



University of Agriculture, Faisalabad

Bidding Documents

Tender No.119/2016

SPECIAL INSTRUCTIONS

- i. No cutting, erasing is allowed in the bid;
- ii. Bid offered, strictly in accordance with the bidding documents, will only be accepted;
- iii. Only typed bid will be accepted failing which it will be considered as non-responsive.

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Section I.

Invitation for Bids



UNIVERSITY OF AGRICULTURE, FAISALABAD
(TENDER NOTICE No.119/2016)

Sealed tenders are invited from Income Tax and Sales Tax registered firms on the basis of Single Stage (two envelop procedure) for Delivery, Installation, Testing and Commissioning of Network Infrastructure, UTM Solution, Voice over IP solution, Video Conferencing System, UPS and Air Conditioning System on Trunk basis (Lot wise) for Directorate of Information Technology Resource Centre & Data Bank (ITRCDB).

Tender No.119/2016

Date of Receiving and Opening	26.09.2016	Receiving Time	10:30 a.m.
		Opening Time	11:00a.m.
		Bid Security	2% of the
			Estimated Cost
		Tender Fee	Rs.500/-

The bidding documents are available in the office of the undersigned and the same may be obtained subject to the payment of the cost of the printing and provision of the document (Tender Fee) as mentioned above to be deposited in the University Income Account (No.11-9/NBP, UAF Branch), in case of city other than Faisalabad add Rs.200/-. The bidding documents can also be downloaded free of cost from the UAF website [www.uaf.edu.pk/Administration/Directorate of Procurement & Inventory Control](http://www.uaf.edu.pk/Administration/Directorate%20of%20Procurement%20&%20Inventory%20Control).

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Section II.

Instructions to Bidders

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Instructions to Bidders

A. Introduction

- 1. Source of Funds**

University of Agriculture, Faisalabad.
- 2. Eligible Bidders**
 - 2.1 The invitation for Bids is opened to all supplier having trade relations with Pakistan and registration for National Tax Number & Sales Tax Number with Federal Board of Revenue
 - 2.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation for Bids.
 - 2.3 Only Government owned enterprises may participate, only if they are legally allowed.
 - 2.4 bidders shall not be under a declaration of ineligibility in accordance with ITB 36.1&37 by any Government organization. The bidder shall provide affidavit to this effect.
- 3. Eligible Goods and Services**
 - 3.1 All goods and related services to be supplied under the contract shall have their origin in eligible source countries and all expenditures made under the contract will be limited to such goods and services.
 - 3.2 For purposes of this clause, “origin” means the place where the goods are mined, grown, or produced, or the place from which the related services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially-recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
 - 3.3 The origin of goods and services is distinct from the nationality of the Bidder.
- 4. Cost of Bidding**
 - 4.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser named in the bid date sheet, hereinafter referred to as “the purchaser” will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

B. The Bidding Documents

- | | |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5. Content of Bidding Documents | <p>5.1 The goods required, bidding procedures, and contract terms are prescribed in the bidding documents. In addition to the Invitation for Bids, the bidding documents include:</p> <ul style="list-style-type: none">(a) Instructions to Bidders (ITB)(b) Bid Data Sheet(c) General Conditions of Contract (GCC)(d) Special Conditions of Contract (SCC)(e) Schedule of Requirements(f) Technical Specifications(g) Bid Form and Price Schedules(h) Bank Guarantee Form if applicable(i) Manufacturer's Authorization Form(j) Integrity pact.(k) Mechanism of Blacklisting and Deregistration <p>5.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or to submit a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in the rejection of its bid.</p> |
| 6. Clarification of Bidding Documents | <p>6.1 A prospective Bidder requiring any clarification of the bidding documents may notify the Purchaser in writing at the Purchaser's address indicated in the Bid Data Sheet. The Purchaser will respond in writing to any request for clarification of the bidding documents which it receives prior to the deadline for the submission of bids prescribed in ITB Clause 19.1. Written copies of the Purchaser's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective bidders that have received the bidding documents.</p> |
| 7. Amendment of Bidding Documents | <p>7.1 At any time prior to the deadline for submission of bids, the Purchaser, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, may modify the bidding documents by amendment.</p> <p>7.2 All prospective bidders that have received the bidding documents will be notified of the amendment in writing and will be binding on them.</p> <p>7.3 In order to allow prospective bidders reasonable time in which</p> |

to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids.

C. Preparation of Bids

- 8. Language of Bid** 8.1 The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser shall be written in English. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified above, in which case, for purposes of interpretation of the Bid, the translation shall govern.
- 9. Documents Constituting the Bid** 9.1 The bid prepared by the Bidder shall comprise the following components:
- (a) a Bid Form and a Price Schedule completed in accordance with ITB Clauses 10, 11, and 12;
 - (b) documentary evidence established in accordance with ITB Clause 13 that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted;
 - (c) documentary evidence established in accordance with ITB Clause 14 that the goods and ancillary services to be supplied by the Bidder are eligible goods and services and conform to the bidding documents; and
 - (d) bid security furnished in accordance with ITB Clause 15.
- 10. Bid Form** 10.1 The Bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the bidding documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, quantity, and prices.
- 10.2 Bidders tendering for engineering goods produced in Pakistan shall be accorded a price preference in rupees up to a specific percentage (in proportion to the value addition) of the lowest quoted landed cost of an item of foreign origin with similar specifications as mentioned in the tenders:
- (1) Provided that-
 - (a) The saving in foreign exchange is not less than the amount of price preference; and
 - (b) It is ensured that in each case of such preference, the total import requirements for producing the supplies tendered for locally manufactured items has been duly indicated by the bidders.

(2) Price preference shall be allowed as under:-

- (a) Having minimum of twenty percent value addition through indigenous manufacturing price preference shall fifteen percent;
- (b) Having over twenty percent and up to thirty percent value addition through indigenous manufacturing, price preference shall be twenty percent, and
- (c) Having over thirty percent value addition through indigenous manufacturing, price preference shall be twenty five percent.

(3) For the purpose of granting a margin of domestic preference bids will be classified into following groups.

Group.A. Bids offering engineering goods produced in Pakistan.

Group.B. Bids offering good of foreign origin to be imported by the purchaser through the supplier's Local (Pakistan) Agent.

Group.C. Bids offering good of foreign origin to be imported by the purchaser directly.

11. Bid Prices

11.1 The Bidder shall indicate on the appropriate Price Schedule the unit prices (where applicable) and total bid price of the goods it proposes to supply under the contract.

11.2 Prices indicated on the Price Schedule shall be entered separately in the following manner or specified otherwise in the Bid Data Sheet:-

a). for goods offered from within Pakistan;

the price shall be quoted on FOR UAF basis. (FOR means the price of goods quoted by the bidder shall be inclusive of all costs, expenses, charges, duties and taxes etc. whatsoever incidental to their delivery, installation and commissioning as the case may be at UAF site).

b). for goods offered from abroad by the local agent of Pakistan:

the price shall be quoted on Free in Stores Plus (FIS+) UAF basis. (FIS+ means the price of goods quoted by the bidder shall be inclusive of all domestic and abroad costs, expenses, charges, duties and taxes etc. whatsoever

except customs duty and of the Pakistan incidental to their delivery installation/commissioning at UAF site). The bidder, in quoting the price, shall be free to use transportation in abroad other than Israel.

- c) for goods offered from abroad by the foreign principal directly:

the price shall be quoted CFR/CPT Karachi seaport or Lahore airport Pakistan, as the case may be. The bidder shall also add all cost expenses, charges, duties and taxes etc. whatsoever expect customs duties, incidental to delivery installation/commissioning of goods from the port of destination to UAF site. The bidder, in quoting the price, shall be free to use transportation in abroad other than Israel.

11.3 The terms CFR, CPT, etc., shall be governed by the rules prescribed in the current edition of *Incoterms* published by the International Chamber of Commerce, Paris or otherwise specified in the Bid Data Sheet and SCC

11.4 The Bidder's separation of price components in accordance with ITB Clause 11.2 above will be solely for the purpose of facilitating the comparison of bids by the Purchaser and will not in any way limit the Purchaser's right to contract on any of the terms offered.

11.5 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account, unless otherwise specified in the Bid Data Sheet. A bid submitted with an adjustable price quotation will be treated as non-responsive and will be rejected, pursuant to ITB Clause 24. If, however, in accordance with the Bid Data Sheet, prices quoted by the Bidder shall be subject to adjustment during the performance of the contract, a bid submitted with a fixed price quotation will not be rejected, but the price adjustment would be treated as zero.

12. Bid Currencies

12.1 Prices shall be quoted in the following currencies:

- (a) For goods and services that the Bidder will supply from within the Purchaser Country, the prices shall be quoted in Pak Rupees, unless otherwise specified in the **Bid Data Sheet**.
- (b) For goods and services that the Bidder will supply from outside the Purchaser Country, the prices shall be quoted in any currency. However the payment will only be made by the purchaser in pak rupees in case of ITB clause 11.2 (b)

and SCC.

- 13. Documents Establishing Bidder's Eligibility and Qualification**
- 13.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted.
- 13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the Purchaser's satisfaction that the Bidder, at the time of submission of its bid, is from an eligible country as defined under ITB Clause 2.
- 13.3 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the Purchaser's satisfaction:
- (a) that, in the case of a Bidder offering to supply goods under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' Manufacturer or producer to supply the goods in the Purchaser Country;
 - (b) that the Bidder has the financial, technical, and production capability necessary to perform the contract;
 - (c) that, in the case of a Bidder not doing business within the Purchaser Country, the Bidder is or will be (if awarded the contract) represented by an Agent in that country equipped and able to carry out the Supplier's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications; and
 - (d) that the Bidder meets the qualification criteria listed in the **Bid Data Sheet**.
- 14. Documents Establishing Goods' Eligibility and Conformity to Bidding Documents**
- 14.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding documents of all goods and services which the Bidder proposes to supply under the contract.
- 14.2 The documentary evidence of the eligibility of the goods and services shall consist of a statement in the Price Schedule of the country of origin of the goods and services offered which shall be confirmed by a certificate of origin issued at the time of shipment.
- 14.3 The documentary evidence of conformity of the goods and services to the bidding documents may be in the form of literature, drawings, and data, and shall consist of:
- (a) a detailed description of the essential technical and performance characteristics of the goods;

- (b) a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period to be specified in the **Bid Data Sheet**, following commencement of the use of the goods by the Purchaser; and
- (c) an item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.

14.4 For purposes of the commentary to be furnished pursuant to ITB Clause 14.3(c) above, the Bidder shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Purchaser in its Technical Specifications, are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names, and/or catalogue numbers in its bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

15. Bid Security

- 15.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, a bid security @ 2% of the quoted value or in the amount specified otherwise in the **Bid Data Sheet**.
- 15.2 The bid security is required to protect the Purchaser against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to ITB Clause 15.7.
- 15.3 The bid security shall be denominated in the currency of the bid or in another freely convertible currency, and shall be in one of the following forms:
- (a) Call deposit receipt (CDR).
- 15.4 Any bid not secured in accordance with ITB Clauses 15.1 and 15.3 will be rejected by the Purchaser as nonresponsive, pursuant to ITB Clause 24.
- 15.5 Unsuccessful bidders' bid securities will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of bid validity prescribed by the Purchaser pursuant to ITB Clause 16.
- 15.6 The successful Bidder's bid security will be discharged upon the Bidder signing the contract, pursuant to ITB Clause 34, and furnishing the performance security, pursuant to ITB Clause 35.

15.7 The bid security may be forfeited:

- (a) if a Bidder:
 - (i) withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form, or
 - (ii) does not accept the correction of errors pursuant to ITB Clause 24.2; or
- (b) in the case of a successful Bidder, if the Bidder fails:
 - (i) to sign the contract in accordance with ITB Clause 34; or
 - (ii) to furnish performance security in accordance with ITB Clause 35.

**16. Period of
Validity of
Bids**

- 16.1 Bids shall remain valid for the period specified in the **Bid Data Sheet** after the deadline date of bid submission prescribed by the Purchaser, pursuant to ITB Clause 19. A bid valid for a shorter period shall be rejected by the Purchaser as nonresponsive.
- 16.2 In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The bid security provided under ITB Clause 15 shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.

**17. Format and
Signing of
Bid**

- 17.1 The Bidder shall prepare an original bid indicated in the **Bid Data Sheet**, clearly marking each "TECHNICAL BID" and "FINANCIAL BID," as appropriate. In the event of any discrepancy between them, the original shall govern.
- 17.2 The original bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the contract. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.
- 17.3 Any interlineations, erasures, or overwriting shall be valid only if they are initialed by the person or persons signing the bid.
- 17.4 The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

D. Submission of Bids

- 18. Sealing and Marking of Bids**
- 18.1 The Bidder shall seal the Technical and Financial Bid in separate envelopes, duly marking the envelopes as “TECHNICAL” and “FINANCIAL.” The envelopes shall then be sealed in an outer envelope.
- 18.2 The inner and outer envelopes shall:
- (a) be addressed to the Purchaser at the address given in the **Bid Data Sheet**; and
 - (b) bear the Project name indicated in the Bid Data Sheet, the Invitation for Bids (IFB) title and number indicated in the Bid Data Sheet, and a statement: “DO NOT OPEN BEFORE,” to be completed with the time and the date specified in the **Bid Data Sheet**, pursuant to ITB Clause 22.1.
- 18.3 The inner envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared “late.”
- 18.4 If the outer envelope is not sealed and marked as required by ITB Clause 18.2, the Purchaser will assume no responsibility for the bid’s misplacement or premature opening.
- 19. Deadline for Submission of Bids**
- 19.1 Bids must be received by the Purchaser at the address specified under ITB Clause 18.2 (a) not later than the time and date specified in the **Bid Data Sheet**.
- 19.2 The Purchaser may, at its discretion, extend this deadline for the submission of bids by amending the bidding documents in accordance with ITB Clause 7, in which case all rights and obligations of the Purchaser and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
- 20. Late Bids**
- 20.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser pursuant to ITB Clause 19 will be rejected and returned unopened to the Bidder.
- 21. Modification and Withdrawal of Bids**
- 21.1 The Bidder may modify or withdraw its bid after the bid’s submission, provided that written notice of the modification, including substitution or withdrawal of the bids, is received by the Purchaser prior to the deadline prescribed for submission of bids.
- 21.2 The Bidder’s modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of ITB Clause 18. A withdrawal notice may also be sent by fax, but followed by a signed confirmation copy,

postmarked not later than the deadline for submission of bids.

21.3 No bid may be modified after the deadline for submission of bids.

21.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security, pursuant to the ITB Clause 15.7.

E. Opening and Evaluation of Bids

22. Opening of Bids by the Purchaser

22.1 The Purchaser will open all bids in the presence of bidders' representatives who choose to attend, at the time, on the date, and at the place specified in the **Bid Data Sheet**. The bidders' representatives who are present shall sign a register evidencing their attendance.

22.2 The bidders' names, bid modifications or withdrawals, bid prices, discounts, and the presence or absence of requisite bid security and such other details as the Purchaser, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the Bidder pursuant to ITB Clause 20.

22.3 Bids (and modifications sent pursuant to ITB Clause 21.2) that are not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances.

22.4 The Purchaser will prepare minutes of the bid opening.

23. Clarification of Bids

23.1 During evaluation of the bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the prices or substance of the bid shall be sought, offered, or permitted.

24. Preliminary Examination

24.1 The Purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

24.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in

words will prevail. If the Supplier does not accept the correction of the errors, its bid will be rejected, and its bid security may be forfeited.

- 24.3 The Purchaser may waive any minor informality, nonconformity, or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.
- 24.4 Prior to the detailed evaluation, pursuant to ITB Clause 26, the Purchaser will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from, or objections or reservations to critical provisions, **such as** those concerning Bid Security (ITB Clause 15), Applicable Law (GCC Clause 31), and Taxes and Duties (GCC Clause 33), will be deemed to be a material deviation. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 24.5 If a bid is not substantially responsive, it will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the nonconformity.

**25. Conversion
to Single
Currency**

25.1 To facilitate evaluation and comparison, the Purchaser will convert all bid prices expressed in the amounts in various currencies in which the bid prices are payable to either:

- (a) Purchaser Country at the selling exchange rate established for similar transactions by the State Bank of Pakistan and National Bank of Pakistan or specified otherwise;

25.2 The currency selected for converting bid prices to a common base for the purpose of evaluation is Pak Rupees to be converted as per rate of the bank shown in ITB 25.1 (a) on the date of opening of the financial bid or specified otherwise in the **Bid Data Sheet**.

26. Evaluation and Comparison of Bids

26.1 The Purchaser will evaluate and compare the bids which have been determined to be substantially responsive, pursuant to ITB Clause 24.

26.2 The Purchaser's evaluation of a bid will take into account, in addition to the bid price quoted in accordance with ITB Clause 11.2, one or more of the following factors as specified in the **Bid Data Sheet**, and quantified in ITB Clause 26.3:

- (a) delivery schedule offered in the bid;
- (b) deviations in payment schedule from that specified in the Special Conditions of Contract;
- (c) the cost of components, mandatory spare parts, and service;
- (d) the availability in the Purchaser's country of spare parts and after-sales services for the equipment offered in the bid;
- (e) the projected operating and maintenance costs during the life of the equipment;
- (f) the performance and productivity of the equipment offered; and/or
- (g) other specific criteria indicated in the **Bid Data Sheet** and/or in the Technical Specifications.

26.3 For factors retained in the Bid Data Sheet pursuant to ITB 26.2, one or more of the following quantification methods will be applied, as detailed in the Bid Data Sheet:

- (a) *Delivery schedule.*
 - (i) The goods covered under this invitation are required to be delivered (shipped) within an acceptable range of weeks specified in the Schedule of Requirement. No credit will be given to earlier deliveries, and bids offering delivery beyond this range will be treated as nonresponsive. Within this acceptable range, an adjustment per week, as specified in the **Bid Data Sheet**, will be added for evaluation to the bid price of bids offering deliveries later than the earliest delivery period specified in the Schedule of Requirements.
- (b) *Deviation in payment schedule.*
 - (i) The SCC stipulates the payment schedule offered by the Purchaser. If a bid deviates from the schedule it will be considered as non-responsive bid.

(c) *Cost of spare parts.*

- (i) The list of items and quantities of major assemblies, components, and selected spare parts, likely to be required during the initial period of operation shall be specified by the bidder. The total cost of these items, at the unit prices quoted in each bid, will be added to the bid price.

or

- (ii) The bidder will draw up a list of high-usage and high-value items of components and spare parts, along with estimated quantities of usage in the initial period of operation. The total cost of these items and quantities will be computed from spare parts unit prices submitted by the Bidder and added to the bid price.

(d) *Spare parts and after sales service facilities in the Purchaser's country.*

The cost to the Purchaser of establishing the minimum service facilities and parts inventories, if outlined in the **Bid Data Sheet** or elsewhere in the bidding documents, if quoted separately, shall be added to the bid price.

(e) *Operating and maintenance costs.*

Since the operating and maintenance costs of the goods under procurement form a major part of the life cycle cost of the equipment, these costs will be evaluated in accordance with the criteria specified in the **Bid Data Sheet** or in the Technical Specifications.

(f) *Performance and productivity of the equipment.*

- (i) Goods offered shall have a minimum productivity specified under the relevant provision in the Technical Specifications to be considered responsive. Evaluation shall be based on the cost per unit of the actual productivity of goods offered in the bid or otherwise specified in the **Bid Data Sheet** or in the Technical Specifications.

(g) *Specific additional criteria*

Other specific additional criteria to be considered in the evaluation and the evaluation method shall be detailed in the **Bid Data Sheet** and/or the Technical Specifications.

26.4. Delivery Schedule.

As mentioned in Bid Data Sheet.

27. Domestic Preference

- 27.1 If the **Bid Data Sheet** so specifies, the Purchaser will grant a margin of preference to goods manufactured in the Purchaser's country for the purpose of bid comparison, in accordance with the procedures outlined in subsequent paragraphs, provided the Bidder shall have established to the satisfaction of the Purchaser that its bid complies with the criteria specified in ITB Clause 10.2 (a):
- 27.2 The Purchaser will first review the bids to confirm the appropriateness of, and to modify as necessary, the bid group classification to which bidders assigned their bids in preparing their Bid Forms and Price Schedules, pursuant to ITB Clauses 10 and 11.
- 27.3 All evaluated bids in each group will then be compared among themselves to determine the lowest evaluated bid of each group. The lowest evaluated bid of each group will next be compared with the lowest evaluated bids of the other groups. If this comparison results in a bid from Group A or Group B being the lowest, it will be selected for contract award.
- 27.4 If, as a result of the preceding comparison, the lowest evaluated bid is from Group C, all Group C bids will then be further compared with the lowest evaluated bid from Group A, after adding to the evaluated bid price of the imported goods offered in each Group C bid, for the purpose of this further comparison only:
- (a) the amount of customs duties and other import taxes that a nonexempt importer would have to pay for the importation of goods offered in each Group C bid;

If the Group A bid in the further comparison is the lowest, it will be selected for award. If not, the lowest evaluated bid from Group C, as determined from the comparison under ITB Clause 27.3 above, will be selected for award.

28. Contacting the Purchaser

- 28.1 From the time of bid opening to the time of contract award, if any bidder wishes to contact the Purchaser on any matter related to the bid, it should do so in writing.
- 28.2 Any effort by a Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison, or contract award may result in the rejection of the Bidder's bid.

F. Award of Contract**29. Post-qualification**

- 29.1 In the absence of prequalification, the Purchaser will determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to

perform the contract satisfactorily, in accordance with the criteria listed in ITB Clause 13.3.

29.2 The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 13.3, as well as such other information as the Purchaser deems necessary and appropriate.

29.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Purchaser will proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.

**30. Award
Criteria**

30.1 Subject to ITB Clause 32, the Purchaser will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.

**31. Purchaser's
Right to Vary
Quantities at
Time of
Award**

31.1 The Purchaser reserves the right at the time of contract award to increase or decrease, as per requirement, the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.

- 32. Purchaser's Right to Accept Bid and to Reject All Bids**
- 32.1 The Purchaser reserves the right to accept bid and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or bidders.
- 33. Notification of Award**
- 33.1 Prior to the expiration of the period of bid validity, the Purchaser will notify/inform the successful and unsuccessful Bidder in writing by letter or by Fax/ e-mail, or telephonically, that its bid has been accepted and unaccepted as the case may be.
- 33.2 The notification of award will constitute the formation of the Contract.
- 33.3 Upon the successful Bidder's furnishing of the performance security pursuant to ITB Clause 35, the Purchaser will discharge bid security to each unsuccessful Bidder on his written request, pursuant to ITB Clause 15.
- 33.4 If, after notification of award, a Bidder wishes to ascertain the grounds on which its bid was not selected, it should address its request to the Purchaser. The Purchaser will promptly respond in writing to the unsuccessful Bidder.
- 34. Signing of Contract**
- 34.1 After 10 days from the announcement of evaluation report, the Purchaser will send supply order or Formal Contract as the case may be to successful bidder. In case of formal contract, the successful bidder will send back the contract to the purchaser duly signed within 7 days from the issuance date. Failing which the Purchaser reserves the right under ITB Clause 15.7.
- 35. Performance Security**
- 35.1 Within Seven (07) days from the issuance of acceptance letter from the Purchaser, the successful Bidder shall furnish the performance security in shape of CDR or Bank guarantee at the discretion of the Purchaser. In case the amount of bid security is equal or greater than the value of the goods to be supplied then the bidder shall not require furnishing the performance security separately and the bid security will be retained to meet the requirement of performance security.
- 35.2 Failure of the successful Bidder to comply with the requirement of ITB Clause 34.2 or ITB Clause 35.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Purchaser may make the award to the next lowest evaluated Bidder or call for new bids.
- 36. Corrupt or Fraudulent Practices**
- 36.1 The purchaser as well as Bidders/Suppliers/Contractors should observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the PPRA Govt. of the Punjab;

- (a) the terms set forth below as follows:
 - (i) “corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition;
- (b) The purchaser will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (c) The Purchaser will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a University Contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a University Contract.

36.2 Furthermore, Bidders shall be aware of the provision stated in Clauses 5.4 and 24.1 of the General Conditions of Contract.

37.Blacklisting/37.1 the Purchaser reserves the right to blacklist or deregister (may impose Permanent or temporary bar for participation in the procurement proceedings respectively) the bidder as follows:-

- (a) **Blacklisting:** The bidder who
 - (i) Fail to perform contractual obligations or the performance under the contract is not upto the mark;
 - (ii) Found to be indulging in corrupt or fraudulent practices;
 - (iii) Commit an action causing or liable to cause loss to the University;
 - (iv) Furnish false information;
- (b) **Deregistration:** The bidder who
 - (i) Submit bid as employee of the firm, or proprietor or shareholder being an employee of the University;
 - (ii) Show non-responsive attitude in case of summoning by the University.

- (iii) Back out from their offers after opening of tender;
- (iv) Misbehave with the University employee;

37.2 The bidder shall provide affidavit that the firm was not declared blacklisted or deregistered by any of the Federal and Provincial Government institution.

Section III.

Bid Data Sheet

Bid Data Sheet

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

A-Introduction	
ITB 2.1	The invitation for Bids is opened to all suppliers having registration for National Tax Number & Sales Tax Number with Federal Board of Revenue.
ITB2.3	Government owned enterprises may participate, only if they are legally allowed.
ITB 2.4	In addition to the contents of ITB 2.4 the bidder shall not be blacklisted by any organization of the Government of the Punjab as well as Federal Government. The bidder shall provide affidavit to this effect.
ITB 4.1	Name of Purchaser: Project Director(ICT)
B- Bidding Documents	
ITB 5.1(h)	Not applicable
ITB 6.1	<p>Purchaser's address: , Directorate of Planning & Development, New Admin Block, University of Agriculture, Faisalabad (UAF), telephone, and facsimile numbers through</p> <p>Directorate of Procurement & Inventory Control (DPIC) University of Agriculture, Faisalabad Phone No. 041-9200898 Fax. 041-9200898</p> <p><u>FOR TECHNICAL RESPONSE:</u></p> <ol style="list-style-type: none"> 1. Director(IT), I.T. Resource Centre & Data Bank (Mobile: +92 333 1761044) 2. I.T. Coordinator (ICT), I.T. Resource Centre & Data Bank (Mobile: +92 333 5258699)
C-Preparation of Bid	
ITB 8.1	Language of the bid. "English"
ITB 11.2 (a & b)	Prices on FOR and FIS Plus as per 11.2 (a & b) respectively shall be mentioned separately
ITB 11.2 (c) ITB 11.3	Not applicable

ITB 13.3 (d)	<p>Qualification requirements.</p> <p>1. Company /Bidder Profile:</p> <ol style="list-style-type: none"> a. Certificate of Company / Firm Registration/Incorporation under the laws of Pakistan from last 5 years minimum. With Valid Income Tax and GST/PST. b. Authorization Certificate c. Partnership Certificate of Highest Level for Active Components mentioned in Lot#1, 2 & 3, Contractor shall be authorized service provider on behalf of principal. d. Minimum 5 years of the relevant projects experience in Public / Private Sector to be countable from 2010 to onward as per following (except for lot no. 6): <ul style="list-style-type: none"> • Establishment / operation of Data Centers having minimum five racks comprising of multi-layer routing, switching, Voice over IP, UPS, IT security equipment (i.e. Firewalls) , LAN, WAN, MAN & Communication equipment. • Involved in I.T infrastructure manufacturing / sales / supply / commissioning business such as Network, IT security and communication equipment. e. Minimum four team members involved in maintenance and support of routers, switches, Voice over IP and IT security equipment during last 5 years. <ul style="list-style-type: none"> • CV of staff f. Has minimum two certified resources (CCIE/HCIE/JNCIE or equivalent) on board to fulfill requirement of assignment against Lot # 1, 2 & 3 (CVs of staff with certifications proves are required) g. Sound financial position of the bidder (cash available equal to 50% of the quoted value as per bank statement) or 5 time sales volume of quoted value as per Income tax returns of last financial year. h. Name of owner/proprietor i. Copy of CNIC j. Copy of NTN and Sales Tax Registration k. Copy of Professional Tax l. Solution shall be 100% comply with RFP m. Bidder shall be responsible for any short term failure of quoted solution n. Principal shall have 5 years of experience in similar projects as well as products. o. Principal local inventory / warehouse shall be available in major cities of Pakistan.
ITB 15.1	Amount of bid security.

	2% of the quoted value in shape of Call Deposit Receipt (CDR) in favor of Director (DPIC), UAF to be attached with Technical Bid.
ITB 16.1	Bid validity period. 90 Days
ITB 17.1	Bid: Financial and Technical Separately. Also a soft copy of Technical Bid Only. However; the bidder shall quote financial bid including and excluding GST / PST.
D-Submission of Bid	
ITB 18.2 (a)	Address for bid submission. Directorate of Procurement & Inventory Control, University of Agriculture, Faisalabad
ITB 18.2 (b)	Tender Notice No. 119/2016
ITB 19.1	Deadline for bid submission. 26.09.2016
E-Bid Evaluation	
ITB 25.1(a)	State Bank or a Commercial Bank to be read as State Bank of Pakistan and National Bank of Pakistan
ITB 25.2	The common base currency is PAK Rupee to be converted as per rate of the bank shown in ITB 25.1(a) of the bid data sheet on the date of opening of the financial bid.
ITB 26.3 (a)(i)	The SCC stipulates the payment schedule offered by the purchaser. If a bid deviates from the schedule then it will be considered as non-responsive.
ITB 26.3 (c)	The bidder will provide the cost of spare parts required to be replaced during whole life of the goods after the expiry of warranty period.
ITB 26.3 (e)	The bidder will provide :- i) Cost of consumables (Lot#5) ii) Life cycle of the goods
ITB 26.3 (f)	Performance and productivity of Goods. As per Technical Specification
ITB 26.3 (g)	As per specification.
ITB 27	As per ITB clause 10.2 prior to the award of procurement contract
ITB 33	Subject to PPRA Rule 2014/UAF Procurement Rule 2014, the bidder with the lowest evaluated bid, if not in conflict with any other law, shall be awarded the procurement contract within the original or extended bid validity period after 10 days of announcement of the evaluation report.

Section IV.

General Conditions of Contract

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General Conditions of Contract

1. Definitions

1.1 In this Contract, the following terms shall be interpreted as indicated:

- (a) “The Contract” means the agreement entered into between the Purchaser and the Supplier, as recorded in the Contract Form signed by the parties, or the supply order issued by the purchaser to the supplier, as the case may be, including all attachments and appendices thereto and all documents incorporated by reference therein.
- (b) “The Contract Price” means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
- (c) “The Goods” means all of the equipment, machinery, and/or other materials which the Supplier is required to supply to the Purchaser under the Contract.
- (d) “The Services” means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the Contract.
- (e) “GCC” means the General Conditions of Contract contained in this section.
- (f) “SCC” means the Special Conditions of Contract.
- (g) “The Purchaser” means the organization purchasing the Goods, as mentioned in Bid Data Sheet.
- (h) “The Purchaser’s country” is **Pakistan**.
- (i) “The Supplier” means the individual or firm supplying the Goods and Services under this Contract and **named in Supply Order**.
- (j) “The University” means the **University of Agriculture, Faisalabad**.
- (k) “The Project Site,” where applicable, means the place or places **named in Bid Data Sheet and technical specifications**
- (l) “Day” means calendar day.

- 2. Application** 2.1 These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract.
- 3. Country of Origin** 3.1 All Goods and Services supplied under the Contract shall have their origin in the countries as elaborated in the **Technical Specifications**.
- 3.2 For purposes of this Clause, “origin” means the place where the Goods were mined, grown, or produced, or from which the Services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of Goods and Services is distinct from the nationality of the Supplier.
- 4. Standards** 4.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods’ country of origin. Such standards shall be the latest issued by the concerned institution.
- 5. Use of Contract Documents and Information; Inspection and Audit by Purchaser** 5.1 The Supplier shall not, without the Purchaser’s prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The Supplier shall not, without the Purchaser’s prior written consent, make use of any document or information enumerated in GCC Clause 5.1 except for purposes of performing the Contract.
- 5.3 Any document, other than the Contract itself, enumerated in GCC Clause 5.1 shall remain the property of the Purchaser and shall be returned (all copies) to the Purchaser on completion of the Supplier’s performance under the Contract if so required by the Purchaser.
- 5.4 The Supplier shall permit the Purchaser to inspect the Supplier’s accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the Purchaser, if so required by the Purchaser.

- 6. Patent Rights** 6.1 The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the Purchaser's country.
- 7. Performance Security** 7.1 Within Seven (07) days from the issuance of acceptance letter from the Purchaser, the successful Bidder shall furnish the performance security in shape of CDR or Bank guarantee at the discretion of the Purchaser in the amount **specified in SCC**. In case the amount of bid security is equal or greater than the value of the goods to be supplied then the bidder shall not require furnishing the performance security separately, it will be retained or deducted from the bidder's claim on bidder's choice.
- 7.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 7.3 The performance security shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Purchaser and shall be in one of the following forms:
- (a) bank guarantee or CDR issued by a reputable bank located in the Purchaser's country or abroad, acceptable to the Purchaser, in the form provided in the bidding documents or another form acceptable to the Purchaser.
- 7.4 The performance security will be discharged by the Purchaser and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless otherwise **specified in SCC**.
- 8. Inspections and Tests** 8.1 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser. **SCC** and the Technical Specifications shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.
- 8.2 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery, and/or at the Goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and

production data, shall be furnished to the inspectors at no charge to the Purchaser.

- 8.3 Should any inspected or tested Goods fail to conform to the Specifications, the Purchaser may reject the Goods, and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.
- 8.4 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Purchaser's country shall in no way be limited or waived by reason of the Goods having previously been inspected, tested, and passed by the Purchaser or its representative prior to the Goods' shipment from the country of origin.
- 8.5 Nothing in GCC Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.

9. Packing

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

10. Delivery and Documents

- 10.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in the Schedule of Requirements. The details of shipping and/or other documents to be furnished by the Supplier are specified in SCC.
- 10.2 For purposes of the Contract, "CFR," "CPT", the terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of *Incoterms* published by the International Chamber of Commerce, Paris.
- 10.3 Documents to be submitted by the Supplier are **specified in SCC**.

- 11. Insurance**
- 11.1 The Goods supplied under the Contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery in the manner **specified in the SCC**.
- 11.2 Where delivery of the Goods is required by the Purchaser on a CFR or CPT basis, the Purchaser shall arrange and pay for cargo insurance, naming the supplier as beneficiary.
- 12. Transportation**
- 12.1 Where the Supplier is required under Contract to deliver the Goods FOB, transport of the Goods, up to and including the point of putting the Goods on board the vessel at the specified port of loading, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. Where the Supplier is required under the Contract to deliver the Goods FCA, transport of the Goods and delivery into the custody of the carrier at the place named by the Purchaser or other agreed point shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.
- 12.2 Where the Supplier is required under Contract to deliver the Goods CFR or CPT, transport of the Goods to the port of destination or such other named place of destination in the Purchaser's country, as shall be specified in the Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.
- 12.3 Where the Supplier is required under the Contract to transport the Goods to a specified place of destination within the Purchaser's country, defined as the Project Site, transport to such place of destination in the Purchaser's country, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price.
- 12.4 Where the Supplier is required under Contract to deliver the Goods CFR or CPT, no restriction shall be placed on the choice of carrier. Where the Supplier is required under Contract (a) to deliver the Goods FOB or FCA, and (b) to arrange on behalf and at the expense of the Purchaser for international transportation on specified carriers or on national flag carriers of the Purchaser's country, the Supplier may arrange for such transportation on alternative carriers if the specified or national flag carriers are not available to transport the Goods within the period(s) specified in the Contract.

13. Incidental Services

13.1 The Supplier may be required to provide any or all of the following services, including additional services, if any, **specified in SCC**:

- (a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
- (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
- (e) training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.

13.2 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

14. Spare Parts

14.1 As **specified in SCC**, the Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- (a) such spare parts as the Purchaser may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
- (b) in the event of termination of production of the spare parts:
 - (i) advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

15.1 The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in

design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the Purchaser's specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

- 15.2 This warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless **specified otherwise in SCC**.
- 15.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the Supplier shall, within the period specified in notice or in SCC and with all reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the Purchaser.
- 15.5 If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in the notice or in SCC, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

16. Payment

- 16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be **specified in SCC**.
- 16.2 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by documents submitted pursuant to GCC Clause 10, and upon fulfillment of other obligations stipulated in the Contract.
- 16.3 Payments shall be made promptly by the Purchaser, **but in no case later than thirty (30) days** after submission of an invoice or claim by the Supplier.
- 16.4 The currency or currencies in which payment is made to the Supplier under this Contract shall be **specified in SCC** subject to the following general principle: payment will be made in the currency or currencies in which the payment has been requested in the Supplier's bid.
- 16.5 All payments shall be made in the currency or currencies

specified in the SCC pursuant to GCC 16.4.

- 17. Prices** 17.1 Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments **authorized in SCC** or in the Purchaser's request for bid validity extension, as the case may be.
- 18. Change Orders** 18.1 The Purchaser may at any time, by a written order given to the Supplier pursuant to GCC Clause 32, make changes within the general scope of the Contract in any one or more of the following:
- (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
 - (b) the method of shipment or packing;
 - (c) the place of delivery; and/or
 - (d) the Services to be provided by the Supplier.
- 18.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Purchaser's change order.
- 19. Contract Amendments** 19.1 Subject to GCC Clause 18, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.
- 20. Assignment** 20.1 The Supplier shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Purchaser's prior written consent.
- 21. Subcontracts** 21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.
- 21.2 Subcontracts must comply with the provisions of GCC Clause 3.

- 22. Delays in the Supplier's Performance**
- 22.1 Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Purchaser in the Schedule of Requirements.
- 22.2 If at any time during performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract.
- 22.3 Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of liquidated damages.
- 23. Liquidated Damages**
- 23.1 Subject to GCC Clause 25, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage **specified in SCC**. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause 24.
- 24. Termination for Default**
- 24.1 The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:
- (a) if the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 22; or
 - (b) if the Supplier fails to perform any other obligation(s) under the Contract.
 - (c) if the Supplier, in the judgment of the Purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this clause:

“corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

“fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition.

24.2 In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

25. Force Majeure 25.1 Notwithstanding the provisions of GCC Clauses 22, 23, and 24, the Supplier shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

25.2 For purposes of this clause, “Force Majeure” means an event beyond the control of the Supplier and not involving the Supplier’s fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26. Termination for Insolvency 26.1 The Purchaser may at any time terminate the Contract by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter

to the Purchaser.

**27. Termination
for
Convenience**

27.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

27.2 The Goods that are complete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:

- (a) to have any portion completed and delivered at the Contract terms and prices; and/or
- (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Services and for materials and parts previously procured by the Supplier.

**28. Settlement of
Disputes**

28.1 If any dispute or difference of any kind whatsoever shall arise between the Purchaser and the Supplier in connection with or arising out of the Contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.

28.2 If the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

28.2.1 Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.

28.2.2 Arbitration proceedings shall be conducted in accordance with the rules of procedure **specified in the SCC**.

28.3 Notwithstanding any reference to arbitration herein,

- (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise

agree; and

- (b) the Purchaser shall pay the Supplier any monies due the Supplier.

29. Limitation of Liability

29.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6,

- (a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser and
- (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

30. Governing Language

30.1 The Contract shall be written in the language **specified in SCC**. Subject to GCC Clause 31, the version of the Contract written in the specified language shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

31. Applicable Law

31.1 The Contract shall be interpreted in accordance with the laws of the Purchaser's country, unless otherwise **specified in SCC**.

32. Notices

32.1 Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or facsimile and confirmed in writing to the other party's address **specified in SCC**.

32.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

33. Taxes and Duties

33.1 A foreign Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's country and purchaser's country as **specified in SCC**.

33.2 A local Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.

Section V.

Special Conditions of Contract

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SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the GCC is indicated in parentheses.

1. **Performance Security (GCC Clause 7)**

GCC 7.1—

A. For goods offered from within Pakistan and abroad by the local agent by Pakistan:

- i. the successful Bidder shall furnish the performance security @ 10% of the value of Supply Order or Contract in shape of CDR in favor of Director (P&IC), UAF within Seven (07) days from the issuance of acceptance letter from the Purchaser. In case the amount of bid security is equal or greater than the value of the performance security, then the bidder shall not require to furnish the performance security separately.

GCC 7.3 a): Bank Guarantee is not allowed

2. **Inspection and Tests (GCC Clause 8)**

GCC 8.1- In accordance with the specifications or samples or both as required by following members of the committee:

- i. Dr. Imran Mumtaz, Director (IT), I.T Resource Center and Data Bank.
- ii. Mr. Ahsan Raza Sattar, Asst. Professor
- iii. Mr. Kashif Akram, I.T Coordinator (ICT)
- iv. Mr. Wasi Ahmad, Network Administrator

3. **Delivery and Documents (GCC Clause 10)**

GCC 10.1&10.3:

A. For goods offered from abroad by the local agent in Pakistan:

- (i) Where the supplier shall require under contract to deliver, install and commission the goods on FIS+ UAF basis, the supplier will ship the goods in favor of the Purchaser. The Purchaser will arrange clearance of the goods on the risk and expense of the supplier. All costs, expenses, charges, taxes, duties etc. whatsoever except customs duties incidental to delivery, installation and commission the goods from port of destination to UAF site shall be paid by the supplier. For clearance of the goods, the supplier shall provide copies of the following documents immediately after shipment of the goods:-

- (a) Airway Bill / Bill of Landing as the case may be
- (b) Commercial Invoice
- (c) Packing List
- (d) Certificate of Origin

GCC 10.2: Not applicable

4. **Insurance, Transportation and Incidental Charges etc.(GCC Clause 11, 12 & 13)**

- i. The supplier shall require to deliver, install and commission the goods on Free in Store Plus (FIS+), (all domestic & abroad costs, expenses/charges, duties, taxes, whatsoever including insurance, transportation, incidental and clearing charges etc. except customs duties shall be paid by the supplier) UAF.

5. **Warranty (GCC Clause 15)**
GCC15.2&15.4: Active and passive goods shall cover 03 years onsite free parts and labor warranty; however in-case of imported goods, local authorized bidder shall provide warranty of the Principal.

6. **Payment (GCC Clause 16)**

GCC-16.1, 16.2&16.4:
A. For goods offered from abroad by the local agent in Pakistan:
 (i) Where the supplier is required under contract to deliver, install and commission the goods on Free in Store Plus (FIS+). The Purchaser shall pay in Pak Rupees equivalent to price of the FIS+ goods as per selling exchange rates of the State Bank of Pakistan/National Bank of Pakistan prevailing on the date of opening of financial bid after complete commissioning/acceptance of the goods and submission of the bill whichever is later (not later than thirty days).

7. **Prices (GCC Clause 17)**
GCC17.1: No Price adjustment is allowed.

8. **Change Orders (GCC Clause 18)**
Not applicable

9. **Liquidated Damages (GCC Clause 23)**

GCC 23.1—Applicable rate:

The liquidated damages, if imposed, will be recovered at the rate of upto0.67% of the value of goods supplied/installed/commission late per day or a part of a period exceeding the original delivery period, subject to the provision that the total liquidated damages thus imposed will not exceed 10% of the total value of the goods delivered/installed/commission late.

10. **Settlement of Disputes (GCC Clause 28)**
The settlement of dispute will be settled in accordance with mechanism for redressal of grievances and settlement of dispute as specified below:-
Complaints of bidder/contractor shall be disposed/settled by a committee and arbitration prior to the entry into force and after into force of procurement contract respectively. Accordingly, grievances committee with powers and terms of reference and method of arbitration are as under:-

- A. Grievances Committee:**
The committee comprises the following to address the complaints of the bidders prior to entry into force of the procurement contract:-
- | | | |
|------|---------------------------------------------------------------------------------------|-------------|
| i. | The Treasurer (Email address: treasurer_uaf@yahoo.com) (Convener) | |
| ii. | Director, I.T. Resource Centre & Data Bank | (Member) |
| iii. | Resident Auditor or the Technical Expert(s) not below the rank of Assistant Professor | (Member) |
| iv. | The Director (DPIC) | (Secretary) |

Any bidder feeling aggrieved by any act of the procuring agency after the submission of his bid may lodge a written complaint concerning his grievances not later than 10 days after the announcement of the bid evaluation report under rule 37 of the UAF Procurement Rules 2014.

The committee shall address the complaints of bidders that may occur prior to the entry into force of the procurement contract. The committee shall investigate and decide upon the complaint within fifteen days of the receipt of the complaint. Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.

Any bidder not satisfied with the decision of the committee may lodge an appeal in the relevant court of jurisdiction.

B. Arbitration:

After coming into force of the procurement contract, all matters of dispute or difference except regarding rejection of goods by the Inspector under GCC clause 8 (Standard Bidding Document) or cancellation of the contract by the Purchaser, under GCC Clause 24 and 27 (Standard Bidding Document) arising out of the agreement between the parties thereto, the settlement of which is not otherwise specially provided for in contract agreement, shall be referred to arbitration as under:-

(a) Foreign Currency Contracts (EXW/FOB/CFR/CPT, etc.) made directly with Foreign Principal / Manufacturer

i. The dispute shall be referred for adjudication to two arbitrators one to be nominated by each party, who before entering upon the reference shall appoint an umpire by mutual agreement, and if they do not agree, a judge of the Superior Court will be requested to appoint the umpire. The arbitration proceedings shall be held in Pakistan and under Pakistan Law.

ii. The venue of arbitration shall be the place from which the contract is issued or such other places as the Purchaser at his discretion may determine.

iii. Arbitration award so given will be firm and final.

(b) Indigenous (FOR) contracts

The settlement of dispute, if not otherwise especially provided for in the contract shall be referred for the decision of Vice Chancellor, University of Agriculture, Faisalabad. His decision shall be final and binding on both the parties. The work under the contract shall if reasonably possible continue, under the proceedings before the Vice Chancellor and no account of such proceeding unless they are subject of the dispute.

Note:

- The arbitration award shall be recorded in writing.
- EXW/FOB/CFR/CPT, etc., contracts made through local agents would be dealt under sub para-B (b) above.

(c) Prior Notice for arbitration:

If the supplier intends to go for arbitration, he shall have to give 30 days notice in writing informing the purchaser of his intention to refer to the points of differences or dispute of arbitration. He shall have to define clearly the point of difference and or dispute in his notice.

C. Court Jurisdiction

Only the Courts at Faisalabad shall have exclusive jurisdiction to adjudicate upon any “lis” brought by either of the parties in relation to the contract.’

11. Applicable Law (GCC Clause 31)

GCC 31.1—UAF Procurement Rules 2014 and Laws governing in Pakistan

12. Notices (GCC Clause 32)

GCC 32.1: The Supplier shall provide address for notice purposes:

13. Taxes and Duties (GCC Clause 33)

14. **Stamp Act**

In accordance with the Stamp Act 1899 amended from time to time, the successful bidders shall require to affix stamp duty @ 25 paisa per hundred rupees on the value of the contract.

Section VI.

Schedule of Requirements

Schedule of Requirements

Number	Description	Quantity	Delivery		Installation, Testing and Commissioning	
			Passive components	Active components	Passive components	Active components
	All Lots	As per technical specifications	Within 6 weeks	Within 10 weeks	Within 14 weeks	Within 6 weeks

Section VII.

Technical Specifications

TECHNICAL SPECIFICATIONS

The quoted goods shall have point to point commentary. The bidder shall quote the goods along with the serial number mentioned below against each and also provide soft copy in Excel Sheet without price as technical bid as per followings:

- i. Quote bid on Turnkey basis (The whole lot).
- ii. Active and passive goods shall cover 03 years onsite free parts and labor warrant however in-case of imported goods, local authorized bidder shall provide warranty of the Principal.
- iii. Successful bidder shall provide onsite training to the UAF staff.
- iv. The prospective bidder may visit ITRCDB to have samples of the goods referred to in t technical specifications, and visit the site for further clarification till 23.09.2016 at 12:00pm
- v. The prospective bidder shall enclose the samples (where required) with the technical bid
- vi. The bidder will be responsible for installation, configuration and smooth deployment system as per requirement.

ACTIVE/PASSIVE NETWORK INFRASTRUCTURE
LOT# 1

S#	ITEM	SPECIFICATION	Estimated QTY	UOM
PASSIVE COMPONENTS				
01	UTP Cable	Cat 6 UTP 4 pair cable, Conductor: Solid Bare Copper AWG 23, Conductor Dia Norm: 0.57, Insulation Average Thickness: 0.22 or higher, Point Thickness (mm): 0.18, Cabling Lay Length: 135 or higher, Filler: PE, Jacket: PVC, Jacket Average Thickness (±0.05mm): 0.50 Min, Jacket Point Thickness (mm): 0.46, Jacket Outer Dia: 6.1, Electrical Characteristics NVP (%): 65 (as per samples)	200 Roles	No
02	Face Plates	Dual shutter face plate with back box; Mechanical characteristics material; ABS blend 94v-0 rated (as per samples)	909	No
03	RJ 45 I/O Module	CAT 6 tool-less (I/O), Plastic Housing: Thermoplastic UL94V-0, Operating Life: Minimum 750 insertion cycles, Contact Plating: 50μ” Gold / 50μ” Nickel, IDC Connector Wire Accommodation: 22-24 AWG (as per samples)	1,818	No
04	Patch Panel	24 port UTP patch panel with fully loaded RJ-45 IO, Support with punch down Tool, Rear Cable management tray,Thickness: 060" (1.52mm) min, Coating: Graphite Grey powder coat, Jack connector contact material: Copper Alloy, Contact plating: 50μ” Gold/100μ” Nickel,Plastic housing: Polycarbonate UL94V-0 rated or equivalent.Electrical Interface resistance: 20 milliohms, IDC connector Wire Accommodation: 22-24 AWG, Jack connector plug retention force: 15 lb	73	No

		(As per sample)		
05		48 port UTP patch panel with fully loaded RJ-45 IO, Support with punch down Tool, Rear Cable management tray, Thickness: 060" (1.52mm) min, Coating: Graphite Grey powder coat, Jack connector contact material: Copper Alloy, Contact plating: 50μ" Gold/100μ" Nickel, Plastic housing: Polycarbonate UL94V-0 rated or equivalent. Electrical Interface resistance: 20 milliohms, IDC connector Wire Accommodation: 22-24 AWG, Jack connector plug retention force: 15 lb (As per sample)	13	No
06	UTP Patch Cable	UTP Cat VI patch cord (1 meter), Cable Conductor size: 24 AWG stranded copper wire Operating temperature range: -20°C to 60°C, Mechanical Characteristics: Plug, MIN Operating life: 750 insertion cycles, RJ45 plug and boot material; Clear polycarbonate, Contact material: 0.35mm thick copper alloy, Contact plating: Selective gold, RJ45 plug dimensions compliant with: ISO/IEC 60603-7-4 and FCC 47 Part 68. (as per samples)	250	No
07		UTP Cat VI patch cord (3 meter), Conductor size: 24 AWG stranded copper wire Nom, Operating temperature range: -20°C to 60°C, Mechanical Characteristics: Plug, MIN Operating life: 750 insertion cycles, RJ45 plug and boot material: Clear polycarbonate, Contact material: 0.35mm thick copper alloy, Contact plating: Selective gold, RJ45 plug dimensions compliant with: ISO/IEC 60603-7-4 and FCC 47 Part 68. (as per samples)	427	No
08	Data Cabinet (local)	Data Cabinet double section 12 U (local), Depth: 23 Inches, Width - 23.75 inches, Rail Width - 19 inch EIA Compliant, Height - 25.25 Inches, Outer Structure and Doors Gauge 20, Black Powder Coating, Front Glass Doors 5mm with built in lock, Side doors will be solid and fixed, load capacity 200 Kg, One fixed tray, 2 fans mounted on TOP, Inner rack fitting gauge 16, Power Distribution Unit: 12 Ports	09	No
09	Optical Fiber Cable	24 core Single Mode optical fiber cable G652D, Maximum 24 fibers per tube and solid polyethylene fillers, reinforced plastic (FRP) central strength member, water blocked interstices, taped, polyethylene inner sheathed, corrugated steel tape Armored, polyethylene overall sheathed, Operating Temperature: -40°C to +70°C, Storage Temperature: -40°C to +70°C. (as per samples)	1,000	Meter
10		12 core Single Mode optical fiber G652D, Maximum 12 fibers per tube and solid polyethylene fillers, reinforced plastic (FRP) central strength member, water blocked interstices, taped, polyethylene inner sheathed, corrugated steel tape armored, polyethylene overall sheathed.	1,000	Meter

		Sheath Thickness: 2.2mm average, Operating Temperature:-40°C to +70°C, Storage Temperature:-40°C to +70°C. Electrical/Optical Characteristics: Tensile Strength. (as per samples)		
11		48 core Single Mode optical fibercable G652D, Maximum 48 fibers per tube and solid polyethylene fillers, reinforced plastic (FRP) central strength member, water blocked interstices, taped, polyethylene inner sheathed, corrugated steel tape Armored, polyethylene overall sheathed, Operating Temperature:-40°C to +70°C, Storage Temperature: -40°C to +70°C, Electrical/Optical Characteristics: Tensile Strength (as per samples)	3,500	Per meter
12	OFDF	Rack mountable 24 Port OFDF with SC Couplers, Metal Body, Accommodate up to 4 modular splice cassettes (allows 6-24 fiber connections per cassette).Material: Powder Coated Mild Steel, Fiber Termination Options: Direct, Fusion Splice, Mechanical Splice, pre-terminated MTP.	08	No
13		Rack mountable 12 Port OFDF with SC Couplers, Metal Body. Accommodate up to 4 modular splice cassettes (allows 6-24 fiber connections per cassette). Material: Powder Coated Mild Steel, Fiber Termination Options: Direct, Fusion Splice, Mechanical Splice, pre-terminated MTP.	30	No
14		Rack mountable 48 Port OFDF with SC Couplers, Metal Body. Accommodate up to 4 modular splice cassettes (allows 6-24 fiber connections per cassette). Material: Powder Coated Mild Steel, Fiber Termination Options: Direct, Fusion Splice, Mechanical Splice, pre-terminated MTP.	02	No
15		OFDF Joint box 14 core for Outdoor Cabinet (per unit)	5	No
16	Pigtails	Single Mode fiber Optics Pigtails with SC connector, Characteristics cable: 900µm Buffered, Outside Diameter 900µm. Attenuation: 9/125µm (OS1), Cable SheathMaterial: PVC Color. Random Connector, Connector End: 1xSC connectors single mode, zirconia ceramic ferrule, composite body Insertion Loss 0.35dB max. Operating Temperature: - 10°C to 60°C(as per samples)	550	No
17	Fiber patch cords	Single Mode fiber patch cord SC/LC (3Meter Duplex), Buffer Diameter: 900µm tight buffer, Strength Member: Aramid Yarn, Min. Bend Radius: 30mm, Cable Sheath Material: LS0H, Cable Sheath Color: Yellow, Operating Temperature: - 10°C to 60°C(as per samples)	210	No
18	Cable tray	Galvanized Cable Tray 4x4 (WxH) 1 mm sheet with cover, hangers & installation material	1,000	Meter
19		Galvanized Cable Tray 12x4 (WxH) 1 mm sheet with cover, hangers & installation	1,500	Meter

		material		
20	Pipes	Conduit pipe (2 inch) with bends and fitting material (per ft)	500	Per ft
21		HDPE pipe (2 inch)	16,000	Per ft
22		PVC flexible pipe 1-inch	1,000	Per ft
23		PVC flexible pipe 2-inch	500	Per ft
24	Duct	PVC Duct 16x25 – (as per sample)	3,000	Per Length
25		PVC Duct 25x25 – (as per sample)	2,800	Per Length
26		PVC Duct 16x38– (as per sample)	3,000	Per Length
27		PVC Duct 40x40– (as per sample	2,000	Per Length
ACTIVE COMPONENTS				
28	Network Switch	<div>1. Hardware Architecture<ul style="list-style-type: none">At least 4 dedicated I/O slots. Backplane capacity: 4 Tbps. Packet forwarding throughput 2,000 Mpps or higher. Capable to support distributed switching architecture and switching fabrics shall be separate from main control board.Switch shall include following interfaces using line cards:<ul style="list-style-type: none">32 x 10G SFP+ ports with loaded 16 optical SFP+ modules, 12 x 1G SFP ports,30 x 1G electrical ports600Gbit/s unidirectional bandwidth per-slot.Support modular fan tray, hot swappable modular power modules,Capable to provide VAS services module such as Next Generation Firewall, IDS/IPS, AV and URL filtering, and WLAN Controller modules.<div>2. Layer 2 Features<ul style="list-style-type: none">Support up to 500K MAC address tables. Mac-based/Port-based/protocol-based and IP subnet-based VLAN assignment, IEEE 802.1ad (Q-in-Q) standard, voice VLAN, Jumbo Frames at least 9216 bytes, standard ring protocol STP,RSTP,MSTP, vlan-based STP,RSTP,MSTP</div><div>3. Layer 3 Features<ul style="list-style-type: none">Support up to 2M IPv4 FIB, 256k ARP entriesSupport Static route, RIPv1/v2, OSPF, IS-IS, BGP, RIPng, ISISv6, OSPFv3, BGPv4+, GR for OSPF/IS-IS/BGP, IP FRR, PBR, IPv4/IPv6 dual stack, BFD for OSPF/IS-IS/BGP, VRRP</div></div>	02	Network Switch

		<div><div>4. Multicast<ul style="list-style-type: none">Support IGMP proxy, IGMP snooping, MLD snooping v1/v2, up to 128K multicast routing entries, Support PIM DM, PIM SM, PIM SSM, IGMPv1/v2/v3, MSDP, MBGP</div><div><div>5. QoS<ul style="list-style-type: none">Support ingress and egress traffic shaping, queuing algorithms, such as SP, WRR, DRR, SP + WRR, and SP + DRR. Support 1:1, N:1, and 1:N port mirroring, SPAN, RSPAN, ERSPAN, Support flow mirroring.</div><div><div>6. Security<ul style="list-style-type: none">Support bidirectional ACL, port-based/VLAN-based ACL, Unified User Management providing different types of authentication such as 802.1x/MAC/portalSupport CPU defense, DHCP Client, Relay, Server, DAI (Dynamic ARP Inspection) feature, DHCP Snooping feature</div><div><div>7. Network O&M<ul style="list-style-type: none">Support SNMPv1/v2c/v3, Telnet, RMON, SSHv2, Web management</div><div>Note: Compatible with existing CISCO and HUAWEI inter-network devices.</div></div></div></div></div>		
29	Network Switch	<div><div>1. Hardware Architecture<ul style="list-style-type: none">24 x 10 Gig SFP+ with 13 single-mode SFP+ OEM modules, 2 x 40 Gig QSFP+ ports.Support one additional interface slot to for 40G QSFP+ interfaces.Switching capacity: 960Gbps or higher. Packet forward throughput: 700Mpps or higher.Jumbo frames up to 9,216bytes. Redundant power supplies.</div><div><div>2. Layer 2 Features<ul style="list-style-type: none">Support up to 250K MAC address tables.Support Mac-based / port-based / protocol-based, and IP subnet-based VLAN assignment, IEEE 802.1ad (Q-in-Q) standard, Voice VLAN, Port aggregation, Standard ring</div></div></div>	09	Network Switch

		<p>protocol STP,RSTP</p> <p>3. Layer 3 Features</p> <ul style="list-style-type: none">• Static route,RIPv1/v2, OSPF, IS-IS, BGP, RIPvng, ISISv6, OSPFv3, BGPv4+, GR for OSPF/IS-IS/BGP, IP FRR, IPv4/IPv6 dual stack,VRRP <p>4. Multicast</p> <ul style="list-style-type: none">• IGMP proxy, IGMP snooping, MLD snooping v1/v2, PIM DM, PIM SM, PIM SSM,IGMPv1/v2/v3 <p>5. QoS</p> <ul style="list-style-type: none">• Ingress / egress traffic shaping and VLAN based traffic limit. Queuing algorithms, such as SP, WRR, DRR, SP + WRR, and SP + DRR,Flow mirroring. <p>6. Security</p> <ul style="list-style-type: none">• Bidirectional/ port-based/ VLAN-based ACL, Support CPU defense, DAI (Dynamic ARP Inspection), DHCP Snooping, Port-based network access control according to IEEE 802.1x standard <p>7. Network O&M</p> <ul style="list-style-type: none">• Support SNMPv1/v2c/v3, Telnet, RMON, SSHv2, web management <p>Note: Compatible with existing CISCO and HUAWEI inter-network devices.</p>		
30	Network Switch	<p>1. General Specification</p> <ul style="list-style-type: none">• 24x 10/100/1000 baseT with 4 x 10GBase SFP+ optical uplink ports along-with 1 x single-mode SFP+ OEM module. Switching capacity: 120Gbps or higher, Forwarding throughput: 90 Mpps or higher, Jumbo frames: 9,216 bytes, Redundant Power Supply,Support at least 370W PoE power budget <p>2. Layer 2 Features</p> <ul style="list-style-type: none">• Support 16K MAC address tables or higher• Support Mac-based, Port-based, protocol-based, and IP subnet-based VLAN assignment• Support up to 4K active VLAN, Guest VLAN or equivalent, voice VLAN <p>3. Multicast</p>	75	Network Switch

		<ul style="list-style-type: none">• Support IGMP snooping v1/v2/v3, MLD snooping v1/v2,multicast VLAN replication <p>4. QoS</p> <ul style="list-style-type: none">• Support ingress and egress traffic shaping and VLAN based traffic limit <p>5. Security</p> <ul style="list-style-type: none">• Support bidirectional ACL, port-based ACL,VLAN-based ACL• Support automatic isolation of attack sources, CPU defense, DAI (Dynamic ARP Inspection) feature, DHCP Snooping feature,port-based network access control according to IEEE 802.1x standard <p>6. Network O&M</p> <ul style="list-style-type: none">• Support SNMPv1/v2c/v3, Telnet, RMON, SSHv2, web management <p>Note: Compatible with existing CISCO and HUAWEI inter-network devices.</p>		
31	Network Switch	<p>1. General Specification</p> <ul style="list-style-type: none">• 48 x 10/100/1000 baseT with 4 x 10GBase SFP+ optical uplink ports along-with one single-mode SFP+ OEM module. Switching capacity: 240Gbps or higher, forwarding throughput: 90 Mpps or higher, Jumbo frames: 9,216bytes, Redundant Power Supply (RPS),at least 370W PoE power budget,• Support RIPv1/v2, OSPF, BGP, IS-IS. <p>2. Layer 2 Features</p> <ul style="list-style-type: none">• Support minimum 16K MAC address tables, Support Mac-based, Port-based, protocol-based, and IP subnet-based VLAN assignment,• Support up to 4K active VLAN, Guest VLAN, voice VLAN or equivalent <p>3. Multicast</p> <ul style="list-style-type: none">• Support IGMP snooping v1/v2/v3, MLD snooping v1/v2,multicast VLAN replication <p>4. QoS</p> <ul style="list-style-type: none">• Support ingress and egress traffic	02	Network Switch

		<p>shaping and VLAN based traffic limit</p> <ul style="list-style-type: none">• Support flow mirroring <p>5. Security</p> <ul style="list-style-type: none">• Support bidirectional / port-based / VLAN-based ACL, automatic isolation of attack sources, CPU defense, DAI (Dynamic ARP Inspection) feature,DHCP Snooping feature• Indicate if the equipment supports the IP Source Guard feature, support port-based network access control according to IEEE 802.1x standard <p>6. Network O&M</p> <ul style="list-style-type: none">• Support SNMPv1/v2c/v3, Telnet, RMON, SSHv2, web management <p>Note: Compatible with existing CISCO and HUAWEI inter-network devices.</p>		
32	Network Switch	<p>1. General Specification</p> <ul style="list-style-type: none">• 48 x 10/100/1000 baseT with 4 x 10GBase SFP+ optical uplink ports along-with one single-mode SFP+ OEM module. Switching capacity: 240Gbps or higher, forwarding throughput: 90 Mpps or higher, Support line rate forwarding on all ports,Jumbo frames: 9,216bytes, Redundant Power Supply (RPS) <p>2. Layer 2 Features</p> <ul style="list-style-type: none">• Support 16K MAC address tables or higher• Support Mac-based, Port-based, protocol-based, and IP subnet-based VLAN assignment, up to 4K active VLAN, Guest VLAN or equivalent. Voice VLAN or equivalent <p>3. Multicast</p> <ul style="list-style-type: none">• Support IGMP snooping v1/v2/v3, MLD snooping v1/v2,multicast VLAN replication <p>4. QoS</p> <ul style="list-style-type: none">• Support ingress and egress traffic shaping and VLAN based traffic limit, support flow mirroring <p>5. Security</p> <ul style="list-style-type: none">• Support bidirectional / port-based / VLAN-based ACL, Support	11	Network Switch

		<p>automatic isolation of attack sources, CPU defense, DAI (Dynamic ARP Inspection) feature, DHCP Snooping feature</p> <ul style="list-style-type: none">• Indicate if the equipment supports the IP Source Guard feature, support port-based network access control according to IEEE 802.1x standard <p>6. Network O&M</p> <ul style="list-style-type: none">• Support SNMPv1/v2c/v3, Telnet, RMON, SSHv2, web management. <p>Note: Compatible with existing CISCO and HUAWEI inter-network devices.</p>		
33	Network Switch	<p>1. General Specification</p> <ul style="list-style-type: none">• 8 x 10/100/1000 baseT Access Switch with 2 x 1 G combo ports or equal along-with 2 x single mode SFP optical modules <p>Note: Compatible with existing CISCO and HUAWEI inter-network devices.</p>	04	Network Switch
34	Network Management System (NMS) with 60-inch LED	<p>1. System Requirements</p> <ul style="list-style-type: none">• Supports Microsoft Windows and SUSE Linux operating systems.• Runs on the virtual machine (VM).• Provides unified management and display pages and allows users to customize management views. In the views, users can clearly view the status, performance, and alarm information about managed resources.• Provides user-friendly, visual, fast, and easy-to-operate graphical user interfaces (GUIs) that adopt the browser/server (B/S) structure and supports the Hypertext Transfer Protocol Secure (HTTPS) protocol. Users can access the GUI using multiple web browsers and use all management functions without installing any plug-ins.• Allows users to customize the content and style of the home page for the portal. After logging in to the portal, the administrator can adjust the modules on the home page according to monitoring focuses.	01	Network Management System (NMS) with 60-inch LED

		<p>Some key modules are displayed on the home page by default and cannot be deleted.</p> <ul style="list-style-type: none">• Compatible with existing CISCO and HUAWEI inter-network devices. <p>2. Management Features</p> <ul style="list-style-type: none">• Automatically discovers network devices based on communication parameters, such as IP address segment and SNMP, and adds the network devices to the network management system.• Uses the dashboard to show network-wide resource information, such as total number of resources of each type, resource usage, and key indicators. The key indicators include CPU usage, memory usage, and device response time, access rate, interface bandwidth, and voice resource usage.• Categorizes multiple devices into a group to perform bulk operations on them.• Supports real-time monitoring and unified browsing of network-wide alarms, provides various alarm severities (for example, critical, major, minor, and warning) that can be distinguished by color or text, and takes specific measures for alarms of different severities.• Notifies users of alarms in several ways, such as real-time alarm notification (alarm panel), alarm sound, email, and short message service (SMS) message.• Locates current alarms directly in the topology and on the device panel and masks alarms based on the preset rules.• Monitors performance indicators and centrally displays the monitored statistics on the dashboard. The indicators include CPU usage, memory usage, device connectivity, device response time, interface traffic, and network		
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		<p>connection/disconnection rate, and network resource usage.</p> <ul style="list-style-type: none">• Allows users to customize performance indicators for third-party devices.• Automatically discovers the layer-2 and layer-3 links and virtual local area network (VLAN) topology and supports the topology linkage functions, including real-time performance, resource management, and alarm linkage to device information. <p>Displays the wireless network status by collecting statistics on the device status, network resources, interference, area, and service type, such as AP channel usage, numbers of APs and users counted by area, number of client radio frequency (RF) types, number of access users counted by SSID, and user access records.</p> <ul style="list-style-type: none">• Displays links between ACs/APs and uplink POE switches and device status in topologies.• Provides WLAN lifecycle management, including planning, deployment, acceptance, maintenance, and optimization.• Supports voice PBX and IP Telephony management.• Supports a full range of voice functions, such as signaling tracing, trunk tracing, traffic statistics, resource statistics, and automatic NE connection <p>3. <u>LED 60 inches Specifications (60-inch Full LED Smart TV), Samsung or equivalent</u></p> <ul style="list-style-type: none">• Display: 60" - 1920 x 1080 - Full HD• Video Enhancement: Wide Color Enhancer (Plus), Upscaling.• Audio: Dolby MS10, DTS Premium Sound 5.1, 20W (10W x 2), Down Firing + Base Reflex (2CH)• Features: Smart Hub, Connect Share, DLNA Mobile to TV, Eco		
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		Sensor, Anynet+, Wifi Direct. • Connectivity: HDMI x 2, USB x 2, Component (Y,Pb,Pr) in, Composite (AV) in, Audio Out Mini and Standard, RF in, MHL, AnyNet+, Dongle Ready(3G/LTE)		
SLA				
35	Service level charges	After warranty period,for maintenance (parts and labor)	03 years	No
INSTALLATION				
36	Installation charges	Fiber laying charges (per meter)	5,500	No
37		Fiber splicing charges (per fiber)	550	No
38		UTP CAT-6 cable laying charges (per RFT)	200,080	No
39		OTDR testing (per fiber node)	105	No
40		Laying charges of PVC flexible pipe (per RFT)	1,500	No
41		Laying charges of PVC Duct 16x25 (per RFT)	30,000	No
42		Laying charges of PVC Duct 25x25 (per RFT)	28,000	No
43		Laying charges of PVC Duct 16x38 (per RFT)	30,000	No
44		Laying charges of PVC Duct 40x40 (per RFT)	20,000	No
45		Soft digging charges, depth 3ft, width 2 ft, (in ft)	15,000	No
46		Hard digging charges, depth 2 ft, width 2 ft (in ft)	1,000	No
47		Underground boring for road crossing (per unit)	5	No
48		Optical fiber back filling, warning tape, sand and brick charges (per brick charges)	As per actual	No
49		Laying charges of conduit pipe (per RFT)	500	No
50		Optical fiber marking/mile stone	As per actual	No
51		Laying charges of HDPE 2-inch pipe (in ft)	16,000	No

TECHNICAL SPECIFICATION OF UTM SOLUTION
LOT# 2

S#	ITEM	SPECIFICATION	Estimated QTY	UOM
01	UTM SOLUTION	<div><div>1. General Specification</div><div><div>• Support multi-core processing architecture, UTM features including firewall, DPI, IDS/IPS, Antivirus, Anti-spam and Content Filtering services.</div><div>• 6 x GE (RJ-45), 4 x GE SFP, 2 x 10 GE optical interfaces (SFP+) with fully loaded 4 x 1G SFP and 2 x 10G SEP+ modules.</div><div>• Firewall performance: 24 Gbps or higher, IPS throughput: 5 Gbps or higher, IPSec VPN throughput: 18 Gbps or higher,Concurrent session: 5.5 Million or higher.</div><div>• Shall have detailed reporting mechanism</div></div><div><div>2. Security Features</div><div><div>• Time, Content, User, Application Attack</div><div>• Authentication methods (local, RADIUS, SecureID, Active Directory, CA, LDAP, and Endpoint Security)</div><div>• Online update of protocol databases</div><div>• Recognition of viruses, Trojan horses, and malware hidden in applications through combination of application identification and virus scanning</div><div>• Identify file types and sensitive information to prevent information leaks</div><div>• Over 4,000 signatures for attack identification. Protocol identification to defend against abnormal protocol behavior. Supports user-defined IPS signatures.Defense against DDoS attacks, such as the SYN flood and UDP flood attacks</div><div>• VPN technologies: IPSec VPN, SSL VPN, L2TP VPN, MPLS VPN, and GRE</div></div></div><div><div>3. Routing</div><div><div>• IPv4: static routing, RIP, OSPF, BGP, and IS-IS</div></div></div><div><div>4. Working mode and availability</div><div><div>• Transparent, routing, or hybrid working mode and high availability (HA), including</div></div></div></div>	02	No

		the Active/Active and Active/Standby mode. NOTE: UTM solution shall be capable to integrate/work with existing CISCO &HUAWEI platform.		
SLA				
02	Service level agreement	After warranty period,for maintenance (parts and labor)	03 year	No
SERVICE SUBSCRIPTION AND SUPPORT				
03	Subscription & support charges	UTM subscription and 8x5 Technical support from Principal	03 year	No
INSTALLATION				
04	Installation charges	Installation, configuration and deployment charges	01	No

TECHNICAL SPECIFICATION OF VOIP SOLUTION
LOT# 3

S#	ITEM	SPECIFICATION	Estimated QTY	UOM
PASSIVE COMPONENTS				
01	Outdoor armored Telephone cable	2 pair outdoor telephone cable, Weather resistant, Black high density solid polyethylene (HDPE) material or equivalent, Coil/Length 500 meters	15	Per coil
02		10 pair outdoor underground telephone cable. Conductor Material: 24 AWG solid bare copper, Diameter: 0.525mm, Primary Insulation: Polyethylene, Average thickness (±0.03mm): 0.21, Min point thickness (mm): 0.17, Insulation Dia (±0.03mm): 0.93, Twisting lay length (mm): 30 underneath, Cabling lay length (±20mm): 240, Jacket material: PVC, Average thickness (±0.05mm): 0.9, Min point thickness (mm): 0.75mm, Outer Dia (±1.0mm): 17.5, Color: Grey	1,500	Per Meter
03		25 pair outdoor underground telephone cable. Conductor Material: 24 AWG solid bare copper, Diameter: 0.525mm, Primary Insulation: Polyethylene, Average thickness (±0.03mm): 0.21, Min point thickness (mm): 0.17, Insulation Dia (±0.03mm): 0.93, Twisting lay length (mm): 30 underneath, Cabling lay length (±20mm): 240, Jacket material: PVC, Average thickness (±0.05mm): 0.9, Min point thickness (mm): 0.75mm, Outer Dia (±1.0mm): 17.5, Color: Grey	1,500	Per Meter
04		50 pair outdoor underground telephone cable. Conductor Material: 24 AWG solid bare copper, Diameter: 0.525mm, Primary Insulation: Polyethylene, Average thickness (±0.03mm): 0.21, Min point thickness (mm): 0.17, Insulation Dia (±0.03mm): 0.93, Twisting lay length (mm): 30 underneath, Cabling lay length (±20mm): 240, Jacket material: PVC, Average thickness (±0.05mm): 0.9, Min point thickness (mm): 0.75mm, Outer Dia (±1.0mm): 17.5, Color: Grey	1,000	Per Meter
05		100 pair outdoor underground telephone cable, Conductor material: 24 AWG solid bare copper, Diameter: 0.5mm, Primary insulation: MDPE, Average Thickness (±0.03mm): 0.18, Min Point Thickness (mm): 0.15, Insulation Dia (±0.03mm): 0.86, Twisting Lay Length (mm): <70, Cabling Lay Length (±20mm): <300	500	Per Meter
06	Tag block	Tag block IDC Connector Operating life: minimum 200 Re-termination, Contact material: Phosphor bronze, Contact plating: Sn/Pb over NiWire Size: 2 x 22-26 AWG, Housing Material: ULVO Rated Thermoplastic, Termination: KATT, 110 or LSA+ tool Electrical, DC resistance: <21mOhm, DC resistance imbalance: <2.0mOhm, Tag block (capacity = 10 bix per block)	10	No
07	Cable bix	Cable bix – (as per samples)	100	No
08	Distribution box	Distribution Box for Tag blocks (capacity = 2 Tag	10	No

		blocks), as per samples		
09	Pipes	Conduit pipe (2 inch) with bends and fitting material	500	Per ft
10		PVC flexible pipe 1-inch	1,000	Per ft
11		PVC flexible pipe 2-inch	500	Per ft
12	Duct	PVC Duct 16x25 – (as per sample)	1,000	Per Length
13		PVC Duct 25x25 – (as per sample)	1,000	Per Length
14		PVC Duct 16x38– (as per sample)	500	Per Length
15		PVC Duct 40x40– (as per sample)	500	Per Length
16	Cable tray	Galvanized Cable Tray 4x4 (WxH) 1 mm sheet with cover, hangers & installation material	1,000	Meter
17		Galvanized Cable Tray 12x4 (WxH) 1 mm sheet with cover, hangers & installation material	1,500	Meter
18	Equipment rack	42U standard Rack Cabinet, Depth 24 inch, Width 24 inch, Height 78 inch, Outer structure and doors gauge 18, Load capacity 200 Kg, One fixed tray, 4 fans mounted on TOP, Inner Rack Fitting Gauge 16, Cable Management Tray, DPI Universal Rack PDU, Black powder coated, Four side open-able, Front glass door, Fixable and moveable wheels	01	No
ACTIVE COMPONENTS				
19	VOIP Solution	<p>General Specifications (for Main Campus IP PABX):</p> <ul style="list-style-type: none">• IP PABX support 1,000 telephone extensions at initial stage; whereas expandable up to 20,000 extensions at later stage. Capable to communicate with remote side exchanges over IP network.• Support redundant power supplies, main control boards and network ports• Capable to work with Analog, IP & video phones.• IP PABX should include requisite interfaces to communicate with 160 PTCL/NTC analog trunk lines gateway at initial stage; whereas it should be expendable at later stage. Length of cable from MDF to Analog gateway will be at-least 20 meter.• Support Voice calling, Video calling, CLIP, CNIP, CLIR, CLIRO, Local Number Query, Ring-back Tone, Call Hold, Call Park, Multi-line Call, Call Waiting, CDR, Call Transfer, CFU, CFNR, CFB, CFO, CFC, Hotline, Pickup, automatic callback, DND, Forced Release, Barge, ONLY, Alarm Clock, MoH• AC power support for IP PABX	01	No
20		<p>General Specifications (for remote-side IP PABX):</p> <ul style="list-style-type: none">• IP PABX support 100 telephone extensions at initial stage at remote side; whereas expandable up to 1,000 extensions at later stage. Capable to communicate with remote side exchanges over IP network. Support	01	No

		<p>redundant power supplies and network ports</p> <ul style="list-style-type: none">• Support local survival when detecting a disconnection from the IP PABX system at the main campus. The voice gateway shall provide local survival for processing users call, providing voice and video communication for local user and supporting local PSTN incoming and outgoing calls.• Capable to work with Analog, IP & video phones.• IP PABX should include requisite interfaces to communicate with 10 PTCL/NTC analog trunk lines gateway at initial stage; whereas it should be expendable at later stage. Length of cable from MDF to Analog gateway will be at-least 20 meter.• Support Voice calling, Video calling, CLIP, CNIP, CLIR, CLIRO, Local Number Query, Ring-back Tone, Call Hold, Call Park, Multi-line Call, Call Waiting, CDR, Call Transfer, CFU, CFNR, CFB, CFO, CFC, Hotline, Pickup, automatic callback, DND, Forced Release, Barge, ONLY, Alarm Clock, MoH <p>AC power support for IP PABX</p>		
21		<ul style="list-style-type: none">• Licenses to connect 659 Analog and 441 IP extensions. <p><u>Bifurcation of Licenses:</u> 1,000 licenses for main campus (584 Analog and 416 IP extensions) 100 licenses for remote-side campus (75 Analog and 25 IP extensions).</p>	1,100	No
22		<ul style="list-style-type: none">• PRI/E1 ports (for Main Campus)	04	No
23		<ul style="list-style-type: none">• PRI/E1 ports (for Remote-side Campus)	01	No
22		<ul style="list-style-type: none">• Analog telephone sets	375	No
24		<ul style="list-style-type: none">• Normal IP phone sets, 2.5 inch color display, 2 Line, Gig Interfaces, POE supported	329	No
25		<ul style="list-style-type: none">• Executive IP phone sets, 5 inch color display, 6 Line, Gig Interfaces, POE supported	60	No
26		<ul style="list-style-type: none">• Video based executive IP phone sets, 7 inch touch screen, color display, gig interfaces, Bluetooth, Wifi & HDMI supported, POE supported	52	No
27		<ul style="list-style-type: none">• Soft Console, Automatic call distribution (ACD), Call queuing, transfer, and night service, Corporate directory, forced release	02	No
28	Computer System for operator console	<ul style="list-style-type: none">• Processor Model: Intel Core I5-4460 or equivalent• Hard disk: 500GB HDD• RAM: 8GB DDR3• Special Features: DVD RAMBO, IntegrateGPU, Integrated Gigabyte LAN, USB Key board, USB	02	No

		mouse, HDMI/VGA, Card Reader, 2xDIMM <ul style="list-style-type: none">LED: 18 inches or Higher		
29	Management work station	<ul style="list-style-type: none">Processor Model: Intel Core I7-4790 or equivalentHard disk:500GB HDDRAM: 8GB DDR3Special Features: DVD RAMBO, IntegrateGPU, Integrated Gigabyte LAN, USB Key board, USB mouse, HDMI/VGA, Card Reader, 2xDIMMLED: 18 inches or Higher	01	No
30	Software’s	<ul style="list-style-type: none">PC Client to support IM, Presence, Voice call, video call, data call	30	No
31		<ul style="list-style-type: none">Mobile client to support on IOS and Android platform with voice, video and IM features.	200	No
32	Hardware required to access Calls on Cell Phones and Desktop	Unified Communication server	01	No
33		Mobile application server	01	No
34		Session border controller / proxy gateway to connect cell / mobile phone sets through SIP using Internet/GPS	01	No
SLA				
35	Service level agreement	After warranty period,for maintenance (parts and labor)	03 years	No
INSTALLATION				
36	Installation charges	Laying charges of 2 pair telephone cable (per RFT)	24,600	No
37		Laying charges of 10 pair telephone cable (per RFT)	4,920	No
38		Laying charges of 25 pair telephone cable (per RFT)	4,920	No
39		Laying charges of 50 pair telephone cable (per RFT)	3,280	No
40		Laying charges of 100 pair telephone cable (per RFT)	1,640	No
41		Laying charges of conduit pipe (per RFT)	500	No
42		Laying charges of PVC flexible pipe (per RFT)	1500	No
43		Laying charges of PVC Duct 16x25 (per RFT)	10,000	No
44		Laying charges of PVC Duct 25x25 (per RFT)	10,000	No
45		Laying charges of PVC Duct 16x38 (per RFT)	5,000	No
46		Laying charges of PVC Duct 40x40 (per RFT)	5,000	No
47		Laing charges of cable tray 4 x 4 (per RFT)	3,280	No
48		Laing charges of cable tray 12 x 4 (per RFT)	5,000	No

TECHNICAL SPECIFICATION OF VIDEO CONFERENCE SOLUTION

LOT# 4

S#	ITEM	SPECIFICATION	Estimated QTY	UOM
01	Vide o Conf erenc e Equi pment	Video conferencing unit (Cisco/Polycom/Equivalent) <ul style="list-style-type: none">○ Video standards and protocols: H.261, H.263, H.264, H.239○ Video input and output: HDMI, composite video (same for dual video); Videoresolution: 1080p, 50fps○ Network: (IPv4 and IPv6 10/100/1G Ethernet, H.323 and/or SIP up to 2 Mbps)○ Main Camera (HD zoom optical 20X, pan and tilt with remote control). Accessories: All relevant cables and connectors etc, LED about 50-inch X 2 same brand as of codec, Operate able on 220 Volts 50Hz power supply, 36°C	02	No
02		Camera (HD zoom optical 20X, pan and tilt with remote control compatible with the above codec separate price required)	02	No
03		<ul style="list-style-type: none">○ LED: 50- inch LED Smart TV<ul style="list-style-type: none">• Video Enhancement: Wide Color Enhancer (Plus), Upscaling.• Audio: Dolby MS10, DTS Premium Sound 5.1, 20W (10W x 2), Down Firing + Base Reflex (2CH)• Features: Smart Hub, Connect Share, DLNA Mobile to TV, Eco Sensor, Anynet+, Wifi Direct.• Connectivity: HDMI x 2, USB x 2, Component (Y,Pb,Pr) in, Composite (AV) in, Audio Out Mini and Standard, RF in, MHL, AnyNet+, Dongle Ready (3G/LTE)	02	No
04		Sound system (international brand) <ul style="list-style-type: none">• Amplifier 50 watts, stereo, runs two speakers and support up to 4 speakers, with 4 inputs: RC/composite with base and tribal and input(s) and master volume.• Wireless microphones with transmitter and receivers	02	No
		<ul style="list-style-type: none">• Speakers (25 watts compatible with the amplifier)	04	No
05		Video conferencing MCU (Cisco/Polycom or equivalent) <ul style="list-style-type: none">• 8 ports multi-party license, Video protocols H.323, SIP, and SCCP, Video coding H.261, H.263, and H.264, Audio coding G.711, G.722, G.722.1, G.723.1, G.728, and G.729A	01	No
06	UPS	Un-interrupted power supply (APC or equivalent) <ul style="list-style-type: none">• 3KVA Double-conversion online, one-hour back time on full load, low noise (variable fan speeds), protections (under load, overload, short circuit, high temperature, etc.), input voltage 180 to 260,	02	No

		operating temperature 40°C, lead acid sealed batteries		
INSTALLATION				
05	Installation charges	Installation, configuration and deployment charges	01	No

TECHNICAL SPECIFICATION OF UPS SOLUTION
LOT# 5

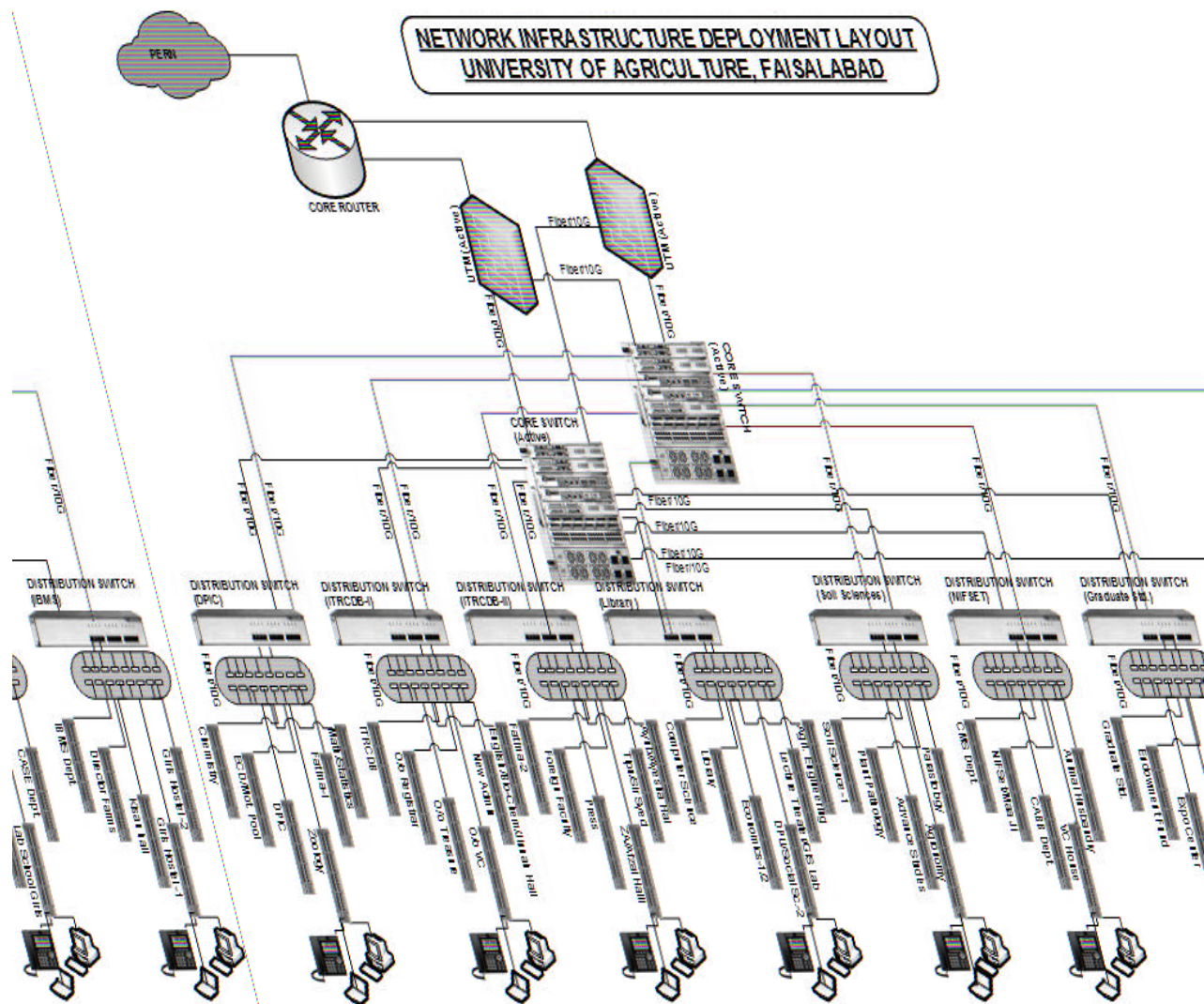
S#	Item ID	Specifications	Estimated QTY	UOM
01	UPS 1000VA Online, Rack Mount 230V with Network Card	UPS 1000VA Rack Mount 230V +Rack Mount Battery Pack for 60-minute backup + UPS Network Management Card Output power capacity: 700Watts / 1.0 kVA, Nominal Output Voltage: 230V, Output Voltage Distortion: Less than 3%, Output Frequency (sync to mains): 50/60 Hz +/- 3 Hz user adjustable +/- 0.1, Load Crest Factor: 3 : 1, Topology: Double Conversion Online, Waveform type: Sine wave, Built-in Bypass, Nominal Input Voltage: 230V, Input frequency: 50/60 Hz +/- 5 Hz (auto sensing), Input Connections: IEC-320 C14, Input voltage range for main operations: 160 – 280V, Battery type: Maintenance-free sealed Lead-Acid battery, Backup time: 60mins, Interface Port(s): DB-9 RS-232 , SmartSlot, Control panel: LED status display, Surge energy rating: 420Joules, Operating Environment: 0 - 40 °C, Operating Relative Humidity: 0 - 95% no %, Approvals: C-tick, CE, EN 50091-1, EN 50091-2, EN 60950, EN 61000-3-2, GOST, VDE	08	No
02		UPS 1000VA Rack Mount 230V + Rack Mount Battery Pack for 25-30 minute backup + UPS Network Management Card Output power capacity: 700Watts / 1.0 kVA, Nominal Output Voltage: 230V, Output Voltage Distortion: Less than 3%, Output Frequency (sync to mains): 50/60 Hz +/- 3 Hz user adjustable +/- 0.1, Load Crest Factor: 3 : 1, Topology: Double Conversion Online, Waveform type: Sine wave, Built-in Bypass, Nominal Input Voltage: 230V, Input frequency: 50/60 Hz +/- 5 Hz (auto sensing), Input Connections: IEC-320 C14, Input voltage range for main operations: 160 – 280V, Battery type: Maintenance-free sealed Lead-Acid battery, Backup time: 25-30mins, Interface Port(s): DB-9 RS-232 , SmartSlot, Control panel: LED status display, Surge energy rating: 420Joules, Operating Environment: 0 - 40 °C, Operating Relative Humidity: 0 - 95% no %, Approvals: C-tick, CE, EN 50091-1, EN 50091-2, EN 60950, EN 61000-3-2, GOST, VDE	83	No

INSTALLATION				
03	Installation charges	Installation charges	01	No

TECHNICAL SPECIFICATION OF AIR CONDITIONING SYSTEMS

LOT# 6

S#	Item ID	Specifications	Estimated Qty	UOM
01	AC Inverter	Split and multi-split type air conditioning systems for superior performance, energy-efficiency, and comfort, 21500 BTU, 2.8 – 3 Amperes current on stability, DC Inverter AC, Uniform Air Distribution, Having Turbo Mode, Easy Maintenance, Lower Sound Level	02	No
INSTALLATION				
02	Installation charges	Installation charges	01	No



Section VIII.

Sample Forms

Sample Forms

1.	Bid Form and Price Schedules	80,81
2	Manufacturer’s/Distrbutor's/Dealer's Certificate Form	82

1. Bid Form and Price Schedules

Date: _____
Tender No. _____

To:

Director I.T,
I.T. Resource Centre & Data Bank,
University of Agriculture, Faisalabad

Gentlemen and/or Ladies:

Having examined the bidding documents including Tender No.119/2016, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver *[description of goods and services]* in conformity with the said bidding documents for the sum of *[total bid amount in words and figures]* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid. We understand that failure to furnish all information required by the bidding documents or to submit a bid not substantially responsive to the bidding documents in every respect will be at our risk and may result in the rejection of its bid.

If our bid is accepted, we undertake to provide a performance security in the form, in the amounts, and within the times specified in the bidding documents and to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements. Failure to which, the Purchaser reserve the right to take action as per provisions of the bidding documents.

We agree to abide by this Bid for the Bid Validity Period specified in Clause 16.1 of the Bid Data Sheet and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and address of agent	Amount and Currency	Purpose of Commission or gratuity
_____	_____	_____
_____	_____	_____
_____	_____	_____
(if none, state “none”)		

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us. We understand that you are not bound to accept the lowest or any bid you may receive.

We certify/confirm that we comply with all requirements as per ITB Clause 2 of the bidding documents.

Dated this _____ day of _____ 19____.

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of _____

Price Schedule for Goods Offered from within the Purchaser’s Country

(ITB clause 11.2 (a))

11.2 (a): FOR

Name of Bidder _____ .Tender Number _____.Page _ of ____.

1	2	3	4	5	6	7	8
Item	Description	Country of origin	Quantity	Price without GST + PST	Price With GST	Price With PST	Price with GST + PST

Signature of Bidder _____

Note: In case of discrepancy between unit price and total, the unit price shall prevail.

Manufacturer's/Distributor's/Dealer's Certificate Form

[See Clause 13.3 (a) of the Instructions to Bidders.]

To: *[name of the Purchaser]*

WHEREAS *[name of the Manufacturer/Distributor/Dealer]* who are established and reputable Manufacturer/Distributor/Dealer of *[name and/or description of the goods]* having factories/Warehouse/trading house at *[address of factory]*

do hereby authorize *[name and address of Agent]* to submit a bid, and subsequently negotiate and sign the Contract with you against Tender No. *[reference of the Invitation to Bid]* for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract for the goods offered for supply by the above firm against this Invitation for Bids.

[signature for and on behalf of Manufacturer]

Note: This letter of authority should be on the letterhead of the Manufacturer/Distributor/Dealer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be included by the Bidder in its bid.