item may also lead to the rejection of bid / item.