

Standard Bidding Document

TENDER FOR SUPPLY, DELIVERY, INSTALLATION, AND
COMMISSIONING OF IT EQUIPMENT, DATA CENTER
INFRASTRUCTURE, DATA BACKUP & RECOVERY SOLUTIONS,
CYBER SECURITY TOOLS AND SOFTWARE FOR NCSA AT AIR
UNIVERSITY, ISLAMABAD
(Goods)

National

Single Stage-Two Envelope



October 10, 2026

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REQUEST FOR BIDS

PROCUREMENT OF GOODS

1. The **Air University, Islamabad Campus (Air University)** has reserved Funds for the procurement planned for FY **2026-27**. The **Air University, Islamabad Campus (Air University)** intends to apply part of the proceeds of this Fund to cover eligible payments under the contract for the "**TENDER FOR SUPPLY, DELIVERY, INSTALLATION, AND COMMISSIONING OF IT EQUIPMENT, DATA CENTER INFRASTRUCTURE, DATA BACKUP & RECOVERY SOLUTIONS, CYBER SECURITY TOOLS AND SOFTWARE FOR NCSA AT AIR UNIVERSITY, ISLAMABAD**" with the reference of "**P148974**"
2. The **Air University, Islamabad Campus (Air University)** invites sealed Bids from eligible Bidders for procurement of goods described in the bidding documents on **EPADS v2.0**.
3. **Single Stage-Two Envelope** will be used by adopting **Least Cost Based Selection (LCBS)** Technique for the subject procurement, in line with the Public Procurement Rules, 2026 and any Regulations, Regulatory Guides, Procurement Guidelines or Instructions issued by the Authority from time to time.
4. All Bids must be accompanied by a Bid Security amount described in Bid Security Section in Bidding Document in the form of **Call at Deposit** or all bids must be accompanied by bid securing declaration in the format specified in the Bidding documents
5. E-Bidding documents, containing detailed terms & conditions, specifications and requirements etc. are available on **e-Pak Acquisition and Disposal System (EPADS)** at **<https://epads.gov.pk/opportunities/federal/procurements/148974>** for all the interested bidders registered on **EPADS v2.0**. Bidders are required to get themselves registered on **EPADS v2.0** to participate in Bidding process.
6. The e-bids, prepared in accordance with the instructions in the e-Bidding Documents, must be submitted through **EPADS v2.0** on or before **Tuesday, October 27, 2026 11:00 AM**. E-bids will be opened using **EPADS v2.0** on

the same day at **Tuesday, October 27, 2026 11:30 AM**. Manual submission of Bids shall not be entertained. Those vendors who have not yet registered on the new version of **EPADS v2.0**, may register themselves on <https://vendors.epads.gov.pk/>. A tutorial to explain the registration process is available at <https://www.youtube.com/watch?v=MNW6T38v7tc>

In terms of Rule 65 of Public Procurement Rules, 2026 Grievance Redressal Committee (GRC) is notified for the subject procurement and notification copy is available on the procuring agency's website and on Authority's website at (www.ppra.gov.pk).

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Instructions to Bidders

A. Introduction

1.Scope of Bids

1.1 The Procuring Agency (PA), as indicated in the **Bids Data Sheet (BDS)** invites Bids **through EPADS v2.0** for the provision of Goods as specified in the BDS and **in Section V - Evaluation Criteria, Specifications & Schedule of Requirements**. The name, identification, and number of items/deliverables are provided in the **BDS**. The successful Bidders will be expected to provide the goods within the specified period and timeline(s) as stated in the **BDS**.

2. Source of Funds

2.1 Source of funds is referred in Clause-2 I of Invitation for Bids.

3. Eligible Bidders

3.1 A Bidder may be natural person, company or firm or public or semi-public agency of Pakistan or any foreign country, or any combination of them with a formal existing agreement (on Judicial Papers) in the form of a joint venture, consortium, or association. In the case of a joint venture, consortium, or association, all members shall be jointly and severally liable for the execution of the Contract in accordance with the terms and conditions of the Contract. The joint venture, consortium, or association shall nominate a Lead Member as nominated in the BDS, who shall have the authority to conduct all business for and on behalf of any and all the members of the joint venture, consortium, or association during the Bidding process, and in case of award of contract, during the execution of the contract.

Verifiable copy of the agreement that forms a joint venture, consortium or association shall be required to be submitted as part of the Bid.

The appointment of Lead Member in the joint venture, consortium, or association shall be confirmed by submission of a valid Power of Attorney to the Procuring Agency.

Any bid submitted by the joint venture, consortium or association shall indicate the part of proposed contract to be performed by each party and each party shall be evaluated (or post qualified if required) with respect to its contribution only, and the responsibilities of each party shall not be substantially altered without prior written approval of the Procuring Agency and in line with any

instructions issued by the Authority.

(The limit on the number of members of JV or Consortium or Association may be prescribed in BDS, in accordance with the guidelines issued by the PPRA).

3.2 The invitation for Bids is open to all prospective suppliers, manufacturers, or authorized agents / dealers subject to any provisions of incorporation or licensing by the respective national incorporating agency or statutory body established for that particular trade or business. Procuring agencies shall specify the registration/licensing requirements for the foreign bidders keeping in view the requirement of that business.

3.3 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest with one or more parties in this Bidding process, if they:

1. are 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 Procuring Agency 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. have controlling shareholders in common; or
3. receive or have received any direct or indirect subsidy from any of them; or
4. have the same legal representative for purposes of this Bid; or
5. have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bids of another Bidder, or influence the decisions of the Procuring Agency regarding this Bidding process; or
6. Submit more than one Bid in this Bidding process.

3.4 A Bidder may be ineligible if –

1. he is declared bankrupt or, in the case of company or firm, insolvent;
2. payments in favor of the Bidder is suspended in accordance with the judgment of a court of law other than a judgment declaring bankruptcy and resulting (in accordance with the national laws) in the total or partial loss of the right to administer and dispose of its property;

3. the Bidder is convicted, by a final judgment, of any offence involving professional conduct;

4. the Bidder is blacklisted locally or by international organizations and hence debarred due to involvement in corrupt and fraudulent practices, or submission of false or misleading information or performance failure or involved in disrupting procurement process or due to breach of bid Securing Declaration.

3.5 As and when required, bidders shall provide to the Procuring Agency evidence of their eligibility, proof of compliance with the necessary legal requirements to carry out the contract effectively.

3.6 Bidders shall submit Bids relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract amounting to more than ten (10) percent of the Bid price is envisaged.

4. Eligible Goods and Related Services

4.1 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. For purpose of this Bid, ineligible countries are the countries declared ineligible by the Federal Government.

5. One Bid per Bidder

5.1 A bidder shall submit only one Bid, in the same bidding process, either individually as a Bidder or as a member in a joint venture or any similar arrangement.

5.2 The Bidder shall not engage a subcontractor for any portion of the contract if the value of such subcontracting exceeds thirty percent (30%) of the total contract amount.

6. Cost of Bidding

6.1 Any cost incurred by the bidder relating to the preparation and submission of its Bid shall be borne by the bidder, and the Procuring Agency shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

B. Bidding Documents

7. Contents of Bidding Document

7.1 The Goods required, Bidding procedures, and terms and conditions of the contract are prescribed in the Bidding Documents. In addition to the Invitation for Bids, the Bidding documents which should be read in conjunction with any addenda issued in accordance with **ITB 10.1** include:

Section I -Invitation to Bids

Section II Instructions to Bidders (ITB)

Section III Bid Data Sheet (BDS)

Section IV Evaluation Criteria, Specifications, Schedule of Requirements

Section V Bid Forms

Section VI General Conditions of Contract (GCC)

Section VII Special Conditions of Contract (SCC)

Section VIII Contract Forms

Section IX Integrity Pact

Section X Declaration of Beneficial Ownership Information.

7.2 The Bidder is expected to examine all instructions, forms, terms and specifications in the Bidding documents. Failure to furnish all the information required in the Bidding documents through EPADS v2.0 will be at the Bidder's risk and may result in the rejection of its Bids.

8. Clarification of Bidding documents

8.1 A prospective Bidder requiring any clarification of the Bidding documents may notify the Procuring Agency through EPADS v2.0.

8.2 The Procuring Agency will within two (02) working days after receiving the request for clarification, respond to any request for clarification through EPADS v2.0 provided that such request is received not later than three (03) days, prior to the deadline for the submission of Bids as prescribed in **ITB 22**

8.3 The Procuring Agency's response will be forwarded to all identified Prospective Bidders through EPADS v2.0, including a description of the inquiry,

but without identifying its source.

8.4 Should the Procuring Agency deem it necessary to amend the Bidding document as a result of a clarification, it shall do so following the procedure under **ITB 9**.

8.5 If indicated **in the BDS**, the Bidder's designated representative is invited at the Bidder's cost to attend a pre-Bid meeting at the place, date and time mentioned **in the BDS**. During this pre-Bid meeting, prospective Bidders may request clarification of the schedule of requirement, the Evaluation Criteria or any other aspects of the Bidding document.

8.6 Minutes of the pre-Bid meeting, if applicable, including the text of the questions asked by Bidders, including those during the meeting (without identifying the source) and the responses given, together with any responses prepared after the meeting will be uploaded on EPADS v2.0. Any modification to the Bidding documents that may become necessary as a result of the pre-Bid meeting shall be made by the Procuring Agency exclusively through the use of an Addendum pursuant to ITB 9. Non-attendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.

9. Amendment of Bidding documents

9.1 Before the deadline for submission of Bids, the Procuring Agency for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder or Pre-Bid meeting may modify the Bidding documents by issuing addenda through EPADS v2.0.

9.2 The Procuring Agency shall promptly publish the addendum through EPADS v2.0.

Any addendum issued including the notice of any extension of the deadline shall also be communicated through EPADS v2.0 to all the bidders who have already submitted their bids. Such bidders shall have the right to withdraw their already submitted bid and re-submit the revised bid prior to the original or extended bid submission deadline.

9.3 To give prospective Bidders reasonable time in which to take an addendum/corrigendum into account in preparing their Bids, the Procuring Agency may, at its discretion, extend the deadline for the submission of Bids through EPADS v2.0:

Provided that the Procuring Agency shall extend the deadline for submission of Bids, if such an addendum is issued within last three (03) days of the Bids submission deadline.

C. Preparation of Bids

10. Language of Bid

10.1 The Bid prepared by the bidder, as well as all correspondence and documents relating to the Bids exchanged by the Bidder and the Procuring Agency shall be written in the English language unless otherwise specified in the BDS. 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 pages in the English language unless otherwise specified in the **BDS**, in which case, for purposes of interpretation of the Bidder, the translation shall govern.

11. Documents and samples Constituting the Bid

11.1 The Bid prepared by the Bidder shall constitute the documents required in the **BDS**.

Details of sample(s) where applicable and requested in the BDS.

Documentary evidence established in accordance with ITB 13 that the Bidder is eligible and/or qualified for the subject bidding process;

Documentary evidence established in accordance with **ITB 03** that the Bidder has been authorized by the manufacturer to deliver the goods into Pakistan, where required and where the supplier is not the manufacturer of those goods;

Documentary evidence established in accordance with ITB 12 that the goods and related services to be supplied by the Bidder are eligible goods and services, and conform to the Bidding Documents;

Bid security or Bid Securing Declaration furnished in accordance with **ITB ---**.

12. Documents Establishing Eligibility of the Goods and Conformity to Bidding documents

12.1 To establish the conformity of the bidder to the Bidding document, the Bidder shall furnish as part of its Bids the documentary evidence that Goods

provided conform to the technical specifications and standards.

13. Documents Establishing Eligibility and Qualification of the Bidder

13.1 Pursuant to **ITB 10**, the Bidder shall furnish, as part of its Bid, all those documents establishing the Bidder's eligibility to participate in the Bidding process and/or its qualification to perform the contract if its Bid is accepted.

14. Form of Bid

14.1 The Bidder shall fill the Form of Bid furnished in the Bidding document. The Bid Form must be completed without any alterations to its format and no substitute shall be accepted.

15. Bid Prices

15.1 The Bid Prices quoted by the Bidder in the Form of Bid and in the Price Schedules shall conform to the requirements specified below or exclusively mentioned hereafter in the Bidding documents.

15.2 All items in the Schedule of Requirement must be listed and priced separately in the Price Schedule(s). If a Price Schedule shows items listed but not priced and neither explicitly denied, their prices shall be construed to be included in the prices of other items.

15.3 In the event that any item(s) in the Price Schedule are not quoted, and such omission is determined by the Procuring Agency not to materially affect the responsiveness of the Bid, the Procuring Agency may, for the sole purpose of bid evaluation and comparison, assign a price to the unquoted item(s) in accordance with the following methodology:

(a) The assigned price shall be the average of the prices quoted for the same item(s) by all substantially responsive bidders; or

(b) In cases where no comparable quotations are available, the Procuring Agency shall apply the corresponding item price from its duly approved cost estimate for evaluation purposes.

The prices so assigned shall be utilized exclusively for bid evaluation and comparison, and shall not, under any circumstances, be incorporated into or form part of the Contract Price.

15.4 The Bid price to be quoted in the Form of Bid in accordance with **ITB 13.1** shall be the total price of the Bid.

15.5 The Bidder shall indicate on the appropriate Price Schedule, the unit prices (where applicable) and total Bid price of the Goods it proposes to provide under the contract.

15.6 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account. A Bid submitted with an adjustable price will be treated as non-responsive and shall be rejected.

16. Bids Currencies

16.1 Prices shall be quoted in Pakistani Rupees unless otherwise specified in the BDS in accordance with Rule 42 (2) of the Public Procurement Rules, 2026.

17. Bids Validity Period

17.1 Such extensions may be more than one time but the total period of such extension shall not exceed the original bid validity period.

17.2 Bids shall remain valid for the period specified in the **BDS** after the Bid submission deadline prescribed by the Procuring Agency. A Bid valid for a shorter period shall be rejected by the Procuring Agency as non-responsive. The period of Bid validity will be determined from the complementary Bid securing instrument, i.e. the expiry period of Bid Security or Bids Securing Declaration as the case may be.

The procuring agency shall ordinarily be under an obligation to process and evaluate the bid and to issue letter of award within the stipulated bid validity period.

17.3 Under exceptional circumstances, prior to the expiration of the initial Bid validity period, the Procuring Agency may request the Bidders' consent to an extension of the period of validity of their Bids through EPADS v2.0. The Bid Security provided under **ITB 17** shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid security or causing to be executed its Bid Securing Declaration. A Bidder agreeing to the request will not be required nor permitted to modify its Bid, but will be required to extend the validity of its Bid Security or Bid Securing Declaration for the period of the extension.

18. Bid Security or Bid Securing Declaration

18.1 The Bidder shall furnish as part of its Bid, a Bid Security in accordance with Rule 36 of the Public Procurement Rules, 2026.

18.2 The original Bid Security shall be enclosed within the sealed envelope and to be submitted physically before closing time for submission of bids. Whereas, scanned copy of bid security shall be uploaded electronically through EPADS v2.0 before closing hours for submission of bids.

18.3 The Bidder who failed to submit the original Bids security before the submission deadline shall be disqualified straightaway.

18.4 The Bid Security or Bid Securing Declaration is required to protect the Procuring Agency against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to **ITB 18.7**.

18.5 The Bid Security shall be denominated in the local currency or in another freely convertible currency, and it shall be in the form specified in the BDS which shall be in any of the following:

- a) a bank guarantee, a bank draft, an irrevocable letter of credit issued by a Scheduled bank in the form provided in the Bidding Documents or another form acceptable to the Procuring Agency;
- b) a cashier's or certified cheque; or
- c) another security if indicated in the BDS.

The Bid Security shall be valid for twenty-eight (28) days beyond the end of the validity of the Bid. This shall also apply if the period for Bid Validity is extended. In either case, the form must include the complete name of the Bidder.

18.6 The Bid Security shall be payable promptly upon written demand by the Procuring Agency in case any of the conditions listed in **ITB 18.7** are invoked.

18.7 Unsuccessful Bidders' Bid Security will be discharged or returned as promptly as possible, however in no case later than thirty (30) days after the expiration of the period of Bid Validity prescribed by the procuring agency pursuant to **ITB 17**. The Procuring Agency shall make no claim to the amount of the Bid Security, and shall promptly return the Bid Security documents, after whichever of the following that occurs earliest:

- a. the expiry of the Bid Security;

- b. the entry into force of a procurement contract and the provision of a Performance Guarantee, for the performance of the contract if such a guarantee, is required by the Bid documents;
- c. the rejection by the Procuring Agency of all Bids;
- d. cancellation of procurement proceedings.
- e. the withdrawal of the Bid prior to the deadline for the submission of Bids, unless the Bid document stipulates that no such withdrawal is permitted.

18.8 The successful Bidder's Bid Security will be discharged upon the Bidder signing the contract, or furnishing the Performance Guarantee.

18.9 The Bid Security may be forfeited or the Bid Securing Declaration executed:

- a. if a Bidder:
- b. withdraws its Bid during the period of Bid Validity as specified by the Procuring Agency, and referred by the Bidder on the Form of Bids except as provided for in **ITB 16.2**; or
- c. does not accept the correction of errors; or
- d. in the case of a successful Bidder, if the Bidder fails:
- e. to sign the contract; or
- f. to furnish Performance Guarantee.

19. Withdrawal, Substitution, and Modification of Bid

19.1 Before Bid submission deadline, any Bidder may withdraw, substitute, or modify its Bid after it has been submitted through EPADS v2.0.

20. Format and Signing of Bid

20.1 The Bidder shall prepare and submit Bids with due diligence after carefully reading all the terms and condition before bid submission deadline through EPADS v2.0.

D. Submission of Bids

21. Submission of Bids through EPADS v2.0 before bid submission deadline.

21.1 The Technical and Financial Bids, shall be submitted electronically through EPADS, before bid submission deadline. The bid submission option shall be automatically disabled once the deadline is over.

22. Deadline for Submission of Bids

22.1 Bids shall be received by the Procuring Agency through EPADS v2.0 before bid submission deadline.

22.2 The Procuring Agency may, under exceptional circumstances, extend the deadline for the submission of Bids, after recording reasons in writing and in an equal opportunity manner.

In such case, all rights and obligations of the Procuring Agency and the Bidders that were previously governed by the original deadline shall thereafter be subject to the revised deadline.

E. Opening and Evaluation of Bids

23. Opening of Bids

23.1 The respective Bid Evaluation Committee of the Procuring Agency shall open all Bids through the EPADS v2.0, on the date and time specified in the Bid Data Sheet (BDS).

23.2 The respective Bid Evaluation Committee **shall generate minutes through EPADS v2.0 containing brief details of bid opening process.** The record of the Bid opening shall include, as a minimum: the name of the Bidder, the Bid price if applicable, and the presence or absence of a Bid Security or Bid Securing Declaration.

23.3 The procuring agency shall live broadcast the opening of bids on national media or on their website or digital channels, if the volume of procurement exceeds five hundred million rupees in case of goods and services and one thousand million rupees in case of works.

23.4 In case the date of opening of bid has been declared as public holiday or the procuring agency fails to open bid due to any EPADS v2.0 related issues, the submission and opening of bids shall be shifted to the next working day at the same time.

23.5 In case of Single Stage One Envelope Procedure, the Bidders names, the Bid prices, the total amount of each Bid and, the presence or absence of Bid Security, Bid Securing Declaration and such other details as the Procuring Agency may consider appropriate, will be announced by the Bid respective Evaluation Committee.

23.6 No bid will be rejected at the time of bid opening except for bids whose original bid security has not been provided to the procuring agency before bid submission deadline.

24. Clarification of Bids

24.1 To assist in the examination, evaluation and comparison of Bids of the Bidders, the respective Bid Evaluation Committee may, ask any Bidder for a clarification of its Bid including breakdown of prices.

24.2 The request for clarification and the response shall be sought through EPADS v2.0 before **three days prior to the deadline for submission of bids.** No change in the prices or substance of the Bids shall be sought, offered, or permitted.

24.3 The alteration or modification in the bids which in any way affect the following parameters will be considered as a change in the substance of a Bid:

1. evaluation & qualification criteria;
2. required scope of work or specifications;
3. all securities requirements;
4. tax requirements;
5. terms and conditions of Bidding documents.
6. change in the ranking of the Bidder

24.4 From the time of bid(s) opening to the time of Contract award if any Bidder wishes to contact the Procuring Agency on any matter related to the Bids it should do so through **EPADS v2.0**.

25. Preliminary Examination of Bids

25.1 Prior to the detailed evaluation of Bids, the respective Bid Evaluation Committee will determine whether each Bid:

1. meets the eligibility criteria defined in **ITB 3**;
2. has been prepared as per the format and contents defined by the Procuring Agency in the Bidding documents;
3. is accompanied by the required securities; and
4. is substantially responsive to the requirements of the Bidding documents.

25.2 The respective Bid Evaluation Committee's determination of a Bid's responsiveness will be based on the contents of the Bid itself.

25.3 A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one that: -

1. affects in any substantial way the scope, quality, or performance of the Goods;
2. limits in any substantial way, inconsistent with the Bidding documents, the Procuring Agency's rights or the Bidders obligations under the Contract; or
3. if rectified, would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

25.4 If a Bid is not substantially responsive, it will be rejected by the respective Bid Evaluation Committee and may not subsequently be evaluated for complete technical responsiveness.

26. Examination of Terms and Conditions; Technical Evaluation

26.1 The respective Bid Evaluation Committee shall examine the Bids to confirm that all terms and conditions specified in the **GCC** and the **SCC** have been accepted by the Bidder without any material deviation or reservation.

26.2 The respective Bid Evaluation Committee shall evaluate the technical aspects of the Bids submitted, to confirm that all requirements specified in Schedule of Requirements and Technical Specifications of the Bidding documents have been met without material deviation or reservation.

26.3 If after the examination of the terms and conditions and the technical evaluation, the respective Bid Evaluation Committee determines that the Bid is not substantially responsive in accordance with **ITB**, it shall reject the Bid.

27. Correction of Errors

27.1 Bids determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows: -

1. if there is a discrepancy between 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, unless in the opinion of the respective Evaluation Committee there is an obvious misplacement of the decimal point in the unit price, in which the total price as quoted shall govern and the unit price shall be corrected;
2. if there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail and the total shall be corrected; and
3. where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.
4. Where there is discrepancy between grand total of price schedule and amount mentioned on the Form of Bid, the amount referred in Price Schedule shall be treated as correct subject to elimination of other errors.

27.2 The amount stated in the Bid will be adjusted by the respective Bid Evaluation Committee in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount, its Bid will then be rejected, and the Bid Security may be forfeited or the Bids Securing Declaration may be executed.

28. Conversion to Single Currency

28.1 For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency in accordance with Rule 42(2) of Public Procurement Rules, 2026.

29. Evaluation of Bids

29.1 The Bids, quotations, or proposals shall be evaluated by the respective evaluation committees as per evaluation criteria prescribed in the Bidding Documents in accordance with Rule 11, 12 and 13 of the Public Procurement Rules, 2026.

29.2 While evaluating the bids, the procuring agency shall consider the following:

- i. Bids will be evaluated on lump sum bid basis or items wise or Lot wise (contracts), as specified in the BDS; and the Bid Price;
- ii. correction of arithmetic errors in accordance with ITB 27;

30. Domestic Preference

30.1 The respective Bid Evaluation Committee shall evaluate and compare bids, allow for preference to domestic bidders, while competing with the international bidders in accordance with the policies of the Federal Government.

The percentage of preference, to be accorded shall be clearly mentioned in the bidding documents under the bid evaluation criteria.

31. Determination of Successful Bid

31.1 Selection technique will be adopted for determining the Successful Bid in accordance with the criteria referred in the BDS or prescribed in the separate section titled as Evaluation Criteria.

31.2 Least Cost Based Selection (LCBS)

After meeting the requirements of eligibility, qualification and substantial responsiveness, the bid in compliance with all the mandatory (technical) specifications/requirements and/or requisite quality threshold (if any), and having lowest evaluated cost (or financial proposal) shall be considered Successful Bid.

31.3 Quality and Cost Based Selection (QCBS)

In such combination, there shall be some specific weightage of both the technical features and financial aspects of the proposal. The financial marks shall be awarded on the basis of inverse proportion calculations. The successful bid shall be declared, on the basis of combined evaluation.

31.4 Quality Based Selection (QBS)

After meeting the requirements of eligibility, qualification and substantial responsiveness the bid in compliance with all the mandatory (technical) specifications/requirements and attaining highest marks in the Technical Evaluation considering all other qualitative and/or quantitative parameters (or point rated criteria) for technical proposal(s) such as working methodology, implementation plan, resource allocation, additional functionalities, risk

management approach, knowledge transfer techniques, post implementation methodology etc. shall be treated as highest ranked bid. Later on, the financial proposal of highest ranked bidder shall be opened, however, in case of failure to proceed further with such a bidder, the procuring agency may resort to second highest bidder and so on.

31.5 The Procuring Agency may adopt the Quality & Cost Based Selection Technique due to the following two reasons:

1. Where the Procuring Agency knows about the main features, usage and output of the products; however not clear about the complete features, technical specifications and functionalities of the goods to be procured and requires the bidders to submit their proposals defining those features, specifications and functionalities; or
2. Where the Procuring Agency, in addition to the mandatory requirements and mandatory technical specifications, requires parameters specified in Evaluation Criteria to be evaluated while determining the quality of the goods.

31.6 In such cases, the Procuring Agency may allocate certain weightage to these factors as a part of Evaluation Criteria, and may determine the ranking of the bidders on the basis of combined evaluation in accordance with provisions of Rule 2(1)(xxviii) of the Public Procurement Rules, 2026.

32. Abnormally Low Financial Bids

32.1 An abnormally low bid is a bid that, in light of the Procuring Agency's cost estimate, market conditions, or other received bids, appears to be unrealistically low and may not be sustainable for successful contract execution.

32.2 Where the Bid price is considered to be abnormally low, the Procuring Agency shall perform price analysis either during determination of Successful Bids or as a part of the post-qualification process.

32.3 The Procuring Agency may reject an Abnormally low financial bid in accordance with Rule 43 of the Public Procurement Rules, 2026.

32.4 In order to identify the Abnormally Low Bids (ALB) following approaches can be considered to minimize the scope of subjectivity:

1. Comparing the Bid price with the cost estimate;

2. Comparing the Bid price with the Bid(s) offered by other Bidders submitting substantially responsive Bids; and

3. Comparing the Bids price with prices paid in similar contracts in the recent past either government- or development partner-funded.

32.5 The respective Bid Evaluation Committee will determine to its satisfaction whether the Bidder that is selected as having submitted the successful bid is qualified to perform the contract satisfactorily.

32.6 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, as well as such other information as the Procuring Agency deems necessary and appropriate. Factors not included in these Bidding documents shall not be used in the evaluation of the Bidders' qualifications.

32.7 Respective Bid Evaluation Committee may seek "Certificate for Independent Price Determination" from the Bidder and the results of reference checks may be used in determining an award of contract.

Explanation: The Certificate shall be furnished by the Bidder. The Bidder shall certify that the price is determined keeping in view of all the essential aspects such as raw material, its processing, value addition, optimization of resources due to economy of scale, transportation, insurance and margin of profit etc.

32.8 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 respective Bid Evaluation Committee will proceed to the next ranked Bidder to make a similar determination of that Bidder's capabilities to perform satisfactorily.

F. Award of Contract

33. Criteria of Award

33.1 The Procuring Agency will award the Contract to the Bidder whose Bids has been determined to be substantially responsive to the Bidding documents and who has been declared as Successful Bidder.

34. Negotiations

34.1 In accordance with Rule 52A of Public Procurement Rules, 2026, without changing the cost and scope of work or services, the procuring agency may

negotiate with the successful bidder (with a view to streamline the work or task execution, at the time of contract finalization) on methodology, work plan, staffing and special conditions of the contract.

There shall be no limitation on the successful bidder offering voluntary reduction in bid price without affecting the quality or scope of the procurement.

35. Procuring Agency's Right to reject all bids

35.1 The Procuring Agency reserves the right to reject all bids or proposals at any time prior to the issuance of the Letter of Award, without incurring any liability, in accordance with Rule 45 of the Public Procurement Rules, 2026.

36. Cancellation of Procurement

36.1 The procuring agency reserves the right to cancel the procurement proceedings in accordance with Rule 46 of the Public Procurement Rules, 2026.

37. Procuring Agency's Right to Vary Quantities at the Time of Award

37.1 The Procuring Agency reserves the right at the time of contract award to increase or decrease the **quantity of** Goods originally specified in these Bidding documents provided this does not exceed **by** 15%, without any change in unit price or other terms and conditions of the Bids and Bidding documents.

38. Notification of Award

38.1 Prior to the award of contract, the procuring agency shall announce and publish the result of bid evaluation on EPADS v2.0 in accordance with Rule 48 of the Public Procurement Rules, 2026.

The Bidder whose Bids has been accepted will be notified of the award by the Procuring Agency prior to expiration of the Bids/Bid Validity period. The Letter of Award will state the sum that the Procuring Agency will pay the successful Bidder in consideration for the delivery of Goods as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price).

38.2 The Letter of award will constitute the formation of the Contract, subject to the Bidder furnishing the Performance Guarantee and signing of the contract.

39. Signing of Contract

39.1 Promptly after issuance of Letter of award, Procuring Agency shall send the successful Bidder the draft Contract, incorporating all terms and conditions as agreed by the parties to the contract.

39.2 Immediately after the Redressal of grievance by the GRC (if any), and **after fulfillment of all conditions precedent** of the Contract Form, the successful Bidder and the Procuring Agency shall sign the Contract.

40. Corrupt & Fraudulent Practices

40.1 Procuring Agencies (including beneficiaries of Government funded projects and procurement) as well as Bidders/Contractors under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts, and will avoid engaging in any corrupt and fraudulent practices.

F. Grievance Redressal & Complaint Review Mechanism

41. Constitution of Grievance Redressal Committee

41.1 The Grievance Redressal Committee shall address the grievance, if any submitted by any party, including the bidder, in accordance with Rule 65 of the Public Procurement Rules, 2026 read with Redressal of Grievances Regulations, 2021.

In case if any party or the bidder is not satisfied with the decision of the GRC or if it fails to decide within ten days, the bidder or the party may file an appeal before the Appellate Committee of the Authority in accordance with Rule 65(7) of the Public Procurement Rules, 2026 to be read with Redressal of Grievances Regulations, 2021.

G. Mechanism of Blacklisting

42. Mechanism of Blacklisting

42.1 The Procuring Agency shall initiate blacklisting proceedings against any bidder, supplier, or contractor in accordance with the Rule 25 of the Public Procurement Rules, 2026.

42.2 The blacklisted/debarred bidder may file the review petition before the Authority in accordance with Rule 25 (6) of the Public Procurement Rules, 2026 to be read with Procedure of filing and disposal of Review Petitions Regulations, 2021.

43. Contract Management

43.1 For each procurement, the Procuring Agency shall designate a Contract Manager, who shall be duly responsible for the efficient management and administration of the contract in strict compliance with the provisions set forth under Rules 58, 59, and 60 of the Public Procurement Rules, 2026.

44. Inspection of goods and evaluation of services.

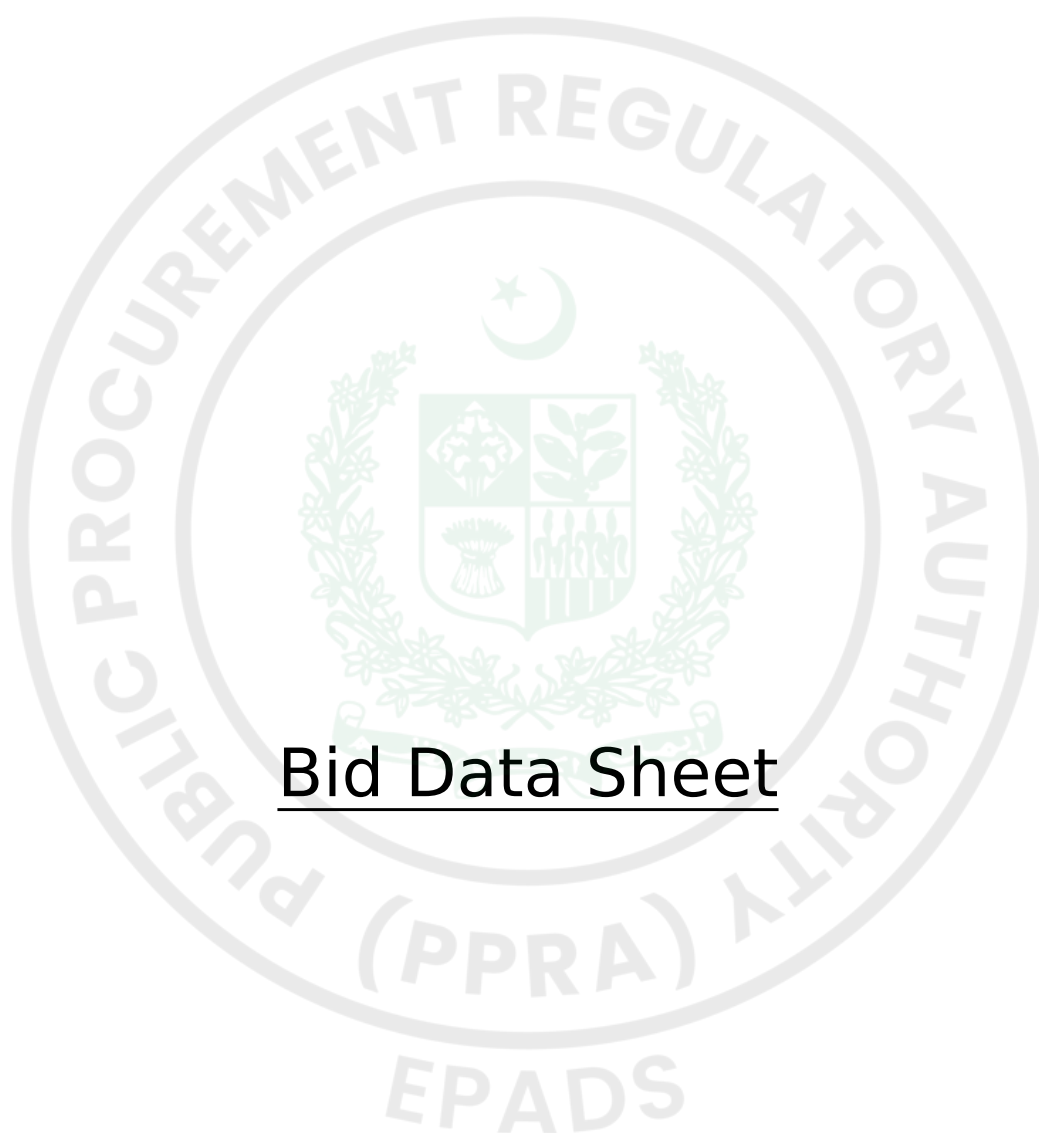
44.1 The Inspection Committee or the Firm shall have the right to conduct inspections of the goods in accordance with Rule 61 of the Public Procurement Rules, 2026.

45. Socio-economic development.

45.1 In accordance with Rule 63 of the Public Procurement Rules, 2026, preference may be granted to small and medium enterprises and marginalized groups in accordance with the policies notified by the Federal Government.

46. Environmental objectives

46.1 As per Rule 64 of the Public Procurement Rules, 2026, the procuring agency may seek to procure goods with a reduced environmental impact throughout their life cycle when compared to goods services with the same primary function that may otherwise be procured.



Bid Data Sheet

Bids Data Sheet (BDS)

The following specific data for the procurement of 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.

BDS Clause Number

ITB Number

Amendments of, and Supplements to, Clauses in the Instruction to Bidders

A. Introduction

BDS Clause Number 1

ITB Number 1.1

Name of Procuring Agency: **Air University, Islamabad Campus (Air University)**

The subject of procurement is: **TENDER FOR SUPPLY, DELIVERY, INSTALLATION, AND COMMISSIONING OF IT EQUIPMENT, DATA CENTER INFRASTRUCTURE, DATA BACKUP & RECOVERY SOLUTIONS, CYBER SECURITY TOOLS AND SOFTWARE FOR NCSA AT AIR UNIVERSITY, ISLAMABAD**

Period for Provision of Goods:

Extension Period (if applicable):

Expected commencement date: **Friday, November 27, 2026**

BDS Clause Number 2

ITB Number 2.1

Source of funds [Enter source of funds]

Financial year for the operations of the Procuring Agency: **2026-27**

Name and identification number of the Contract: **P148974**

Identification Number:

BDS Clause Number 3

ITB Clause Number 3.1

Eligible Bidder [Enter eligibility of bidder]

JV/Consortium or Association Allowed: **No**

Number of JV/Consortium Members: **Nil**

see section of eligibility criteria.

B. Bidding Documents

BDS Clause Number 4

ITB Clause Number 4.1

Eligible goods and related services [Enter requirements for eligible goods and related services, if any]

ITB Number 8.1

The Bidders may seek clarifications through **EPADS v2.0** : Clarification Date: Saturday, October 24, 2026

ITB Number 8.2

The Bidders may seek clarifications through **EPADS v2.0** : Clarification Date: Saturday, October 24, 2026

ITB Number 8.3

The Bidders may seek clarifications through **EPADS v2.0** : Clarification Date: Saturday, October 24, 2026

ITB Number 8.5

Pre-bid meeting will be/will not be held [Tick the appropriate] If yes write down the time, and date of the pre-Bid meeting:

[The meeting should take place not later than one weeks before the deadline for Bid submission.]

C. Preparation of Bids

BDS Clause Number 5

ITB Number 10.1

The Language of all correspondences and documents related to the Bids shall be in: **English**

List of documents required along with the bid: No

BDS Clause Number 6

ITB Number 11.1

Documents required / not required with bid submission [enter list of documents] Samples required / not required with the bid [Enter the names and number of samples]

Items/Lots and therrre related documents:

See section items and Lots

BDS Clause Number 7

ITB Number 12.1

Items / Lots Specifications:

see section of items specifications.

BDS Clause Number 8

ITB Number 15.6

The price shall be **Fixed**.

BDS Clause Number 9

ITB Number 16.1

Currency of the Bids shall be : **PKR**

BDS Clause Number 10

ITB Number 17.1

The Bids/Bid Validity period shall be: **120 Days**

BDS Clause Number 11

ITB Number 18.1

The amount of Bid Security shall be as defined in Bid Security Section for items and lots given in **BDS 6**

Instrument of Bid Security shall be in the Name of : **Air University, Islamabad Campus**

The Bid Security shall be in the form of: **Call at Deposit**

ITB Number 18.2

The address for submission of original bid security is [Insert the address for bid security submission]

D. Submission of Bids

BDS Clause Number 12

ITB Number 20.1

Bid shall be submitted online on EPADS v2.0 whereas hard copy of the bid security should be submitted to the following;

PAF Complex, Sector E-9., Islamabad Capital Territory before bid submission deadline.

Bids that are not submitted on EPADS v2.0 shall be disqualified.

The deadline for Bids submission is: **Tuesday, October 27, 2026 11:00 AM**

Day : **Tuesday**

Date: **Tuesday, October 27, 2026**

Time : **11:30 AM**

E. Opening and Evaluation of Bids

BDS Clause Number 13

ITB Number 23.1

The Bids opening shall take place on **EPADS v2.0**.

Day : **Tuesday**

Date: **Tuesday, October 27, 2026**

Time : **11:30 AM**

ITB Number 29.2

The procuring agency shall consider the following:

lump sum bid basis; or

items wise; or

Lot wise (contracts),

ITB Number 30.1

BDS Clause Number 14

ITB Number 31.1

Domestic Preference [applicable / not applicable]

ITB Number 31.2

Selection technique adopted will be:

The Procuring Agency shall use any of the following evaluation techniques for determination of successful bid.

Least Cost Base Selection (LCBS)

Quality and Cost Based Selection (QCBS)

Quality Based Selection (QBS)

[Insert the Evaluation Technique]

Selection technique adopted will be: **Least Cost Based Selection (LCBS)**
see Evaluation Criteria

F. Review of Procurement Decisions

BDS Clause Number 15

ITB Number 41.1

Grievance against this procurement shall be submitted online on EPADS v2.0.

Arbitrator shall be appointed by mutual consent of the both parties.

ITB Number 42.2

The Address of PPRA Grievance Redressal Appellate Committee to submit a copy of grievance:

Grievance Redressal Appellate Committee,

Public Procurement Regulatory Authority

1st Floor, G-5/2, Islamabad, Pakistan

Tel: +92-51-9202254

Eligibility Criteria

Bidder's Type	Required Registration
Individual / Individual Consultant	NADRA CITIZENSHIP (CNIC/NICOP)
Sole Proprietorship	FBR (NTN)
Partnership Firm	FBR (GSTN)
Company (Private Limited)	
Company (Public Limited)	
Company (Holding Company)	
Company (Limited by Guarantee)	
State Owned Enterprise (Private Limited)	
State Owned Enterprise (Public Limited)	
NGO / NPO	
IGO	

Evaluation Criteria

Eligible bidder(s) with substantially responsive bid(s) offering **Least Cost Based Selection (LCBS)** shall be consider for the award of contract(s).

Least Cost Based Selection (LCBS)

Weightage

Technical Evaluation %	
100	
Technical Marks	100
Passing Marks	50
Technical Evaluation Criteria	
Supply, Installation & Commissioning of IT Equipment completed during last 03 years (Similar to items demanded in the BOQs). (Quantitative)(Doc Required)	30
Ongoing Similar Purchase order for Supply, Installation & Commissioning of IT Equipment. (Within Period of 3-4 months from the date of submission of bid). (Quantitative)(Doc Required)	15
Length of experience in relevant field (Quantitative)(Doc Required)	10
Authorized Dealership (Quantitative)(Doc Required)	10
Technical staff with relevant experience (Quantitative)(Doc Required)	15
Technical Local Support Center & Training (Quantitative)(Doc Required)	10

Average working capital for the last 02 years supported by Audited Financial Statements. (Quantitative)(Doc Required)	5
Average annual turnover during last 02 years supported by Tax Returns. (Quantitative)(Doc Required)	5



Items/Lots

Items Without Lots :

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization
LOT # 01 - GPU Based Desktop Computers (08 GB GPU)	Computer workstation	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Quantity: 260/Qty	260/Qty	2200000 PKR	Any
LOT # 02 - GPU Based Desktop Computers (16GB GPU)	Computer workstation	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 50/Qty	50/Qty	640000 PKR	Any
LOT # 03 - SERVERS-1	Computer workstation	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 3/Qty	3/Qty	300000 PKR	Any

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization
LOT # 04 - SERVERS -2	Computer workstation	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 3/Qty	3/Qty	60000 PKR	Any
LOT # 05 (Item # 01) (Networking of 05 Computer Labs)	Network cable management panel assembly	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 5/Qty	5/Qty	50000 PKR	--
LOT # 05 (Item # 02) (Power Work of 05 Computer Labs)	Network cable management panel assembly	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 5/Qty	5/Qty	30000 PKR	--
LOT # 06 - LAPTOPS	Laptop and desktop computer depot repair service	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 02/Qty	2/Qty	12000 PKR	Any

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization
LOT # 07 (UPS with Protection DBs) For Computer Labs	Power supply	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 06/Qty	6/Qty	100000 PKR	--
LOT # 08 (Network Data Switches)	Network switches	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 17/Qty	17/Qty	60000 PKR	--
LOT # 09 (Interactive LED Screens 86") kamara,multan,islamabad	Acoustic screen enclosure	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 85/Qty	85/Qty	1190000 PKR	Any
LOT # 10 (Photocopier Machine)	Photocopiers	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 01/Qty	1/Qty	20000 PKR	Any

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization
LOT # 11 (ENTERPRISE BACKUP, RECOVERY & STORAGE SOLUTION)	Computer storage equipment depot repair service	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 20/Qty	20/Qty	40000 PKR	Any
LOT # 12 Cyber Secur tools-1	Air capacitor	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 27 Days Quantity: 81/Qty	81/Qty	80000 PKR	--
LOT # 12 Cyber Security Tools-2	Air capacitor	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 27 Days Quantity: 81/Qty	81/Qty	200000 PKR	--
LOT # 13 hard disk-2TB and 5TB	Hard disk drives	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 04/Qty	4/Qty	4000 PKR	--

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization
LOT # 14 Printers	Digital image printers	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 27 Days Quantity: 06/Qty	6/Qty	6000 PKR	--
LOT # 15 cyber software	Access software	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 27 Days Quantity: 91/Qty	91/Qty	50000 PKR	--
LOT # 16 Computer Tables-3 seater	Arm chair	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 27 Days Quantity: 15/Qty	15/Qty	6600 PKR	--
LOT # 17 Computer Tables-2 seater	Arm chair	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 27 Days Quantity: 125/Qty	125/Qty	45000 PKR	--

Item	UNSPSC	Delivery Schedule	Quantity	Bid Security	Manufacturer / Dealer Authorization
LOT# 18 computer Chairs	Arm chair	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 27 Days Quantity: 285/Qty	285/Qty	45600 PKR	--
LOT # 16 (Interactive LED Screens 86") FRPMC Karachi	Acoustic screen enclosure	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 20/Qty	20/Qty	280000 PKR	Any
LOT No. 17 - Data Center (Islamabad Campus)	Data center services	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 1/Qty	1/Qty	1200000 PKR	Any
LOT # 18 SAN Storage	Storage area network SAN switch	Address: PAF Complex, Sector E-9., Islamabad Capital Territory Schedule: 120 Days Quantity: 1/set	1/set	160000 PKR	Any

Related Services of Goods:

No



Items/Lot Specification

Items Without Lots :

Item: LOT # 01 - GPU Based Desktop Computers (08 GB GPU)

UNSPSC: Computer workstation

Specifications / Requirementss:

Processor Intel Core i7- 14th Generation 14700 / equivalent Ultra7 Chassis Mini Tower / Tower (As per GPU Requirement) Mother Board Intel Chipset Memory 16 GB Hard Disk Drive 512 GB SSD NVMe GPU Nvidia RTX 4060, 8 GB or better Ports HDMI / Display Port + USB 02 & 03 + Sound Ports Power Supply 500 Watts or above - As per requirement of GPU Network Adaptor LAN: Integrated NIC 1 Gbps LED Monitor 22" LED FHD Monitor- Keyboard Mouse Branded Keyboard & Mouse of same brand of CPU Cables System and monitor Power Cords + Display Cables . No convertor Operating System Linux / Ubuntu / Dos Warranty 03 Years comprehensive OEM Local NBD Warranty on site at AU Islamabad campus Optional Price 16 GB Ram Additional (To make system 32GB) Terms & Conditions • DELL/HP/Lenovo brands only • Only Authorized Tier1 / Tier2 Partners having their office, service center in Islamabad / Rawalpindi with service center and support in Lahore Karachi with certified trained manpower on their own payroll can quote. Attach the list of Manpower with office details. • The bidder should have at least 10 similar projects in their portfolio during last 03 years. • Delivery Time : Ex-Stock with be preferred or 8-10 weeks maximum • Delivery and installation of computers with OS in labs of respective campuses as mentioned above

Item: LOT # 02 - GPU Based Desktop Computers (16GB GPU)

UNSPSC: Computer workstation

Specifications / Requirementss:

Processor Intel Core i7- 14th Generation 14700 Chassis Tower (As per GPU Requirement) Mother Board Intel Chipset Memory 32 GB Hard Disk Drive 512 GB SSD NVMe GPU Nvidia RTX 5060 / 5070 16 GB Ports HDMI / Display Port + USB 02 & 03 + Sound Ports Power Supply As per GPU requirement (16GB) Network Adaptor LAN: Integrated NIC 1 Gbps LED Monitor 21.5" LED FHD Monitor- Keyboard Mouse Branded Keyboard & Mouse of same brand of CPU Cables System and monitor Power Cords + Display Cables . No convertor

Operating System Linux / Ubuntu / Dos Warranty 03 Years comprehensive OEM Local NBD Warranty on site at AU Islamabad campus Optional Price 16 GB Ram to make the system

Terms & Conditions • DELL/HP/Lenovo brands only • Only Authorized Tier1 / Tier2 Partners having their office, service center in Islamabad / Rawalpindi with certified trained manpower on their own payroll and support center in Islamabad / Rawalpindi. • The bidder should have at least 10 similar projects in their portfolio during last 03 years. • Delivery Time : Ex-Stock or 8-10 weeks maximum • Delivery and installation of computers with OS at Air University Islamabad Campus

Item: LOT # 03 - SERVERS-1

UNSPSC: Computer workstation

Specifications / Requirementss:

Brand & Model Server 1 - Dell / HP / Lenovo or better Processor For Server 1 = 02 x Intel® Xeon® Silver 4309Y 2.8G, 8C/16T, 10.4GT/s, 12M Cache, Turbo, HT (105W) DDR4-2666- (Dual Processor Machine) Chassis - Chipset Support of 8x3.5" SAS/SATA - / 2U - Rack Mount - Chipset Intel Memory 128 GB DDR4 ECC Registered RDIMM - (32 x 04) or better Hard Disk Drive • 02 x 448 SAS SSD / NvMe with Raid 1 • 03 x 1.2TB Hard Drive SAS ISE 12Gbps 10k 512n 2.5in with 3.5in HYB CARR Raid / OS RAID 0 /1 / 5 for HDDs and SSDs - Linux / Ubuntu Power Supply Dual Hot pluggable Power Supply Redundant (1+1) 550 Watts or above Network Adaptor 02 x 1 Gbps Ethernet + 02 x 10Gbps Ethernet + 02 x 10 Gbps Fiber ports Rack Rails Bazel Genuine Sliding RAIL Kit and Front Bazel with Cable Management Arm, 2U LCD Bezel Warranty 03 Years NBD on site at Air University Islamabad Campus.

Terms & Conditions • DELL/HP/LENOVO brands or better. • Only Authorized Tier1 / Tier2 Partners having their office, service center and trained manpower in Islamabad / Rawalpindi can quote. • The bidder should have at least 05 similar projects in portfolio during last 03 years • Delivery and installation at Air University Islamabad Campus. • AU reserves the right to increase or decrease the quantity.

Item: LOT # 04 - SERVERS -2

UNSPSC: Computer workstation

Specifications / Requirementss:

Brand & Model Server 2 - HP HP 380 G10 or equivalent - Processor 2X Intel Xeon Gold 6138 V4 or better - 20C 40T 2.0 up to 3.7 Ghz, 55 MB Cache Chassis - Chipset Support of 8x3.5" SAS/SATA - / 2U - Rack Mount - Chipset Intel Memory 128 GB DDR4 ECC Registered RDIMM - (32 x 04) Hard Disk Drive • 02 x 448 SAS SSD / NvMe with Raid 1 • 03 x 1.2TB Hard Drive SAS ISE 12Gbps 10k 512n 2.5in with 3.5in HYB CARR Raid / OS RAID 0 /1 / 5 for HDDs and SSDs - Linux / Ubuntu Power Supply Dual Hot pluggable Power Supply

Redundant (1+1) 550 Watts or above Network Adaptor 02 x 1 Gbps Ethernet + 02 x 10Gbps Ethernet + 02 x 10 Gbps Fiber ports Rack Rails Bazel Genuine Sliding RAIL Kit and Front Bazel with Cable Management Arm, 2U LCD Bezel Warranty 02 Year Warranty on site at Air University Islamabad Campus Terms & Conditions • DELL/HP/LENOVO brands or better. • Partners having their office, service center and trained manpower in Islamabad / Rawalpindi can quote. • Bidder should have experience manpower having good experience on servers. Attached the CVs • The bidder should have at least 05 similar projects in portfolio during last 03 years • Delivery and installation on site at Islamabad Campus. AU reserves the right to increase or decrease the quantity.

Item: LOT # 05 (Item # 01) (Networking of 05 Computer Labs)

UNSPSC: Network cable management panel assembly

Specifications / Requirementss:

Network Cable UTP Cat-6 Cable Roll 23AWG Pure Copper – Corning, Schneider – 1000 Feet Roll- Fluke tested cables will be acceptable. 20 Rolls RJ-45 Connectors Cat-6 with Boot Cover- A + Quality 800 GI Duct 4" Wide and 1.5" Hight with 16 Guage Galvanized Local Best Quality (for laying cables on Floor) 500 ft Flexible pipe 1" – 90 Meter Roll – Dura 04 Cabinet 9U- Imported Double Section with lock, Fan and front Glass 05 60 x 40 PVC Duct – Adamjee / Dura Duct 700 ft 80 x 80 PVC Duct – Adamjee / Dura Duct 60 ft Cable Manager – Good Quality 10 Networking Jobs in 05 Computer Labs – (As per drawings attached) • UTP Cat-6 Cable Laying and Termination, Fixing of GI Duct on floor, running network cables in GI Duct on floor and in PVC Duct on walls as per requirement of the site. • Tagging of Cables with Yellow Ring Tags 0-9. • All other jobs to complete the networking in computer labs. 1 Job

Item: LOT # 05 (Item # 02) (Power Work of 05 Computer Labs)

UNSPSC: Network cable management panel assembly

Specifications / Requirementss:

Power Cable 7/29 – Pakistan Cables , Newage, Aiwa (90 Meter Role) 16 Roll Power Cable 3/29 for earthing – Pakistan Cable, Newage, Aiwa (90 Meter Role) 05 Roll Duct 16*38 – Dura Duct / Adamjee - 600 ft Power Breaker 16A, Schneider 36 Power Breaker 63A, Schneider 05 Power DB – Local A+ Quality 05 Light Plug Multi – A+ Quality 13 Amp - Schneider Clipsal or equivalent 140 PDUs – As per sample Pure copper strips A+ Quality - Support 4 Flat Sockets to accommodate 04 devices simultaneously Fixing of PDUs in Tables with screws Fixing of Tables on Floor with 4-5" Washer Head screws 125 Laying and Installation Job in 05 Computer Labs • Power Cable Laying on Floor in GI Sheet and in PVC Ducts on walls •

Fixing of sockets on floor as per drawings attached. • Installation of Power DB, Breakers, and termination of cable in breakers as per drawings and to make the computer labs fully functional in power. Job

Item: LOT # 06 – LAPTOPS

UNSPSC: Laptop and desktop computer depot repair service

Specifications / Requirementss:

Generation 14th Generation Processor Option 2 = 14th Generation Intel Core i7 14700 processor Installed RAM 16GB SO-DIMM DDR5-5600 Hard Drives 1TB SSD M.2 2280 PCIe® 4.0x4 NVMe® Screen size 15.6 / 16" WQXGA (2560x1600) IPS 350nits Anti-glare, 100% sRGB, 165Hz, Dolby Vision®, G-SYNC®, Low Blue Light Backlit keyboard Should be available Bluetooth Yes LAN Card 100/1000M 1 Gbps Wi-Fi - Type Yes - Wi-Fi® 6E, 802.11ax 2x2 or equivalent HDMI 1x HDMI® 2.1, up to 8K/60Hz Camera FHD 1080p with Privacy Shutter Warranty 03 Years comprehensive NBD at Air University Islamabad • DELL/HP/Lenovo brands only • Only Authorized Tier1 / Tier2 Partners having their office, service center in Islamabad / Rawalpindi with certified trained manpower on their own payroll, can quote. • The bidder should have at least 10 similar projects in their portfolio during last 03 years. • Delivery Time : Ex-Stock or 8-10 weeks maximum • Delivery and installation of computers with OS at Air University Islamabad

Item: LOT # 07 (UPS with Protection DBs) For Computer Labs

UNSPSC: Power supply

Specifications / Requirementss:

20 KVA Online Pure Sinewave – APC SRT / SUVT or equivalent. Only renowned American, European brands like APC, Emerson Liebert / ABB Brands only. • Three Phase IN / three / Single Out - Power Factor 0.9 or better - Online Pure sine wave Double Conversion, with batteries of well-known brand and fresh stock only. Backup time: 10-15 minutes backup on 80% load • Manufacturing date should not be later than 02 years. 05 10 KVA Online Pure Sinewave – APC SRT or equivalent. Only renowned American, European brands like APC, Emerson Liebert / ABB Brands only. • Single IN / Single Out - Power Factor 0.9 or better - Online Pure sine wave Double Conversion, with batteries of well-known brand and fresh stock only. Backup time: 10-15 minutes backup on 80% load Manufacturing date should not be later than 02 years. 01 Protection Panel DB for 20 KVA UPS – 20 KVA • Qty 03 x 80 Amp Breakers (Schneider) 2 poles with small DB Box if required for input and output • Input Output voltage Protection - High Quality imported + Indicator of INPUT and OUTPUT • Manual Bypass 80 Amp with Over voltage under voltage control, Surge protection / SPD. input and output • Please visit site for estimation of cable and any other item required for this

installation. Please include the price of anything additional required for this installation. 06 • Power Cable 16 mm (Pakistan Cable, FAST) 4 Core for 20 KVA UPS • Power Cable 10 mm (Pakistan Cable, FAST) 4 Core for 10 KVA UPS 150 Meter 30 Meter Installation at Air University Campuses at mentioned above • Complete installation commissioning of UPS, power cable and UPS DB at Air University Campuses as mentioned above • Warranty: 01 Year for UPS and minimum 06 months for Batteries on site at Air University Islamabad. • Delivery time – 04 weeks Job 06 UPS Installation • Suppliers should have offices & service centre in ISB/RWP • Only relevant Professional having atleast 05 years of experience in the field. • Bidder should have their own repair UPS repair workshop with professional UPS trained technicians in ISB/RWP • Bidder should have atleast more than 50 similar installations at Islamabad Rawalpindi. • 02 Years warranty on site at Air University campsues as mentioned above

Item: LOT # 08 (Network Data Switches)

UNSPSC: Network switches

Specifications / Requirementss:

Switch -01 (TOR Switch Layer – 3) Enterprise Level Switch only – SME/Consumer end Switches are not acceptable • 24 x 10G Copper+ 02 x 10/40G Optical Fiber Ports supporting single/Multi mode. • VLAN switching, MAC-based VLAN assignment, and Inter-VLAN Routing • Access, Trunk, and Hybrid interface types. • Layer-3 Fully Manageable through GUI & CLI • 802.1x authentication, MAC base authentication, RADIUS, TACACS+ authentication, Different user levels for commands, preventing unauthorized users from using certain commands, Defense against DoS attacks, TCP SYN Flood attacks, UDP Flood attacks, broadcast storms, and heavy traffic attacks 01 Switch -02 (Access Switches) Enterprise Level Switch only – SME/Consumer end Switches are not acceptable • 24 x 1G Copper and 02 x 10G Optical Autosensing ports. • VLAN switching, MAC-based VLAN assignment Access, Trunk, and Hybrid interface types • Layer-2 Fully Manageable through GUI & CLI • 802.1x authentication, MAC base authentication, RADIUS authentication. 16 Fiber Patch Card Single mode Duplex SC to LC - 3 Meter Single mode Duplex LC to LC - 1 Meter 15 15 Terms and Conditions • Cisco, Ruijie, H3C, Huawei or better equivalent only. • Enterprise Level Switch only well-known brands only – • SME/Consumer end Switches are not acceptable • Manageable all switches through cloud free software • Minimum 03 years comprehensive Warranty • Successful bidder will Deploy, configure switches at Air University varuious campus

Item: LOT # 09 (Interactive LED Screens 86”) kamara,multan,islamabad

UNSPSC: Acoustic screen enclosure

Specifications / Requirementss:

Resolution: 4K (3840 x 2160) Built-In Camera: 48 MP, AI-Based 4K Voice Tracking Camera Built-in 08 Microphones Array or better with Clear sound pickup at 6-8 Meter. Echo cancellation and Noise reduction Build-In Speaker: Minimum 02 x 15 Watts or better Glass: Anti-Glare / Anti-Reflective /Anti blue Glass with Mohs 7 (4mm glass thickness) Intelligent Whiteboard for Smooth Writing with minimum response time and maximum accuracy will be preferred. Built in Wi-Fi, 2.4 / 5.0 Ghz Supported – Wi-Fi 6 Finger Multi Touch options 02 x Magnetic pen / stylus pen Lifetime Free White Board Software for windows. Palm Rejection option should be available. Android 14 or better (OTA-Auto Firmware Update) Android Spec: Android 14, 08 GB, 128GB AI handwriting tracking – Handwriting to Digital form Multitouch gesture e.g. Select, move, zoom and erase Touch Points: 20 Points (Windows)- 20(Points Android) Facility of Hotspot Whiteboard saving mode (QR code scan/Email/Local storage/USB) Remote Control of LED Refresh rate: 60Hz – Contrast ratio: 4000 :1 One tap switchover from Android to Windows Wired and Wireless Projection: up to 4K 50000 Hrs. Life for LED Panel HDMI Wired Projection + USB Type-C wired projection x 1, Wireless projection of multiple users + through mobile App Free for lifetime Computer Software for Screen Sharing Supported windows, Android & Mac OS. Mention Int. Certification if available for Brand. Windows OPS Spec: Core i5/i7, 12th Generation or better, 16GB RAM, 512GB SSD Ports: 02 x HDMI In + 01 x HDMI Out, 02 x USB Ports (Type-A 2.0,3.0,3.1) 01 x USB Type-C, (should be available on Front and Rear Panel both). 01 x USB Type-B), 01 x Touch USB. LAN In x 1, LAN Out x 1, Bluetooth 5.1 (preferred) OPS Port x 1, Line-in, Line-out, Earphone, RS232 x 1, SPDIF out (optional) Remote management of multiple devices through software Integration of additional teacher camera Wall Mount Bracket with Installation Wall mount kit with complete installation and configuration, Ducting & Cabling at Air University ISLAMABAD Campus. Surge Protector: Install Surge protector on input of the Screens (Voltage Controller with Back Box) Warranty: 02 Years on site at Air University ISLAMABAD Campus With lifetime software upgrades and updates. Delivery Time: 06-08 weeks' maximum Installation : Power Sockets are available on front wall of classroom and labs. Installation should be included with power cabling, ducting required with HDMI Cable laying from Screen to Podium. With all required accessories. DMS(must be same brand) with ability to manage and control all devices. Digital Signage Remotely install apps, Remote Management + Alert Announcement + Digital Signage, Live Streaming on panels through device management system, B) Wireless headgear / collar Mic For Teacher – Integrated with LED Screen OPS for clear voice of teachers particularly on zoom / Teams Free Power Professional UHF Mic Model AK-460II . or equivalent With Mono to Stereo convertor c) Branded HDMI Cable 10 meter Fiber Optics, 4K, Best Quality. d) Wireless Keyboard, Mouse, Mouse Pad, Best Quality . Range up to 08 Meter . B) Wireless headgear / collar Mic For Teacher – Integrated with LED Screen OPS for clear voice of teachers particularly on zoom / Teams Free Power Professional UHF Mic Model AK-460II . or equivalent With Mono to Stereo convertor 10 c) Branded HDMI Cable 10 meter Fiber Optics, 4K, Best Quality. 60 d) Wireless Keyboard, Mouse, Mouse Pad, Best Quality . Range up to 08 Meter . 05 Delivery & Installation at Air University Campuses as mentioned above Terms & Conditions Only professional Firms have more than 05 Years of experience in the field of selling Interactive Screens with strong technical trained team on their own payroll and having their own service center in Islamabad / Rawalpindi only can quote. Supplier should have Purchase orders of more than 100 similar Interactive LED Screens on their portfolio. Supplier should have supply and services relationship with at least 10 different organizations during last 03 years for the supply and installation of interactive LED screens. Supplier will provide Demo Unit at Air University Islamabad Campus for POC. Screen will be finalized purely based on the Demonstration of equipment and technical features set. System ruggedness, equipment performance, features set which are more supporting to teaching methodology, customer's feedback on the product and best suitable for Air University will be selected. Installation of panels with configuration of software at Air University ISLAMABAD Campus. AU reserve the right to increase or decrease the quantities.

Item: LOT # 10 (Photocopier Machine)

UNSPSC: Photocopiers

Specifications / Requirementss:

Country of Origin Japan CPM + Functionality 45 CPM. Copy, Print, Colour Scan Memory + Processor Minimum 04 GB or higher + 1.2 GHz or better Hard Disk 128 GB SSD Dual Printing- DADF - Single pass for Dual side copying (No RADF) + Duplex Printing copying Resolution Print 1800 1200 dpi & Scan / Copy 600 x 600 dpi or better Input Trays Capacity Input Paper Capacity - At least 1000 sheets Colour Scanner Built-in colour scanner over Network Paper Size A3, A4 and lower Tray Capacity Bypass with AI least 100 Sheets + 1000 Pages on other trays Touch screen size 9" Touch Screen full coloured LCD Panel or larger USB Ports USB2 x 01, USB3 x 01, USB 2.0 x 1 Device Network Interfaces Standard 1 Gbps - RJ-45 connector Trolley PPC Trolley Warranty 02 Year with parts and service on site at Air University Islamabad. Delivery Air University ISLAMABAD Campus - Copy Cost Terms and conditions Please mention following 1. Mention the cost of Toner, Developer, and Drum with their yields. Also calculate the Copy cost by dividing cost of Drum, Developer, and toner with number of copiers. 2. Mention the cost of consumable parts up to 5 Lac copies. Copy and consumable cost will be considered in financial evaluation. Supplier will replace the consumables in case parts does not complete their life. 3. Only Authorized Distributors by principal can quote - Provide Authorized Letter 4. Only renowned brands having more than 100 installations can quote 5. Bidder may have Service centre in Islamabad / Rawalpindi with professional engineers can quote.

Item: LOT # 11 (ENTERPRISE BACKUP, RECOVERY & STORAGE SOLUTION)

UNSPSC: Computer storage equipment depot repair service

Specifications / Requirementss:

The bidder shall supply, install, configure, test and commission a complete Enterprise Backup and Recovery Solution, including: 1. Enterprise backup and recovery software licenses for minimum 20 physical/virtual servers. 2. Dedicated backup server/appliance. 3. Dedicated backup storage with sufficient usable capacity. 4. Backup software with centralized management. 5. Automated backup scheduling and policy-based protection. 6. Deduplication and compression. 7. Immutable/ransomware-protected backup capability. 8. Full server, VM, application, database and file-level recovery. 9. Bare-metal recovery capability. 10. Disaster recovery/replication capability. 11. Backup monitoring, reporting and alerting. 12. Installation, configuration, testing and commissioning. 13. Administrator training. 14. Minimum 3 years warranty/support/subscription. DETAILED TECHNICAL SPECIFICATIONS Scope: The bidder shall supply, install, configure, test and commission a complete Enterprise Backup and Recovery Solution comprising backup software, backup server/appliance, backup storage, recovery capability, monitoring, support and training. 1. Backup Software • Minimum licensing for 20 physical/virtual servers/workloads, expandable to at least 50 servers. •

Centralized web-based management console. Support for Windows and Linux servers. Support for Microsoft Hyper-V and VMware ESXi/vSphere. Image-level backup for physical and virtual machines. Full, incremental and synthetic full backup capability. Changed Block Tracking or equivalent technology. Automatic scheduling and policy-based backup. Automatic backup verification and retry of failed jobs. Compression and source-side/global deduplication. Backup retention and automatic cleanup policies. Encryption and secure transmission of backup data. Bandwidth throttling and configurable backup windows. Email/configurable notifications, dashboards, logs and reports. Role-Based Access Control and preferably MFA support.

2. Recovery Requirements • Full server recovery and bare-metal recovery. Recovery to replacement hardware. Complete and rapid/instant virtual machine recovery. • Recovery of individual files and folders. Recovery of deleted files from available restore points. Application/database-level recovery for supported enterprise applications. Recovery to an alternate server/VM where supported.

3. Backup Storage Hardware • Enterprise-grade rack-mountable backup storage appliance. Minimum 30 TB usable backup capacity after RAID protection, expandable to at least 50 TB. Enterprise-grade 24x7 hard drives with hot-swappable drive bays. RAID 6 support with hardware RAID controller and protected write cache. Hot-swappable disks and redundant power supplies. Minimum 64 GB ECC RAM, expandable. Minimum 2 × 10GbE network interfaces plus dedicated management interface. Remote hardware management such as IPMI/iLO/iDRAC or equivalent. Web-based storage management and monitoring. Expansion capability for additional storage.

4. Automatic Backup & Retention • Automatic daily incremental backups. Weekly full or synthetic full backups. Configurable monthly/long-term retention. Automatic cleanup according to retention policy. Automatic retry of failed jobs. Automatic notification of backup failures and status. Support for protection policies for newly added workloads where available.

5. Deduplication & Compression • Block-level deduplication. Global deduplication where supported. Compression of backup data. Storage and bandwidth optimization. • Reporting of deduplication/compression efficiency.

6. Immutable Backup & Ransomware Protection • Mandatory immutable backup capability. Protection against ransomware, malicious deletion and unauthorized modification. • Support for hardened repository, WORM/object lock or equivalent immutable technology. Configurable immutability/retention period. • Separate administrative credentials for backup and storage infrastructure. Audit logs for administrative activities.

7. Disaster Recovery & Off-Site Protection • Backup copy/replication to a secondary location. Scheduled replication of selected servers/VMs. Support for recovery from secondary/off-site backup. Configurable Recovery Point Objective (RPO) and Recovery Time Objective (RTO). Failover/failback capability where supported. Disaster recovery testing without affecting production systems.

8. Backup Server • Rack-mounted enterprise server. Minimum 8-core Intel Xeon/AMD EPYC or equivalent processor. Minimum 32 GB ECC RAM, expandable to 64 GB or more. Minimum 2 × 480 GB enterprise SSD in RAID 1 for operating system. Minimum 2 × 10GbE network ports. • Hardware RAID controller. Redundant power supplies. Remote management capability. Supported Windows Server or Linux operating system.

9. Security Requirements • AES-256 or equivalent encryption. Encryption at rest and in transit. Role-Based Access Control. Multi-factor authentication where supported. Separate backup administrator credentials.

Item: LOT # 12 Cyber Secur tools-1

UNSPSC: Air capacitor

Specifications / Requirementss:

Complete Forensic Adapter Kit 3 SATA, IDE, SAS, NVMe/M.2, PCIe, mSATA, ZIF/LIF, USB-A/C, Thunderbolt, SD, microSD, CF, Memory Stick, power adapters and forensic cables High-Capacity Evidence Drives 20 Enterprise 12–24 TB HDDs and 4–8 TB SSDs; evidence/working-copy separation Dedicated backup appliance 1 At least 40 TB usable; snapshots and scheduled backup of priority datasets, code and results. Cyanoacrylate Fuming Chamber 1 Controlled chamber with humidity/temperature control and exhaust Fingerprint Imaging Station 1 DSLR/mirrorless camera, macro lens, alternate light source, filters Research network equipment 1 Managed 25 GbE switch, compatible server adapters, cables and transceivers. Forensic Evidence Imaging SSDs 6 High-endurance 4–8 TB SSDs for temporary working images Digital Evidence Camera 2 24 MP+; macro capability; RAW; timestamp; tripod; evidence scale/measurement accessories Forensic Light Source Kit 2 UV, blue, green, alternate light wavelengths; filters and goggles Android tablet, 10 10-11", >=128 GB storage, >=4 GB RAM, with case; compatibility testing, assisted sign-up, loan devices, session and interview recording; reused in NCSA labs Barcode/QR Evidence System 3 Thermal barcode printer; scanner; sequential labels; QR/barcode support; evidence tracking software Tablet Test Devices 6 Android/iPadOS; Wi-Fi/cellular variants Faraday Evidence Box 2 RF isolation; 2G/3G/4G/5G/Wi-Fi/Bluetooth/GPS; 2.4/5/6 GHz; RF-isolated power; USB-C/USB feed-through; viewing window; mesh gloves; 80 dB+ attenuation preferred Rack and power distribution 1 Suitable-depth rack, metered PDUs, rails, cable management and temperature monitoring. Forensic Evidence Server 1 32+ CPU cores; 256 GB ECC RAM; 2× enterprise NVMe; minimum 100 TB raw storage; RAID-6/RAIDZ2; hot-swap; 10/25 GbE; encryption; snapshots; audit logs; redundant PSU Digital Microscope 2 10×–200×; 4K camera; measurement; LED/polarized illumination; image/video capture Macro Lens 4 90–105mm macro, 1:1 reproduction Digital Microscope 2 4K camera, 10×–200×+, measurement and image capture Stereo Microscope 4 10×–80×, binocular/trinocular, transmitted/reflected illumination Forensic Evidence Examination Tables 4 Chemical-resistant, washable, illuminated, lockable storage Crime Scene Photography Kit 4 Camera, macro lens, tripod, flash, scales, color chart, evidence markers Network Data Switches 1 Enterprise-level switch only; 24×1G copper; 2×10G optical autosensing ports; 2×10G electrical copper RJ45 ports; MAC-based VLAN assignment; access/trunk/hybrid interface types; Layer-2 fully manageable via GUI & CLI; 802.1x, MAC-based and RADIUS authentication; 6× Single Mode SFP 10 KM; delivery 2–8 weeks maximum. Terms and conditions • Vender can quote any one or combinations of items • Deliver installation at Air University Islamabad Campus • Warranty and support for the period of 01 year

Item: LOT # 12 Cyber Security Tools-2

UNSPSC: Air capacitor

Specifications / Requirementss:

AI Fixed Dome Camera 4 8MP; 4K; WDR 120 dB+; IR; IP67/IK10; human/vehicle detection; privacy masking; edge analytics Forensic Hardware Write Blocker – SATA/USB 2 Professional standalone hardware write blocker for forensic acquisition of SATA HDD/SSD and USB storage media. Supports SATA I/II/III, 2.5"/3.5" drives, USB 2.0/3.x; USB 3.0+ host interface; hardware-enforced read-only/write-blocking; blocks ATA/SCSI write, erase and format commands; LED indicators for power, media detection, host connection, write-block

status and activity; SATA data/power cables; external power adapter; HPA/DCO detection preferred; compatible with FTK, EnCase/OpenText, X-Ways, Magnet and other forensic imaging tools; Windows/Linux compatibility; firmware upgrade capability; rugged/portable design; NIST CFTT-tested or equivalent independently validated; minimum 1-year warranty and OEM technical support. Smartwatch/IoT Mobile Evidence 3 Apple Watch, Wear OS device, Bluetooth wearable Fingerprint Chemical Development Kit 2 Ninhydrin, DFO/indanedione-compatible teaching setup Tableau T8u Forensic USB 3.0 Bridge (hardware write blocker) 1 Enterprise-level switch only; 24×1G copper; 2×10G optical autosensing ports; 2×10G electrical copper RJ45 ports; MAC-based VLAN assignment; access/trunk/hybrid interface types; Layer-2 fully manageable via GUI & CLI; 802.1x, MAC-based and RADIUS authentication; 6× Single Mode SFP 10 KM; delivery 2–8 weeks maximum. Dedicated SDN Whitebox Switch Laptop 1 Hardware Complete Crime Scene Investigation Kits 6 vidence collection, PPE, forceps, swabs, bags, rulers, markers, evidence tags, tweezers, packaging Evidence Collection Bags 1 lot Paper/plastic bags in multiple sizes, breathable biological-evidence packaging UPS 1 APC Easy UPS SRV 3KI 3000VA Tower or equivalent. Alfa AWUS036ACHM wireless adapter (monitor mode + injection) 1 Synology 2-bay NAS DS224 with 1×3.5" 8TB SATA HDD and 1×2.5" 8TB SATA SSD, or equivalent. Security Testing / Assessment 1 Professional Service Evidence Markers 8 Numbered/alphabetical scene markers, tents and scales Portable Evidence Examination Light 12 Rechargeable LED, adjustable intensity Fingerprint Development Kits 8 Black/gray/white magnetic and conventional powders; brushes; applicators Faraday Bags 20 Multi-layer RF shielding; 5G, Wi-Fi, Bluetooth, GPS; tamper-evident; mobile/tablet/laptop sizes Solana Mainnet SOL Allowance 1 Blockchain / Service Fingerprint Specimen Collection Kit 10 Ink pad, roller, cards, biometric capture accessories Terms and conditions • Vender can quote any one or combinations of items • Deliver installation at Air University Islamabad Campus • Warranty and support for the period of 01 year

Item: LOT # 13 hard disk-2TB and 5TB

UNSPSC: Hard disk drives

Specifications / Requirementsss:

Hard Disk 2 TB – Shock Proof. Portable . Lexar, Transcend , A Data 02 Hard Disk 5 TB – Shock Proof. Portable . Lexar, Transcend , A Data 02 Hp laser jet 4003 DN or equivalent – with duplex printing 03 Hp laser jet 404DN or equivalent – with duplex printing 03

Item: LOT # 14 Printers

UNSPSC: Digital image printers

Specifications / Requirementsss:

Item: LOT # 15 cyber software

UNSPSC: Access software

Specifications / Requirementsss:

Rapid7 InsightVM (current successor to Nexpose) 1 Network vulnerability assessment, asset discovery, risk prioritization, vulnerability scanning and remediation workflow. Suitable for enterprise vulnerability management and research environments. Invicti Web & API Security / Acunetix 2 Automated Dynamic Application Security Testing (DAST) for web applications and APIs; automated vulnerability discovery, verification and reporting. IDA Pro Essential – Academic 15 Professional reverse-engineering and malware-analysis platform; disassembly, decompilation, debugging and analysis of executable binaries. Academic/classroom licensing subject to institutional eligibility. Burp Suite Professional 6 Professional web-application security testing platform for VAPT, manual penetration testing, vulnerability discovery, API testing and security assessment. Shodan lifetime membership 50 Threat Intelligence Fingerprint Comparison & Analysis Software 1 Fingerprint image enhancement, comparison, examination, measurement and teaching/research functions. Vendor-specific software/license to be selected. Microsoft Sentinel – SIEM/Security Monitoring Allowance 1 cloud SIEM/SOAR platform for security-log ingestion, analytics, threat detection, alerting and investigation. Budget should be based on expected daily log ingestion and retention. Google Colab Pro / Paid Colab Subscription 6 Cloud-based Python/Jupyter research environment with access to accelerated compute for machine learning and data-science experimentation. Claude Code Max – AI Development Subscription AI Development Tool VirusTotal Private API / Google Threat Intelligence API Private threat-intelligence API for malware, URL, domain, IP and file intelligence; automated threat-enrichment and research integration. Enterprise/private API pricing is quote-based. AbuseIPDB Premium API 1 IP reputation, abuse reporting and blacklist intelligence API for threat intelligence, SOC research and automated IP-risk assessment. RunPod GPU – RTX A6000 48GB 1 On-demand cloud GPU compute with NVIDIA RTX A6000 48GB; suitable for AI/ML training, inference, computer vision and large-model experimentation. Usage-based allowance. Backblaze B2 Cloud Storage 1 Cloud object storage for encrypted research-data backup, datasets, forensic artifacts and experiment results. Usage-based storage and egress charges. Domain, SSL certificate and off-site encrypted backup, 6 months 1 Domain registration, SSL/TLS certificate and six-month off-site encrypted backup service for research platforms and web applications. IPFS / Pinata Storage Allowance 1 Managed IPFS storage/pinning and gateway service for decentralized storage, research datasets and blockchain/Web3 experiments. Solana Mainnet SOL Allowance 1 Operational SOL allowance for Solana Mainnet transaction fees and blockchain research activities. Solana RPC Infrastructure 1 Managed Solana RPC/API service for blockchain data access, transaction queries, application development and blockchain research. RunPod Network Storage (model weights) 2 Persistent cloud storage for AI/ML model weights, checkpoints, datasets and experiment artifacts associated with RunPod GPU workloads.

Item: LOT # 16 Computer Tables-3 seater

UNSPSC: Arm chair

Specifications / Requirementss:

Computer Tables: Three Seater 8'-0"x1'-10" Steel Frame with Wooden top and CPU Box of 14" Wide.

Item: LOT # 17 Computer Tables-2 seater

UNSPSC: Arm chair

Specifications / Requirementss:

Computer Tables: Two-Seater 5'-0"x1'-10" Steel Frame with Wooden top and CPU Box of 14" Wide.

Item: LOT# 18 computer Chairs

UNSPSC: Arm chair

Specifications / Requirementss:

Computer Chairs: Hydraulic, Moveable without Arms. As per Sample

Item: LOT # 16 (Interactive LED Screens 86") FRPMC Karachi

UNSPSC: Acoustic screen enclosure

Specifications / Requirementss:

Resolution: 4K (3840 x 2160) Built-In Camera: 48 MP, AI-Based 4K Voice Tracking Camera Built-in 08 Microphones Array or better with Clear sound pickup at 6-8 Meter. Echo

cancellation and Noise reduction Build-In Speaker: Minimum 02 x 15 Watts or better Glass: Anti-Glare / Anti-Reflective /Anti blue Glass with Mohs 7 (4mm glass thickness) Intelligent Whiteboard for Smooth Writing with minimum response time and maximum accuracy will be preferred. Built in Wi-Fi, 2.4 / 5.0 Ghz Supported – Wi-Fi 6 Finger Multi Touch options 02 x Magnetic pen / stylus pen Lifetime Free White Board Software for windows. Palm Rejection option should be available. Android 14 or better (OTA-Auto Firmware Update) Android Spec: Android 14, 08 GB, 128GB AI handwriting tracking – Handwriting to Digital form Multitouch gesture e.g. Select, move, zoom and erase Touch Points: 20 Points (Windows)- 20(Points Android) Facility of Hotspot Whiteboard saving mode (QR code scan/Email/Local storage/USB) Remote Control of LED Refresh rate: 60Hz – Contrast ratio: 4000 :1 One tap switchover from Android to Windows Wired and Wireless Projection: up to 4K 50000 Hrs. Life for LED Panel HDMI Wired Projection + USB Type-C wired projection x 1, Wireless projection of multiple users + through mobile App Free for lifetime Computer Software for Screen Sharing Supported windows, Android & Mac OS. Mention Int. Certification if available for Brand. Windows OPS Spec: Core i5/i7, 12th Generation or better, 16GB RAM, 512GB SSD Ports: 02 x HDMI In + 01 x HDMI Out, 02 x USB Ports (Type-A 2.0,3.0,3.1) 01 x USB Type-C, (should be available on Front and Rear Panel both). 01 x USB Type-B), 01 x Touch USB. LAN In x 1, LAN Out x 1, Bluetooth 5.1 (preferred) OPS Port x 1, Line-in, Line-out, Earphone, RS232 x 1, SPDIF out (optional) Remote management of multiple devices through software Integration of additional teacher camera Wall Mount Bracket with Installation Wall mount kit with complete installation and configuration, Ducting & Cabling at Air University ISLAMABAD Campus. Surge Protector: Install Surge protector on input of the Screens (Voltage Controller with Back Box) Warranty: 02 Years on site at Air University ISLAMABAD Campus With lifetime software upgrades and updates. Delivery Time: 06-08 weeks' maximum Installation : Power Sockets are available on front wall of classroom and labs. Installation should be included with power cabling, ducting required with HDMI Cable laying from Screen to Podium. With all required accessories. 20 DMS(must be same brand) with ability to manage and control all devices. Digital Signage Remotely install apps, Remote Management + Alert Announcement + Digital Signage, Live Streaming on panels through device management system, B) Wireless headgear / collar Mic For Teacher – Integrated with LED Screen OPS for clear voice of teachers particularly on zoom / Teams Free Power Professional UHF Mic Model AK-460II . or equivalent With Mono to Stereo convertor 06 c) Branded HDMI Cable 10 meter Fiber Optics, 4K, Best Quality. 20 d) Wireless Keyboard, Mouse, Mouse Pad, Best Quality . Range up to 08 Meter . 05 Delivery & Installation at Air University FRPMC Karachi Terms & Conditions Only professional Firms have more than 05 Years of experience in the field of selling Interactive Screens with strong technical trained team on their own payroll and having their own service center in Karachi only can quote. Supplier should have Purchase orders of more than 100 similar Interactive LED Screens on their portfolio. Supplier should have supply and services relationship with at least 10 different organizations during last 03 years for the supply and installation of interactive LED screens. Supplier will provide Demo Unit at Air University Islamabad Campus for POC. Screen will be finalized purely based on the Demonstration of equipment and technical features set. System ruggedness, equipment performance, features set which are more supporting to teaching methodology, customer's feedback on the product and best suitable for Air University will be selected. Installation of panels with configuration of software at Air University ISLAMABAD Campus. AU reserve the right to increase or decrease the quantities.

Item: LOT No. 17 - Data Center (Islamabad Campus)

UNSPSC: Data center services

Specifications / Requirementss:

Scope of Work Air University desires to establish a modern state of the art Data Center at its Islamabad Campus. The scope of work includes the design, supply, installation, integration, testing, commissioning, and handover of a complete Smart Row Data Center at Air University, Islamabad Campus. The project shall include server racks, UPS and backup power systems, generator with ATS, precision cooling, fire detection and suppression, environmental. As per character text limit the Complete details can not be incorporated here. For details forward your request on the contact mentioned below . Email :- mzeeshan@au.edu.pk whatsapp no. 0336-5512928

Item: LOT # 18 SAN Storage

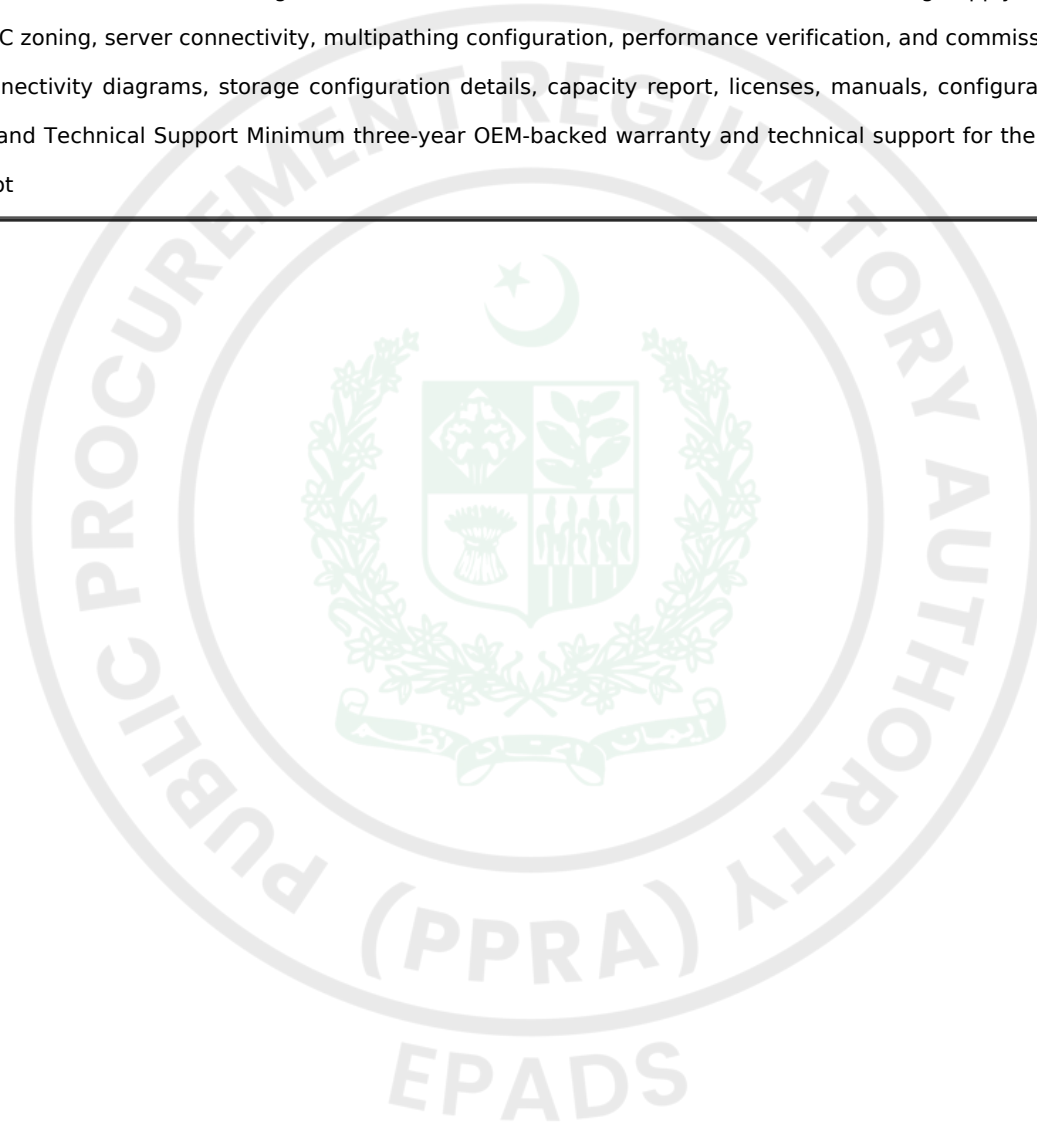
UNSPSC: Storage area network SAN switch

Specifications / Requirementss:

Scope of Work Air University desires to purchase Install, Configure, Test and Commission a Enterprise SAN Storage for e-Filing System of Enterprise SAN Storage for Air University e-Filing System. Detailed BOQ is as follows:-

- 1 Enterprise Hybrid SAN Storage Array Enterprise-grade rack-mount SAN with dual active-active controllers; support for NVMe SSD and enterprise SAS HDD storage tiers; minimum 50 TB usable capacity after RAID protection and hot-spare allocation; RAID 5, RAID 6 and RAID 10 support; redundant power supplies and fans; non-disruptive failover; online expansion; centralized management; 3-year OEM warranty and support.
- 01 2 NVMe SSD Storage Tier Enterprise-grade, hot-pluggable NVMe SSDs supported by the proposed SAN; minimum 7.68 TB usable NVMe capacity after applicable RAID protection; suitable for high-performance e-Filing application data, databases, indexes, metadata and frequently accessed files; support for monitoring drive health and wear.
- 01 Set 3 Enterprise SAS HDD Storage Tier Enterprise-grade hot-pluggable SAS HDDs, preferably 12 Gbps or better, with drive capacity and quantity sufficient to meet the required overall usable storage capacity; RAID 6 support; online replacement and expansion; suitable for e-Filing documents and other capacity-intensive data.
- 01 Set 4 RAID Protection and Hot-Spare Drives RAID 5, RAID 6 and RAID 10 support; dual-parity RAID 6 configuration for critical data volumes; automatic rebuild; dedicated or global hot-spare drives in accordance with OEM recommendations; drive failure alerts.
- 01 Set 5 SAN Fibre Channel Connectivity Minimum four 10 Gbps Fibre Channel host ports across the array, with at least two ports per controller; support for redundant Fibre Channel fabrics and multipathing; all required FC transceivers included.
- 01 Set 6 Fibre Channel SAN Switches Two enterprise-grade 10 Gbps FC switches, each with at least 08 physical ports and the required ports activated; redundant fabric configuration; management interface; required licenses, power supplies, and accessories.
- 02 7 Fibre Channel Host Bus Adapters (HBAs) OEM-compatible 10 Gbps FC HBA cards for each e-Filing application, database, or virtualization server requiring SAN connectivity; dual-path connectivity through separate FC switches; include required drivers, firmware, and accessories.
- As required 8 FC Transceivers and Optical Cables OEM-compatible 10 Gbps FC transceivers and multimode OM4 LC-LC fiber-optic cables for all required SAN-to-switch and switch-to-server connections; provide sufficient quantities for redundant paths and spare connections.
- 01 Lot 9 SAN Management Software SAN administration and monitoring software; centralized management of storage pools, volumes, RAID groups, performance, capacity, alerts, and hardware health; include

all necessary licenses. 01 Lot 10 Data Protection Features Support for point-in-time snapshots, volume cloning, thin provisioning, and replication capability where supported by the proposed system; include required licenses for the offered features. 01 Lot 11 Rack Mounting and Accessories Rack rails, cable management, power cords, labeling, mounting hardware, and all accessories required for installation in the existing Data Center rack. 01 Lot 12 Installation and Commissioning Supply, installation, configuration, RAID and storage-pool creation, LUN/volume provisioning, FC zoning, server connectivity, multipathing configuration, performance verification, and commissioning at Air University Islamabad 01 Lot 13 Documentation and Training As-built connectivity diagrams, storage configuration details, capacity report, licenses, manuals, configuration backup, and training for Air University technical staff. 01 Lot 14 OEM Warranty and Technical Support Minimum three-year OEM-backed warranty and technical support for the SAN array, drives, controllers, FC switches, and associated supplied equipment. 01 Lot



Price Schedule

For Individual Items

#	Item Title	Quantity	Unit Price (PKR)	Total Price (PKR)	Delivery Location	Delivery Period / Year	Country of Origin
1							
2							

For Lots

#	Lot Title	Total Lot Price (PKR)	Country of Origin
1	[Lot 1 Title]		





General Conditions of Contract

A. General

1. Definitions

1.1 Unless the context otherwise requires, the following terms whenever used in this Contract shall have the same meaning and shall be interpreted as indicated

- a. “Applicable Law” means the laws and any other instruments having the force of law in the Government’s Country, or in such other country as may be specified in the Special Conditions of the Contract (SC), as they may be issued and in force from time to time;
- b. The “Arbitrator” is the person appointed with mutual consent of both the parties, to resolve contractual disputes as provided for in the General Conditions of the Contract GCC Clause 35 hereunder.
- c. “Authority” means Public Procurement Regulatory Authority.
- d. The “Commencement Date” is the date when the Supplier shall commence execution of the contract as specified in the SCC.
- e. “Completion date” means the date of completion of the Contract by the Bidder as certified by the Procuring Agency.
- f. “Procuring Agency” means:-
 - a. any Ministry, Division, Department or any Office of the Government;
 - b. any authority, corporation, body or organization established by or under a Law or which is owned or controlled by the Government;
- g. “The Contract” means an agreement enforceable by law;
- h. “The Contract Price” means the price payable to the Bidder under the Contract for the full and proper performance of its contractual obligations;
- i. “Ancillary Services” means those services ancillary to the provision of 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 Bidder covered under the Contract;
- j. “GCC” means the General Conditions of Contract contained in this section;
- k. “SCC” means the Special Conditions of Contract by which the GCC may be amended or supplemented;
- l. “Day” means calendar day unless indicated otherwise.
- m. “Defective Goods” are those goods which are below standards, requirements or specifications stated by the Contract.
- n. “Delivery” means the transfer of the goods from the supplier equipment, machinery, and /or other materials which the Supplier is required to supply to the Procuring Agency under Contract.

o. "Effective Date" means the date on which this Contract comes into force and effect.

p. "Force Majeure" means an unforeseeable event which is beyond reasonable control of either Party and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of a Party, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances. and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood, epidemics, or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by Government agencies.

q. "The Bidder" means the individual or corporate body whose Bids to provide the Goods has been accepted by the Procuring Agency;

r. "The Project Site," where applicable, means the place or places named in Bids Data Sheet and technical Specifications;

s. "Government" means the Government of Pakistan;

t. "Subcontractor" means any entity to which the Bidder subcontracts any part of the Goods.

u. "The Services" means the work to be performed by the Bidder pursuant to this Contract and as prescribed in the Specifications and Schedule of Activities included in the Bidder's Bids;

v. "Party" means the Procuring Agency or the Bidder, as the case may be, and "Parties" means both of them;

w. "Foreign Currency" means any currency other than the currency of the country of the Procuring Agency;

x. "Completion Date" means the date of completion of the contract by the Bidder as certified by the Procuring Agency;

y. "In Writing" means communicated in written form with proof of receipt;

z. "Local Currency" means the currency of Pakistan;

a. "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 produce results that is substantially different in basic characteristics or in purpose or utility from its components.

b. "Specification" means the Specification of the Goods and performance of incidental services in accordance with the relevant standards included in the Contract and any modification or addition made or approved by the Procuring Agency.

c. "Procuring Agency" means: -

any Ministry, Division, Department or any Office of the Federal Government;

any authority, corporation, body or organization established by or under a Federal Law or which is owned or controlled by the Federal Government;

2. Application and Interpretation

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract.

2.2 In interpreting these Conditions of Contract headings and marginal notes are used for convenience only and shall not affect their interpretations unless specifically stated; references to singular include the plural and vice versa; and masculine include the feminine. Words have their ordinary meaning under the language of the Contract unless specifically defined.

3. Applicable Law

3.1 The contract shall be governed and interpreted in accordance with the laws of Pakistan, unless otherwise specified in SCC.

4. Governing Language

4.1 The Contract as well as all correspondence and documents relating to the Contract exchanged between the Bidder and the Procuring Agency, shall be written in the **English language** unless otherwise stated in the **SCC**. Supporting documents and printed literature that are part of the Contract may be in another language provided these are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Contract, this translation shall govern.

5. Notices

5.1 Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram, or facsimile to such Party at the address specified in the **SCC**.

6. Standard

6.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, the American Standards (such as ACI, IEEE, ASME, etc.) or the Pakistani standards such as PSQCA Such standards shall be the latest issued by the concerned institution.

7. Delivery/Location

7.1 The Goods shall be delivered to such locations as the Procuring Agency may approve and as specified in SCC.

8. Authorized Representatives / Authority of Member in charge

8.1 Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Procuring Agency or the Bidder may be taken or executed by the officials specified in the **SCC**.

B. Commencement, Completion, Modification, and Termination of Contract

8. Effectiveness of Contract

8.1 This Contract shall come into effect on the date the Contract is signed by both parties and such other later date as may be stated in the SCC.

9. Commencement of the Contract

9.1 The Bidder shall confirm availability of Key Experts and begin carrying out the Services not later than the number of days after the Effective Date specified in the SCC.

10. Program

10.1 Before commencement of the Contract, the Bidder shall submit to the Procuring Agency for approval a Program showing the general methods, arrangements, order and timing for all activities. The Services shall be carried out in accordance with the approved Program as updated.

11. Starting Date/Expiration Date

11.1 The Bidder shall start carrying out the Services Five (05) days after the date the Contract becomes effective, or at such other date as may be specified in the SCC.

11.2 Unless terminated earlier pursuant to Clause **GCC 16** hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SCC.

12. Entire Agreement

12.1 This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.

13. Modification

13.1 Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any Bids for modification or variation made by the other Party.

13.2 In cases of any modifications or variations, the prior written consent of the Procuring Agency is required.

14. Force Majeure

14.1 Definition

For the purposes of this Contract, “Force Majeure” means an event which is beyond the reasonable control of a Party and which makes a Party’s performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

14.2 No Breach of Contract

The failure of a Party to fulfill any of its obligations under the contract shall not be considered to be a breach of, or default under, this Contract in so far as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

14.3 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure. However, such period shall not exceed sixty (60) days.

14.4 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Bidder shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.

15. Termination

15.1 By the Procuring Agency

The Procuring Agency may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (e) of this Clause. In such an occurrence the Procuring Agency shall give at least thirty (30) calendar days' written notice of termination to the Bidder in case of the events referred to in (a) through (d); at least sixty (60) calendar days' written notice in case of the event referred to in (e);

- a. If the Bidder fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension;
- b. If the Bidder becomes (or, if the Bidder consists of more than one entity, if any of its members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;
- c. If the Bidder fails to comply with any final decision reached as a result of arbitration proceedings;
- d. If, as the result of Force Majeure, the Bidder is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days;
- e. If the Procuring Agency, in its sole discretion and for any reason whatsoever, decides to terminate this Contract;

15.2 By the Bidder

The Bidder may terminate this Contract, by not less than thirty (30) calendar days' written notice to the Procuring Agency, in case of the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause.

- a. If the Procuring Agency fails to pay any money due to the Bidder pursuant to this Contract and not subject to dispute within forty-five (45) calendar days after receiving written notice from the Bidder that such payment is overdue.
- b. If, as the result of Force Majeure, the Bidder is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days.
- c. If the Procuring Agency fails to comply with any final decision reached as a result of arbitration.
- d. If the Procuring Agency is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Bidder may have subsequently approved in writing) following the receipt by the Procuring Agency of the Bidder's notice specifying such breach.

C. Obligations of the Bidder

16. General

16.1 Standard of Performance

1. The Bidder shall deliver the product and carry out the Services with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Bidder shall always act, in respect of any matter relating to this Contract or to the Services, as a faithful adviser to the Procuring Agency, and shall at all times support and safeguard the Procuring Agency's legitimate interests in any dealings with the third parties.

16.2 Law Applicable to Goods

The Bidder shall deliver the goods in accordance with the Contract and in accordance with the Law of Pakistan and shall take all practicable steps to ensure that any of its Experts and Sub-Bidders, comply with the Applicable Law.

17. Conflict of Interests

17.1 Bidder Not to Benefit from Commissions and Discounts.

The remuneration of the Bidder shall constitute the Bidder's sole remuneration in connection with this Contract or the Services, and the Bidder shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Bidder shall use their best efforts to ensure that the Personnel, any Subcontractors, and agents of either of them similarly shall not receive any such additional remuneration.

17.2 Bidder and Affiliates Not to be Otherwise Interested in Project

The Bidder agree that, during the term of this Contract and after its termination, the Bidder and its affiliates, as well as any Subcontractor and any of its affiliates, shall be disqualified from providing Goods for any project resulting from or closely related to the Services.

17.3 Prohibition of Conflicting Activities

Neither the Bidder nor its Subcontractors nor the Personnel shall engage, either directly or indirectly, in any of the following activities:

- a. during the term of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contract;
- b. during the term of this Contract, neither the Bidder nor their Subcontractors shall hire public employees in active duty or on any type of leave, to perform any activity under this Contract;

18. Confidentiality

18.1 Except with the prior written consent of the Procuring Agency, the Bidder and the Experts shall not at any time communicate to any person or entity any confidential information acquired in the course of the contract.

19. Insurance to be Taken Out by the Bidder

19.1 The Bidder(a) shall take out and maintain, and shall cause any Subcontractors to take out and maintain, at its (or the Subcontractors', as the case may be) own cost but on terms and conditions approved by the Procuring Agency, insurance against the risks, loss or damage, and for the coverage, as shall be specified in the SCC; and (b) at the Procuring Agency's request, shall provide evidence to the Procuring Agency showing

that such insurance has been taken out and maintained and that the current premiums have been paid.

20. Bidder's Actions Requiring Procuring Agency's Prior Approval

20.1 The Bidder shall obtain the Procuring Agency's prior approval in writing before taking any of the following actions:

- (a) appointing such members of the Personnel not provided by the Bidder;
- (b) changing the Program of activities; and
- (c) any other action that may be specified in the SCC.

21. Reporting Obligations

21.1 The Bidder shall submit to the Procuring Agency the reports and documents in the numbers, and within the periods as prescribed by the Procuring Agency.

22. Liquidated Damages

22.1 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 Procuring Agency 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 performance security (or guarantee) specified in **SCC**. Once the said maximum is reached, the Procuring Agency may consider termination of the Contract pursuant to **GCC Clause 16**.

22.2 Correction for Over-payment

If the Intended Completion Date is extended after liquidated damages have been paid, the Procuring Agency shall correct any overpayment of liquidated damages by the Bidder by adjusting the next payment certificate. The Bidder shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in SCC.

22.3 Lack of performance penalty

If the Bidder has not corrected a Defect within the time specified in the Procuring Agency's notice, a penalty for Lack of performance will be paid by the Bidder. The amount to be paid will be calculated as a percentage of the cost of having the Defect corrected, assessed as specified in the SCC.

23. Performance Guarantee

23.1 The Performance Security (or Guarantee) shall be provided to the Procuring Agency no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form acceptable to the Procuring Agency as specified in SCC, and denominated in the types and proportions of the currencies in which the Contract Price is payable as specified in the SCC.

23.2 Within Seven (07) days from the issuance of acceptance letter from the Procuring Agency, the successful Bidder shall furnish the Performance Guarantee in shape of ----- at the discretion of the PA in the amount **specified in SCC**. In case the amount of Bids security is equal or greater than

23.3 The proceeds of the Performance Guarantee shall be payable to the Procuring agency as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

23.4 The Performance Guarantee shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Procuring agency and shall be in the acceptable form as specified in SCC.

23.5 The Performance Guarantee will be discharged by the Procuring agency 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**.

23.6 The bid security of the successful bidder shall not be substituted with the Performance Guarantee.

24. Fraud and Corruption

24.1 The Procuring Agency requires the Supplier to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the Bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

25. Sustainable Procurement

25.1 The Bidder shall conform to the sustainable procurement contractual provisions, if and as specified in the SCC.

D. Bidder's Personnel

26. Description of Personnel

26.1 The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Bidder's Key Personnel. The Key Personnel listed by title as well as by name are hereby approved by the Procuring Agency.

27. Removal and/or Replacement of Personnel

27.1 Except as the Procuring Agency may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Bidder, it becomes necessary to replace any of the Key Personnel, the Bidder shall provide as a replacement a person of equivalent or better qualifications.

27.2 If the Procuring Agency finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Bidder shall, at the Procuring Agency's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to the Procuring Agency.

27.3 The Bidder shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

E. Obligations of the Procuring Agency

28. Assistance and Exemptions

28.1 The Procuring Agency shall use its best efforts to ensure that the Government shall provide the Bidder such assistance and exemptions as specified in the SCC.

29. Change in the Applicable Law

29.1 If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost of the related Services rendered by the Bidder, then the remuneration and reimbursable expenses otherwise payable to the Bidder under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred in the SCC.

30. Services and Facilities

30.1 The Procuring Agency shall make available to the Bidder and the Experts, for the purposes of the Services and free of any charge, the services, facilities and property described , at the times and in the manner specified in the SCC or terms of reference.

30.2 In case that such services, facilities and property shall not be made available to the Bidder, the Parties shall agree on (i) any time extension that it may be appropriate to grant to the Bidder for the performance of the Services, (ii) the manner in which the Bidder shall procure any such services, facilities and property from other sources, and (iii) the additional payments, if any, to be made to the Bidder as a result thereof.

F. Payments to the Bidder

31. Contract Price

31.1 The price payable shall be in Pakistani Rupees unless otherwise specified in the SCC. Prices charged by the Supplier for Goods delivered under the Contract shall not vary from the prices quoted by the Supplier in its Bid.

32. Terms and Conditions of Payment

32.1 Payments will be made to the Bidder according to the payment schedule stated in the SCC and as per actual invoice submitted by the Bidder.

32.2 Unless otherwise stated in the SCC, the advance payment shall be made against the provision by the Bidder of a bank guarantee for the same amount, and shall be valid for the period stated in the SCC. Any other payment shall be made after the conditions listed in the SCC for such payment have been met, and the Bidder have submitted an invoice to the Procuring Agency specifying the amount due.

33. Currency of Payment

33.1 Any payment under this Contract shall be made in the currency(ies) specified in the SCC.

G. Quality Control

34. Identifying Defects

34.1 The principle and modalities of Inspection of the Goods by the Procuring Agency shall be as indicated in the SCC. The Procuring Agency shall check the Bidder's performance and notify him of any Defects that are found. Such checking shall not affect the Bidder's responsibilities. The Procuring Agency may instruct the Bidder to search for a Defect and to uncover and test any service that the Procuring Agency considers may have a Defect. Defect Liability Period is as defined in the SCC.

35. Correction of Defects, and

Lack of Performance Penalty

35.1 The Procuring Agency shall give notice to the Bidder of any Defects before the end of the Contract. The Defects liability period shall be extended for as long as Defects remain to be corrected.

35.2 Every time notice a Defect is given, the Bidder shall correct the notified Defect within the length of time specified by the Procuring Agency's notice.

35.3 If the Bidder has not corrected a Defect within the time specified in the Procuring Agency's notice, the Procuring Agency will assess the cost of having the Defect corrected, the Bidder will pay this amount, and a Penalty for Lack of Performance.

36. Taxes and Duties

36.1 A Supplier shall be entirely responsible for all taxes, duties, fees, etc., incurred until delivery of the contracted Goods to the Procuring Agency.

H. Settlement of Disputes

37. Alternate Dispute Resolution

37.1 Upon the commencement of the Procurement Contract, any disputes arising between the contracting parties shall be resolved in accordance with Rule 66 of the Public Procurement Rules, 2026.

37.2 The procuring agency may refer the matter to the Chief Justice Islamabad High Court or Managing Director PPRA or the Secretary Ministry of Law & Justice for appointment of Arbitrator.

37.3 The fee for the Arbitrator shall be specified in Pak Rupees as determined by the appointing authority which shall be borne and shared equally by the contracting parties.

38. Change Orders

The Procuring Agency may at any time, by a written order given to the Supplier, 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 Procuring Agency;
- b) The method of shipment or packing;
- c) The place of delivery; and/or
- d) The Services to be provided by the Supplier.

39. Contract Amendments

39.1 Subject to GCC Clause 32, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

40. Sub-Contracts

40.1 The Supplier shall consult the Procuring Agency in the event of subcontracting under this contract if not already specified in the Bid. Subcontracting shall not alter the Supplier's obligations.



Special Conditions of Contract

SECTION VIII. 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 Conditions of Contract. The corresponding clause number of the GCC is indicated in parentheses.

Number of GC Clause

Amendments of, and Supplements to, Clauses in the General Conditions of Contract

Number of GC Clause 1

Definitions

The Procuring Agency is: **Air University, Islamabad Campus (Air University), Assistant Director PAF Complex, Sector E-9., Islamabad Capital Territory**

The Supplier is:

The title of the subject procurement is: **TENDER FOR SUPPLY, DELIVERY, INSTALLATION, AND COMMISSIONING OF IT EQUIPMENT, DATA CENTER INFRASTRUCTURE, DATA BACKUP & RECOVERY SOLUTIONS, CYBER SECURITY TOOLS AND SOFTWARE FOR NCSA AT AIR UNIVERSITY, ISLAMABAD**

Number of GC Clause 3

Applicable/Governing Law:

The Contract shall be interpreted in accordance with the laws of Islamic Republic of Pakistan

Number of GC Clause 4

Language:

The language of the Contract, all correspondence and communications to be given, and all other documentation to be prepared and supplied under the Contract shall be in **English**.

Number of GC Clause 5

Notices:

The addresses for the notices are:

The Authority:

**Air University, Islamabad Campus (Air University), Assistant Director
PAF Complex, Sector E-9., Islamabad Capital Territory
+92-336-551-2928
mzeeshan@au.edu.pk**

Contractor/ Bidder:

[Name, address and telephone number].

The Contractor/ Bidder's Representative(s)

[Name, address, telephone number and e-mail address]

Number of GC Clause 7.1

The Authorized Representatives are:

For the Procuring Agency:

**Air University, Islamabad Campus (Air University), Assistant Director
PAF Complex, Sector E-9., Islamabad Capital Territory
+92-336-551-2928
mzeeshan@au.edu.pk**

For the Bidder:

Name:

Designation:

Address:

Number of GC Clause 8

Effectiveness of the contract

Number of GC Clause 9

Commencement of Contract:

Number of GC Clause 11.2

Expiration of Contract:

Number of GC Clause 15

Termination

In the event of termination of the contract due to any reason as already defined in the General Conditions of Contract, the Bidder shall be responsible for providing to the Authority the Goods till the time of alternate arrangements.

Number of GC Clause 17

Conflict of Interest:

The Procuring Agency reserves the right to determine on a case-by-case basis whether the Bidder should be disqualified from providing goods or services due to a conflict of a nature described in Clause GCC 17.

Number of GC Clause 22

Liquidated Damages

If the Bidder fails to provide services as required under the contract or in case of any data loss/data breach or any incident compromising the data security or other such failures related to any services, the Bidder shall

pay to the Procuring Agency as Liquidated Damages at a rate of **0.01%** to **5.00%** of the Contract value, in accordance with the extent of performance failure & the cost of investigating such incidents as judged by the Authority.

Number of GC Clause 23

Performance Guarantee:

Instrument of Performance Guarantee shall be in the Name of : **Air University**

The amount of performance guarantee shall be **10.00%** of the contract price in acceptable form of **Call at Deposit**

Number of GC Clause 32

Payment terms:

Payment will be made to the Bidder against the procured Goods and services according to the actual invoice or running bills submitted by the Bidder against the services provided within the time given in the conditions of the contract.

Number of GC Clause 33

Currency of Payment:

All the payment to be released to the contractor/Bidder shall be in Pakistani Rupees.

Number of GC Clause 34

Identifying Defects:

The Authority reserves the right at any time to inspect the premises of the provider to inspect the goods and monitor the goods being provided.

Inspections & Tests Requirements

For being Brand New, bearing relevant reference numbers of the equipment (Certificate from supplier)

For Physical Fitness having No Damages (Certificate from supplier)

For the Country of Origin as quoted by the Supplier (Certificate from manufacturer)

For conformance to specifications and performance parameters, through Prior to delivery inspection (Inspection Report by Procurement Committee / Inspection Team)

For successful operation at site after complete installation, testing and commissioning of the equipment (Installation, Testing and Commissioning Report by Procurement Committee / Inspection Team)

Delivery & Documents

Copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount;

Original and two copies of the usual transport document (for example, a negotiable bill of lading, a non-negotiable sea waybill, an inland waterway document, an air waybill, a railway consignment note, a road consignment note, or a multimodal transport document) which the buyer may require to take the goods;

Copies of the packing list identifying contents of each package;

Insurance Certificate;

Manufacturer's or Supplier's Valid Warranty Certificate;

Inspection Certificate issued by the Nominated Inspection Agency (if any), and the Supplier's Factory Inspection Report;

Certificate of Origin.

The above documents would be required even if the equipment has already been imported and is available with the supplier ex-stock

Number of GC Clause 37

Following is the guidance for Dispute Resolution

(a) For Contracts to be entered with foreign Contractor/ Service Provider:

All disputes arising in connection with the present Contract shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with said Rules.

(b) For Contracts to be entered with nationals of Pakistan:

i. If any dispute of any kind whatsoever shall arise between the Authority and the Bidder in connection with or arising out of the Contract, including without prejudice to the generality of foregoing, any question regarding its existence, validity, termination and the execution of the Contract – whether during developing phase or after their completion and whether before or after the termination, abandonment or breach of the Contract – the parties shall seek to resolve any such dispute or difference by mutual diligent negotiations in good faith within 14 (fourteen) days following a notice sent by one Party to the other Party in this regard.

ii. At future of negotiation the dispute shall be resolved through mediation and mediator shall be appointed with the mutual consent of the both parties.

iii. At the event of failure of mediation to resolve the dispute relating to this contract such dispute shall finally be resolved through binding Arbitration in accordance with GCC clause 38.

iv. The cost of the mediation and arbitration shall be shared by the parties in equal proportion however the both parties shall bear their own costs and lawyer's fees regarding their own participation in the mediation and arbitration. However, the Arbitrator may make an award of costs upon the conclusion of the arbitration making any party to the dispute liable to pay the costs of another party to the dispute.

v. Arbitration proceedings as mentioned in the above clause regarding resolution of disputes may be commenced prior to, during or after completion of the contract.

Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree that the Authority shall pay the Bidder any monies due to the Bidder.

Rules of procedure for arbitration proceedings:

Any dispute between the Authority and a Bidder who is a national of the Islamic Republic of Pakistan arising in connection with the present Contract shall be referred to adjudication or arbitration in accordance with the laws of the Islamic Republic of Pakistan including Arbitration Act 1940, however above provision shall prevail in referring the case to the Arbitrator.

Place of Arbitration and Award:

The arbitration shall be conducted in English language and place of arbitration shall be at Islamabad. The award of the arbitrator shall be final and shall be binding on the parties.





Bid Securing Declaration

Form 9: Bid Securing Declaration

Date: *[insert date (as day, month and year)]*

Bid No.: **P148974**

Alternative No.: **[insert identification No if this is a Bid for an alternative]**

To: **Air University, Islamabad Campus (Air University), Assistant Director PAF Complex, Sector E-9., Islamabad Capital Territory**

We, the undersigned, declare that:

We understand that, according to your conditions, Bids must be supported by a Bid Securing Declaration.

We accept that we will be blacklisted and henceforth cross debarred for participating in respective category of public procurement proceedings for a period of (not more than) six months, if fail to abide with a bid securing declaration, however without indulging in corrupt and fraudulent practices, if we are in breach of our obligation(s) under the Bid conditions, because we:

1. have withdrawn or modified our Bid during the period of Bid Validity specified in the Form of Bid;
2. Disagreement to arithmetical correction made to the Bid price; or
3. having been notified of the acceptance of our Bid by the Procuring Agency during the period of Bid Validity, (i) failure to sign the contract if required by Procuring Agency to do so or (ii) fail or refuse to furnish the Performance Security or to comply with any other condition precedent to signing the contract specified in the Bidding Documents.

We understand this Bid Securing Declaration shall expire if we are not the successful

Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight (28) days after the expiration of our Bid.

Signed: *[insert signature of person whose name and capacity are shown]* In the capacity of *[insert legal capacity of person signing the Bid Securing Declaration]*

Name: *[insert complete name of person signing the Bid Securing Declaration]*

Duly authorized to sign the Bid for and on behalf of: *[insert complete name of Bidder]*

Dated on day of , *[insert date of signing]*

Corporate Seal (where appropriate)



Contract Form

SECTION IX: CONTRACT FORMS

THIS AGREEMENT made the ____ day of _____ 20____ between **Air University, Islamabad Campus (Air University), Assistant Director PAF Complex, Sector E-9., Islamabad Capital Territory**

(hereinafter called “the Procuring Agency”) of the one part and *[name of Bidder]* of *[city and country of Bidder]* (hereinafter called “the Bidder”) of the other part:

WHEREAS the Procuring Agency invited Bids for provision of goods, viz., **TENDER FOR SUPPLY, DELIVERY, INSTALLATION, AND COMMISSIONING OF IT EQUIPMENT, DATA CENTER INFRASTRUCTURE, DATA BACKUP & RECOVERY SOLUTIONS, CYBER SECURITY TOOLS AND SOFTWARE FOR NCSA AT AIR UNIVERSITY, ISLAMABAD (P148974)** and has accepted a Bids by the Bidder for the provision of Goods in the sum of *[contract price in words and figures]* (hereinafter called “the Contract Price”).

NOW THIS CONTRACT WITNESSETH AS FOLLOWS:

1. In this Contract words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Contract, In the event of any ambiguity or conflict between the Contract Documents listed below, the order of precedence shall be the order in which the Contract Documents are listed below:-

1. This form of Contract;
2. the Form of Bids and the Price Schedule submitted by the Bidder;
3. the Schedule of Requirements;
4. the Technical Specifications;
5. the Special Conditions of Contract;
6. the General Conditions of the Contract;
7. the Procuring Agency’s Letter of Acceptance; and
8. *[add here: any other documents]*

3. In consideration of the payments to be made by the Procuring Agency to the Bidder as hereinafter mentioned, the Bidder hereby covenants with the Procuring Agency to provide the Goods related services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Procuring Agency hereby covenants to pay the Bidder in consideration of the provision of Goods and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Contract to be executed in accordance with their respective laws the day and year first above written.

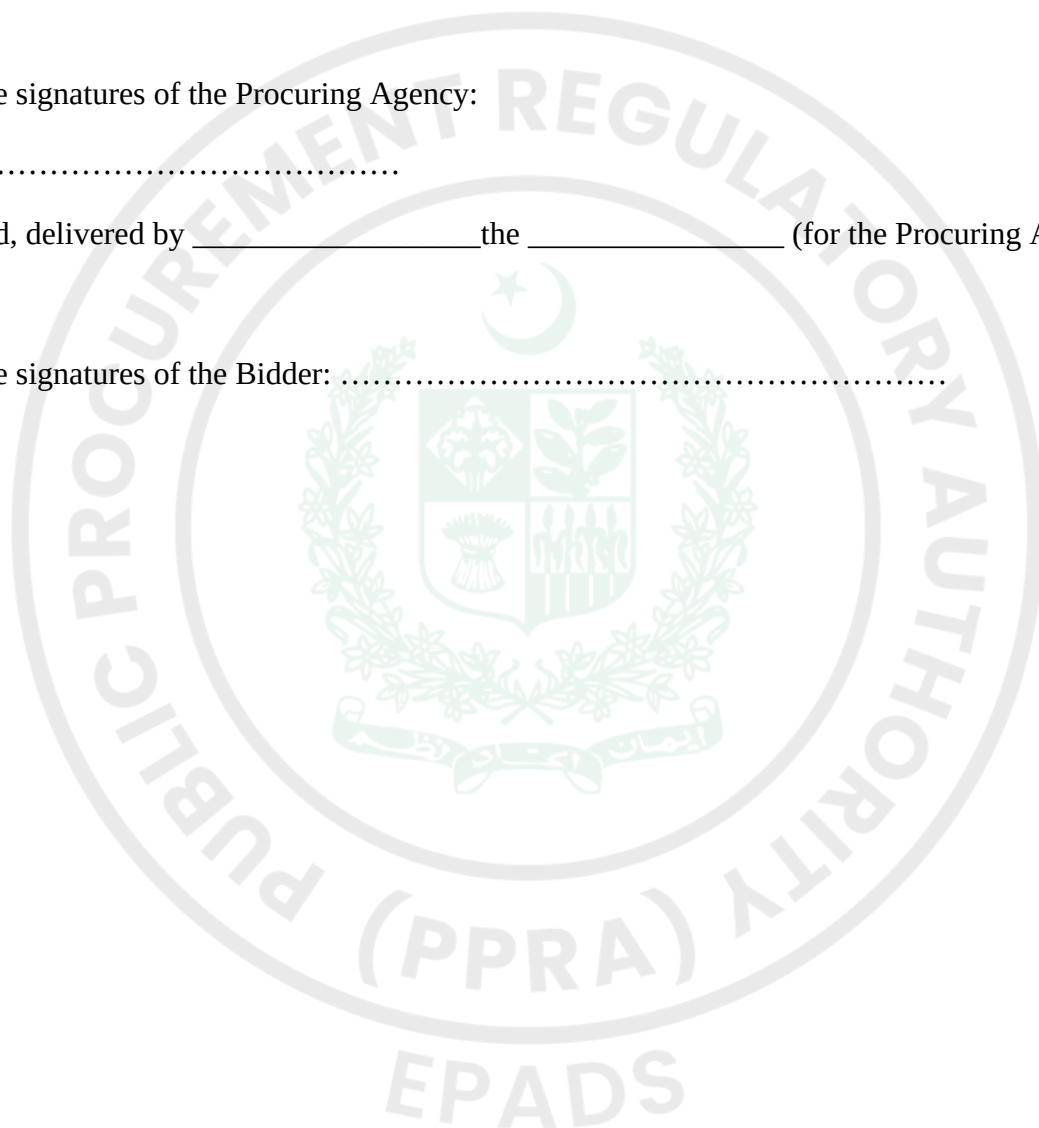
Signed, sealed, delivered by _____ the _____ (for the Procuring Agency)

Witness to the signatures of the Procuring Agency:

.....

Signed, sealed, delivered by _____ the _____ (for the Procuring Agency)

Witness to the signatures of the Bidder:





Integrity Pact

Integrity Pact

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN CONTRACTS WORTH RS.10.00 MILLION OR MORE

Contract

Number: Contract

Value: Contract Title:

Dated:

[Name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice.

Without limiting the generality of the foregoing [Name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fee etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultations fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

[Name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representative or warranty.

[Name of Supplier] accepts full responsibility and strict liability for making and false declaration, not making full disclosure, misrepresenting fact or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, [Name of Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [Name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.



Performance Guarantee Form

Performance Guarantee Form

To: **Air University, Islamabad Campus (Air University), Assistant Director PAF Complex, Sector E-9., Islamabad Capital Territory**

WHEREAS *[name of Bidder]* (hereinafter called “the Bidder”) has undertaken, in pursuance of Contract No. *[reference number of the contract]* dated *[insert date]* for provision of Goods(hereinafter called “the Contract”).

AND WHEREAS it has been stipulated by you in the said Contract that the Bidder shall furnish you with a Bank Guarantee by a reputable bank for the sum specified therein as security for compliance with the Bidder’s performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Bidders guarantee:

THEREFORE, WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Bidder, up to a total of *[amount of the guarantee in words and figures]*, and we undertake to pay you, upon your first written demand declaring the Bidder to be in default under the Contract and without cavil or argument, any sum or sums within the limits of *[amount of guarantee]* as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the: *[insert date]*

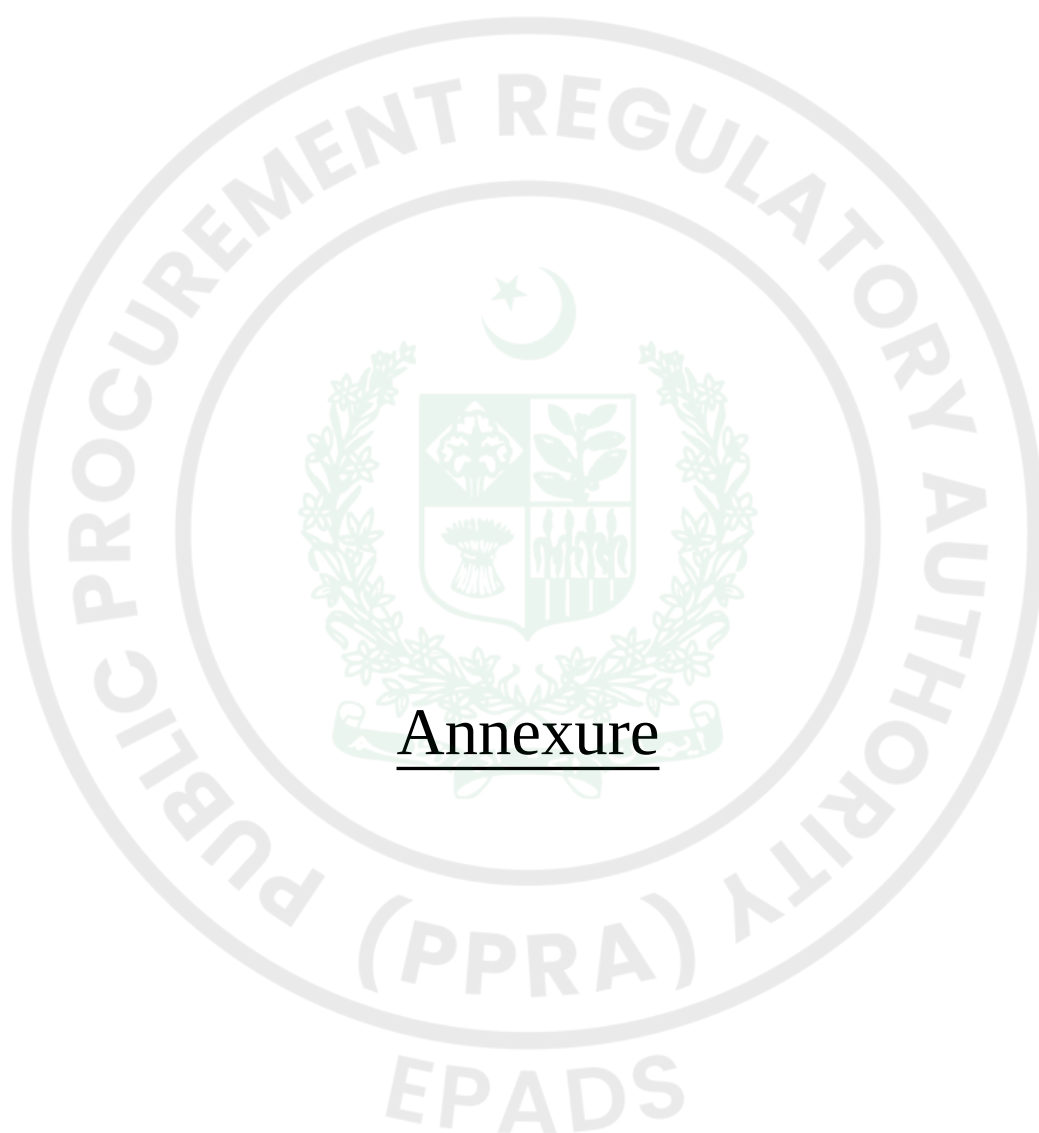
Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]





Annexure

Quantitative Evaluation Yardstick for Procurement of IT Equipment Information (Read-Only)

See Form Under Additional Forms and Documents: **Quantitative Evaluation Yardstick for Procurement of IT Equipment** (page number: 90)

ITEM details for information

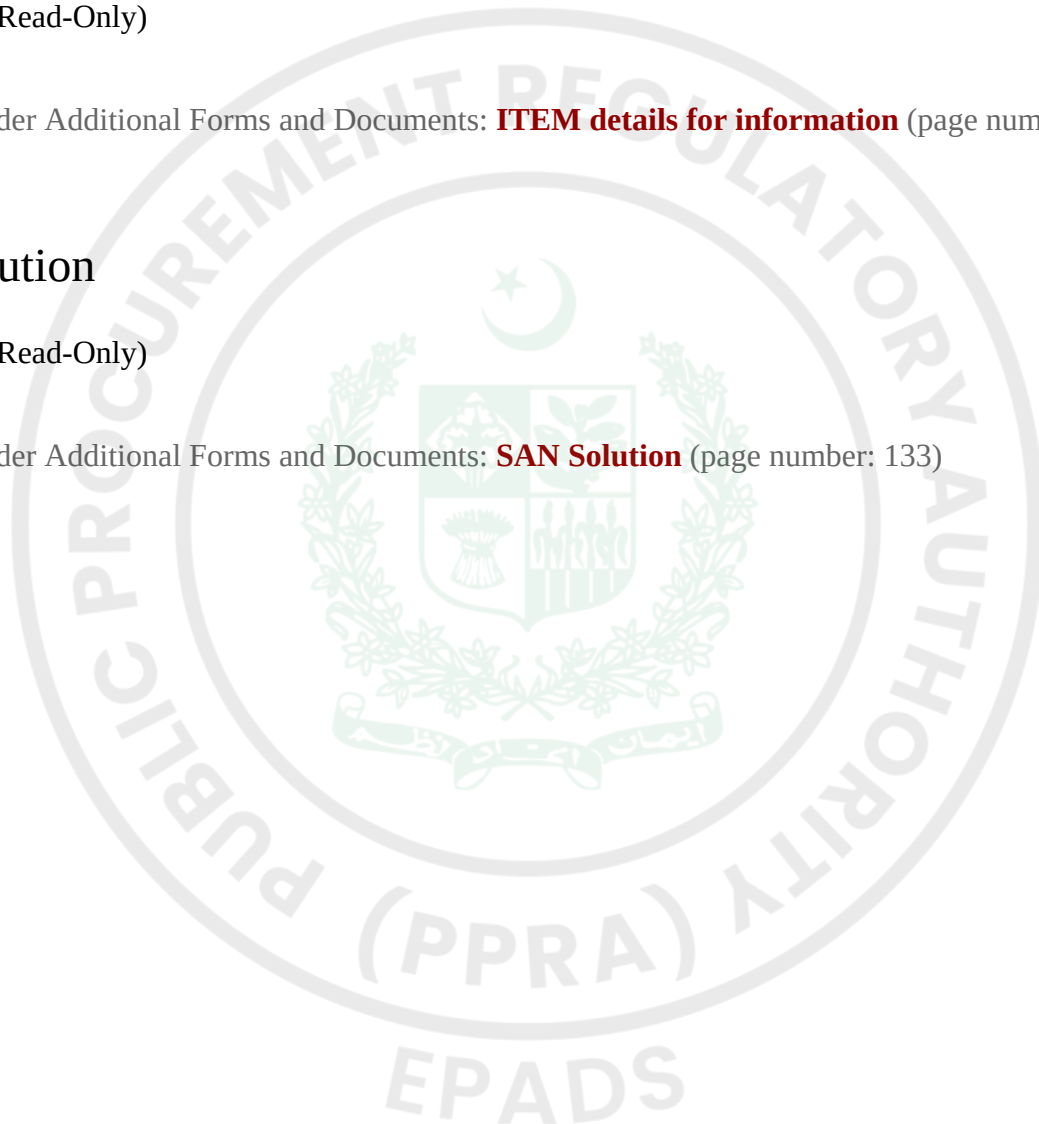
Information (Read-Only)

See Form Under Additional Forms and Documents: **ITEM details for information** (page number: 92)

SAN Solution

Information (Read-Only)

See Form Under Additional Forms and Documents: **SAN Solution** (page number: 133)





Procurement Forms

Past Experience and Completed Contracts

1. Supply, Installation & Commissioning of IT Equipment completed during last 03 years (Similar to items demanded in the BOQs).	30
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See Form Under Additional Forms and Documents: **Past Experience and Completed Contracts** (page number: 135)

Current Contracts and Their Progress

Ongoing Similar Purchase order for Supply, Installation & Commissioning of IT Equipment. (Within Period of 3-4 months from the date of submission of bid).	15
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See Form Under Additional Forms and Documents: **Current Contracts and Their Progress** (page number: 136)

Financial Capacity and Net Worth Evaluation Form

Average working capital for the last 02 years supported by Audited Financial Statements.

See Form Under Additional Forms and Documents: **Financial Capacity and Net Worth Evaluation Form** (page number: 137)

Average Annual Turnover

Average annual turnover during last 02 years supported by Tax Returns.

See Form Under Additional Forms and Documents: **Average Annual Turnover** (page number: 139)





Additional Forms and Documents

Quantitative Evaluation Yardstick for Procurement of IT Equipment

A. Relevant Experience	Total Points 45
1. Supply, Installation & Commissioning of IT Equipment completed during last 03 years (Similar to items demanded in the BOQs).	30
2. Ongoing Similar Purchase order for Supply, Installation & Commissioning of IT Equipment. (Within Period of 3-4 months from the date of submission of bid).	15
B. Profile of Firm	Total Points 35
1. Length of experience in relevant field	10
2. Authorized Dealership	10
3. Technical staff with relevant experience	15
C. After Sales Service Capability	Total Points 10
1. Technical Local Support Center & Training	10
2. OEM's Warranty Certificate	Mandatory
D. Financial Capability	Total Points 10
1. Average working capital for the last 02 years supported by Audited Financial Statements.	05
2. Average annual turnover during last 02 years supported by Tax Returns.	05
E. Technical Compliance	
1. Technical Compliance sheet	Mandatory
<u>NOTE :-</u> Technical compliance with the specifications and provision of the warranty certificate are mandatory. Therefore, any firm that does not comply with the specifications or the warranty clause will be disqualified, regardless of the marks obtained on the evaluation yardstick.	



LOT # 01 - GPU Based Desktop Computers (08 GB GPU)							
Description / Specifications					Qty	Unit	Total
Islamabad Campus 60	Multan Campus 50	Kamra Campus 50	Shorkot Campus 50	Karachi Campus 50			
Processor	Intel Core i7- 14 th Generation 14700 / equivalent Ultra7				260		
Chassis	Mini Tower / Tower (As per GPU Requirement)						
Mother Board	Intel Chipset						
Memory	16 GB						
Hard Disk Drive	512 GB SSD NVMe						
GPU	Nvidia RTX 4060, 8 GB or better						
Ports	HDMI / Display Port + USB 02 & 03 + Sound Ports						
Power Supply	500 Watts or above – As pe requirement of GPU						
Network Adaptor	LAN: Integrated NIC 1 Gbps						
LED Monitor	22” LED FHD Monitor-						
Keyboard Mouse	Branded Keyboard & Mouse of same brand of CPU						
Cables	System and monitor Power Cords + Display Cables . No convertor						
Operating System	Linux / Ubuntu / Dos						
Warranty	03 Years comprehensive OEM Local NBD Warranty on site at AU Kharian campus						
Optional Price	16 GB Ram Additional (To make system 32GB)						
Terms & Conditions	• DELL/HP/Lenovo brands only • Only Authorized Tier1 / Tier2 Partners having their office, service center in Islamabad / Rawalpindi with service center and support in Lahore Karachi with certified trained manpower on their own payroll can quote. Attach the list of Manpower with office details. • The bidder should have at least 10 similar projects in their portfolio during last 03 years. • Delivery Time : Ex-Stock with be preferred or 8-10 weeks maximum • Delivery and installation of computers with OS in labs of respective campuses as mentioned above •						

LOT # 02 - GPU Based Desktop Computers (16GB GPU) Islamabad Campus				
Description / Specifications		Qty	Unit	Total
Processor	Intel Core i7- 14 th Generation 14700	50		
Chassis	Tower (As per GPU Requirement)			
Mother Board	Intel Chipset			
Memory	32 GB			
Hard Disk Drive	512 GB SSD NVMe			
GPU	Nvidia RTX 5060 / 5070 16 GB			
Ports	HDMI / Display Port + USB 02 & 03 + Sound Ports			
Power Supply	As per GPU requirement (16GB)			
Network Adaptor	LAN: Integrated NIC 1 Gbps			
LED Monitor	21.5" LED FHD Monitor-			
Keyboard Mouse	Branded Keyboard & Mouse of same brand of CPU			
Cables	System and monitor Power Cords + Display Cables . No convertor			
Operating System	Linux / Ubuntu / Dos			
Warranty	03 Years comprehensive OEM Local NBD Warranty on site at AU Islamabad campus			
Optional Price	16 GB Ram to make the system			
Terms & Conditions	• DELL/HP/Lenovo brands only • Only Authorized Tier1 / Tier2 Partners having their office, service center in Islamabad / Rawalpindi with certified trained manpower on their own payroll and support center in Islamabad / Rawalpindi. • The bidder should have at least 10 similar projects in their portfolio during last 03 years. • Delivery Time : Ex-Stock or 8-10 weeks maximum • Delivery and installation of computers with OS at Air University Islamabad Campus			

LOT # 03 - SERVERS				
Item Description / Specifications		Qty	Unit	Total
Brand & Model	Server 1 - Dell / HP / Lenovo or better	03		
Processor	For Server 1 = 02 x Intel® Xeon® Silver 4309Y 2.8G, 8C/16T, 10.4GT/s, 12M Cache, Turbo, HT (105W) DDR4-2666- (Dual Processor Machine)			
Chassis - Chipset	Support of 8x3.5" SAS/SATA - / 2U – Rack Mount - Chipset Intel			
Memory	128 GB DDR4 ECC Registered RDIMM – (32 x 04) or better			
Hard Disk Drive	02 x 448 SAS SSD / NvMe with Raid 1 03 x 1.2TB Hard Drive SAS ISE 12Gbps 10k 512n 2.5in with 3.5in HYB CARR			
Raid / OS	RAID 0 /1 / 5 for HDDs and SSDs - Linux / Ubuntu			
Power Supply	Dual Hot pluggable Power Supply Redundant (1+1) 550 Watts or above			
Network Adaptor	02 x 1 Gbps Ethernet + 02 x 10Gbps Ethernet + 02 x 10 Gbps Fiber ports			
Rack Rails Bazel	Genuine Sliding RAIL Kit and Front Bazel with Cable Management Arm, 2U LCD Bezel			
Warranty	03 Years NBD on site at Air University Islamabad Campus.			
Terms & Conditions	- DELL/HP/LENOVO brands or better. - Only Authorized Tier1 / Tier2 Partners having their office, service center and trained manpower in Islamabad / Rawalpindi can quote. - The bidder should have at least 05 similar projects in portfolio during last 03 years - Delivery and installation at Air University Islamabad Campus. - AU reserves the right to increase or decrease the quantity.			

LOT # 04 - SERVERS				
Item Description / Specifications		Qty	Unit	Total
Brand & Model	Server 2 – HP HP 380 G10 or equivalent -	03		
Processor	2X Intel Xeon Gold 6138 V4 or better - 20C 40T 2.0 up to 3.7 Ghz, 55 MB Cache			
Chassis - Chipset	Support of 8x3.5" SAS/SATA - / 2U – Rack Mount - Chipset Intel			
Memory	128 GB DDR4 ECC Registered RDIMM – (32 x 04)			
Hard Disk Drive	02 x 448 SAS SSD / NVMe with Raid 1 03 x 1.2TB Hard Drive SAS ISE 12Gbps 10k 512n 2.5in with 3.5in HYB CARR			
Raid / OS	RAID 0 /1 / 5 for HDDs and SSDs - Linux / Ubuntu			
Power Supply	Dual Hot pluggable Power Supply Redundant (1+1) 550 Watts or above			
Network Adaptor	02 x 1 Gbps Ethernet + 02 x 10Gbps Ethernet + 02 x 10 Gbps Fiber ports			
Rack Rails Bazel	Genuine Sliding RAIL Kit and Front Bazel with Cable Management Arm, 2U LCD Bezel			
Warranty	02 Year Warranty on site at Air University Islamabad Campus			
Terms & Conditions	- DELL/HP/LENOVO brands or better. - Partners having their office, service center and trained manpower in Islamabad / Rawalpindi can quote. - Bidder should have experience manpower having good experience on servers. Attached the CVs - The bidder should have at least 05 similar projects in portfolio during last 03 years - Delivery and installation on site at Islamabad Campus. AU reserves the right to increase or decrease the quantity.			

LOT # 05 (Item # 01) (Networking of 05 Computer Labs)					
Islamabad Campus 01		Multan Campus 01		Kamra Campus 01	
Karachi Campus 01		Shorkot Campus 01			
Sr	Descriptions	Qty	Rate	Total	
1	Network Cable UTP Cat-6 Cable Roll 23AWG Pure Copper – Corning, Schneider – 1000 Feet Roll- Fluke tested cables will be acceptable.	20 Rolls			
2	RJ-45 Connectors Cat-6 with Boot Cover- A + Quality	800			
3	GI Duct 4" Wide and 1.5" Hight with 16 Guage Galvanized Local Best Quality (for laying cables on Floor)	500 ft			
4	Flexible pipe 1" – 90 Meter Roll – Dura	04			
5	Cabinet 9U- Imported Double Section with lock, Fan and front Glass	05			
6	60 x 40 PVC Duct – Adamjee / Dura Duct	700 ft			
7	80 x 80 PVC Duct – Adamjee / Dura Duct	60 ft			
8	Cable Manager – Good Quality	10			
9	Networking Jobs in 05 Computer Labs –As per Drawing available at AU • UTP Cat-6 Cable Laying and Termination, Fixing of GI Duct on floor, running network cables in GI Duct on floor and in PVC Duct on walls as per requirement of the site. • Tagging of Cables with Yellow Ring Tags 0-9. • All other jobs to complete the networking in computer labs.	1 Job			

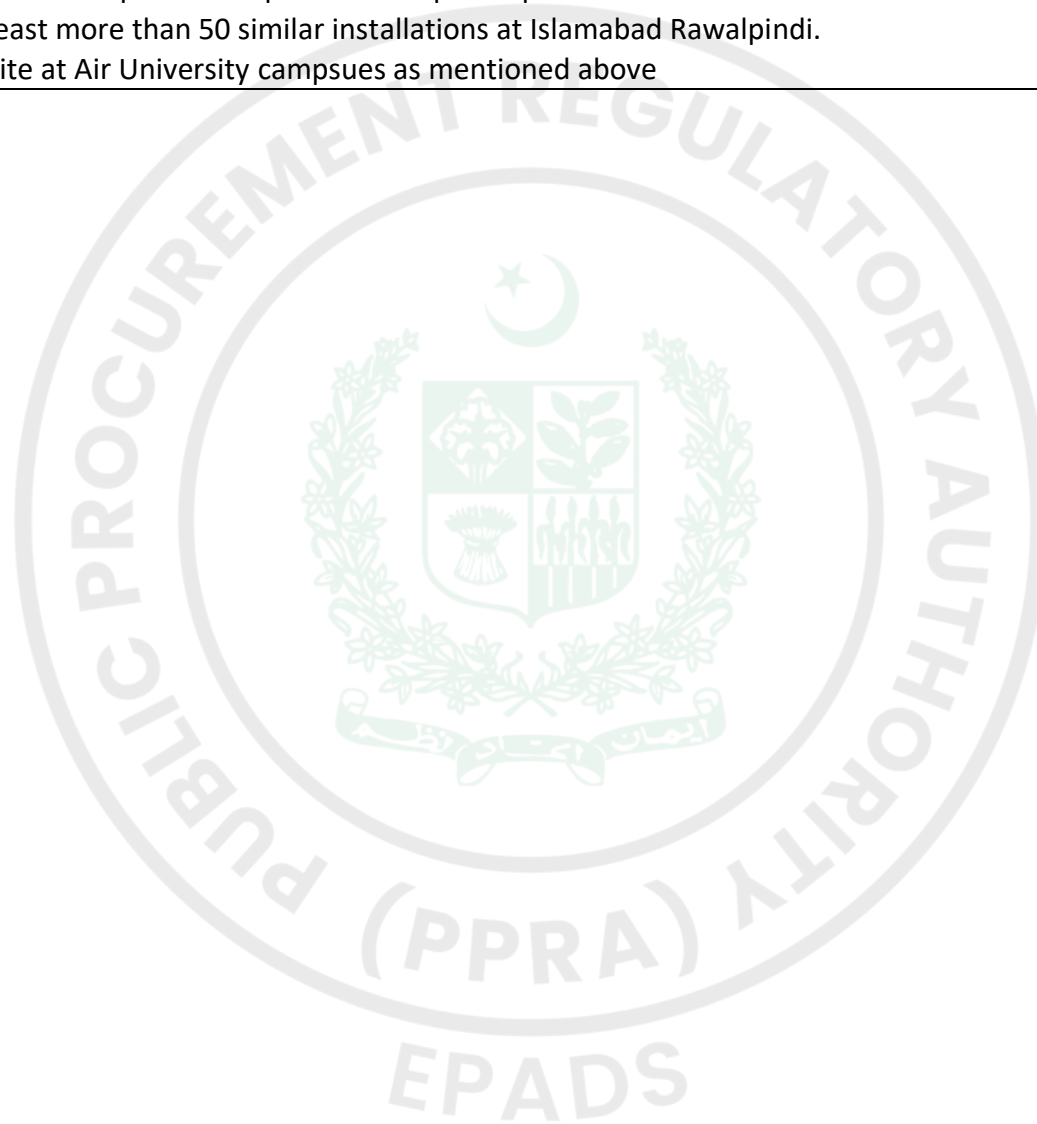
LOT # 05 (Item # 02)								
(Power Work of 05 Computer Labs)								
Islamabad Campus 01		Multan Campus 01		Kamra Campus 01		Karachi Campus 01	Shorkot Campus 01	
#	Descriptions					Qty	Rate	Total
1	Power Cable 7/29 – Pakistan Cables , Newage, Aiwa (90 Meter Role)					16 Roll		
2	Power Cable 3/29 for earthing – Pakistan Cable, Newage, Aiwa (90 Meter Role)					05 Roll		
3	Duct 16*38 – Dura Duct / Adamjee -					600 ft		
4	Power Breaker 16A, Schneider					36		
5	Power Breaker 63A, Schneider					05		
6	Power DB – Local A+ Quality					05		
7	Light Plug Multi – A+ Quality 13 Amp - Schneider Clipsal or equivalent					140		
	PDUs – As per sample Pure copper strips A+ Quality - Support 4 Flat Sockets to accommodate 04 devices simultaneously Fixing of PDUs in Tables with screws							
	Fixing of Tables on Floor with 4-5” Washer Head screws					125		
8	Laying and Installation Job in 05 Computer Labs • Power Cable Laying on Floor in GI Sheet and in PVC Ducts on walls • Fixing of sockets on floor as per drawings attached. • Installation of Power DB, Breakers, and termination of cable in breakers as per drawings and to make the computer labs fully functional in power.					Job		



LOT # 06 – LAPTOPS		Qty	Unit	Total
Generation	14th Generation	02		
Processor	Option 2 = 14 th Generation Intel Core i7 14700 processor			
Installed RAM	16GB SO-DIMM DDR5-5600			
Hard Drives	1TB SSD M.2 2280 PCIe® 4.0x4 NVMe®			
Screen size	15.6 / 16" WQXGA (2560x1600) IPS 350nits Anti-glare, 100% sRGB, 165Hz, Dolby Vision®, G-SYNC®, Low Blue Light			
Backlit keyboard	Should be available			
Bluetooth	Yes			
LAN Card	100/1000M 1 Gbps			
Wi-Fi - Type	Yes - Wi-Fi® 6E, 802.11ax 2x2 or equivalent			
HDMI	1x HDMI® 2.1, up to 8K/60Hz			
Camera	FHD 1080p with Privacy Shutter			
Warranty	03 Years comprehensive NBD at Air University Islamabad			
	• DELL/HP/Lenovo brands only • Only Authorized Tier1 / Tier2 Partners having their office, service center in Islamabad / Rawalpindi with certified trained manpower on their own payroll, can quote. • The bidder should have at least 10 similar projects in their portfolio during last 03 years. • Delivery Time : Ex-Stock or 8-10 weeks maximum • Delivery and installation of computers with OS at Air University Islamabad			

#	LOT # 07 (UPS with Protection DBs) For Computer Labs				
	Description / Specifications				
	Islamabad Campus 02	Multan Campus 01	Kamra Campus 01	Karachi Campus 01	Shorkot Campus 01
(a)	20 KVA Online Pure Sinewave – APC SRT / SUVT or equivalent. Only renowned American, European brands like APC, Emerson Liebert / ABB Brands only. - Three Phase IN / three / Single Out - Power Factor 0.9 or better - Online Pure sine wave Double Conversion, with batteries of well-known brand and fresh stock only. Backup time: 10-15 minutes backup on 80% load - Manufacturing date should not be later than 02 years.				05
	10 KVA Online Pure Sinewave – APC SRT or equivalent. Only renowned American, European brands like APC, Emerson Liebert / ABB Brands only. Single IN / Single Out - Power Factor 0.9 or better - Online Pure sine wave Double Conversion, with batteries of well-known brand and fresh stock only. Backup time: 10-15 minutes backup on 80% load Manufacturing date should not be later than 02 years.				01
(c)	Protection Panel DB for 20 KVA UPS – 20 KVA - Qty 03 x 80 Amp Breakers (Schneider) 2 poles with small DB Box if required for input and output - Input Output voltage Protection - High Quality imported + Indicator of INPUT and OUTPUT - Manual Bypass 80 Amp with Over voltage under voltage control, Surge protection / SPD. input and output - Please visit site for estimation of cable and any other item required for this installation. Please include the price of anything additional required for this installation.				06
(d)	- Power Cable 16 mm (Pakistan Cable, FAST) 4 Core for 20 KVA UPS - Power Cable 10 mm (Pakistan Cable, FAST) 4 Core for 10 KVA UPS				150 Meter 30 Meter
(e)	Installation at Air University Campuses at mentioned above - Complete installation commissioning of UPS, power cable and UPS DB at Air University Campuses as mentioned above - Warranty: 01 Year for UPS and minimum 06 months for Batteries on site at Air University Islamabad. - Delivery time – 04 weeks				Job 06 UPS Installation

- | |
|--|
| <ul style="list-style-type: none">• Suppliers should have offices & service centre in ISB/RWP• Only relevant Professional having atleast 05 years of experience in the field.• Bidder should have their own repair UPS repair workshop with professional UPS trained technicians in ISB/RWP• Bidder should have atleast more than 50 similar installations at Islamabad Rawalpindi.• 02 Years warranty on site at Air University campuses as mentioned above |
|--|



LTO # 08 (Network Data Switches)				
#	Description / Specifications	Qty.	Unit Rate	Total Cost
a)	Switch -01 (TOR Switch Layer – 3) Enterprise Level Switch only – SME/Consumer end Switches are not acceptable 24 x 10G Copper+ 02 x 10/40G Optical Fiber Ports supporting single/Multi mode. - VLAN switching, MAC-based VLAN assignment, and Inter-VLAN Routing - Access, Trunk, and Hybrid interface types. - Layer-3 Fully Manageable through GUI & CLI 802.1x authentication, MAC base authentication, RADIUS, TACACS+ authentication, Different user levels for commands, preventing unauthorized users from using certain commands, Defense against DoS attacks, TCP SYN Flood attacks, UDP Flood attacks, broadcast storms, and heavy traffic attacks	01		
c)	Switch -02 (Access Switches) Enterprise Level Switch only – SME/Consumer end Switches are not acceptable 24 x 1G Copper and 02 x 10G Optical Autosensing ports. - VLAN switching, MAC-based VLAN assignment Access, Trunk, and Hybrid interface types - Layer-2 Fully Manageable through GUI & CLI 802.1x authentication, MAC base authentication, RADIUS authentication.	16		
g)	Fiber Patch Card Single mode Duplex SC to LC - 3 Meter Single mode Duplex LC to LC - 1 Meter	15 15		
	Terms and Conditions - Cisco, Ruijie, H3C, Huawei or better equivalent only. - Enterprise Level Switch only well-known brands only – - SME/Consumer end Switches are not acceptable - Manageable all switches through cloud free software - Minimum 03 years comprehensive Warranty - Successful bidder will Deploy, configure switches			

LOT # 09 (Interactive LED Screens 86") **NCSA**

Description / Specifications		Qty	Price
- Resolution: 4K (3840 x 2160) - Built-In Camera: 48 MP, AI-Based 4K Voice Tracking Camera - Built-in 08 Microphones Array or better with Clear sound pickup at 6-8 Meter. Echo cancellation and Noise reduction - Build-In Speaker: Minimum 02 x 15 Watts or better - Glass: Anti-Glare / Anti-Reflective /Anti blue Glass with Mohs 7 (4mm glass thickness) - Intelligent Whiteboard for Smooth Writing with minimum response time and maximum accuracy will be preferred. - Built in Wi-Fi, 2.4 / 5.0 Ghz Supported – Wi-Fi 6 - Finger Multi Touch options 02 x Magnetic pen / stylus pen - Lifetime Free White Board Software for windows. - Palm Rejection option should be available. - Android 14 or better (OTA-Auto Firmware Update) - Android Spec: Android 14, 08 GB, 128GB - AI handwriting tracking – Handwriting to Digital form - Multitouch gesture e.g. Select, move, zoom and erase - Touch Points: 20 Points (Windows)- 20(Points Android) - Facility of Hotspot - Whiteboard saving mode (QR code scan/Email/Local storage/USB) - Remote Control of LED - Refresh rate: 60Hz – Contrast ratio: 4000 :1 - One tap switchover from Android to Windows - Wired and Wireless Projection: up to 4K 50000 Hrs. Life for LED Panel - HDMI Wired Projection + USB Type-C wired projection x 1, - Wireless projection of multiple users + through mobile App - Free for lifetime Computer Software for Screen Sharing	- Supported windows, Android & Mac OS. - Mention Int. Certification if available for Brand. <u>Windows OPS Spec:</u> Core i5/i7, 12th Generation or better, 16GB RAM, 512GB SSD <u>Ports:</u> 02 x HDMI In + 01 x HDMI Out, 02 x USB Ports (Type-A 2.0,3.0,3.1) 01 x USB Type-C, (should be available on Front and Rear Panel both). 01 x USB Type-B), 01 x Touch USB. - LAN In x 1, LAN Out x 1, Bluetooth 5.1 (preferred) - OPS Port x 1, Line-in, Line-out, Earphone, RS232 x 1, - SPDIF out (optional) - Remote management of multiple devices through software - Integration of additional teacher camera <u>Wall Mount Bracket with Installation</u> - Wall mount kit with complete installation and configuration, Ducting & Cabling at Air University ISLAMABAD Campus. <u>Surge Protector:</u> Install Surge protector on input of the Screens (Voltage Controller with Back Box) <u>Warranty:</u> 02 Years on site at Air University ISLAMABAD Campus With lifetime software upgrades and updates. <u>Delivery Time:</u> 06-08 weeks' maximum <u>Installation : Power Sockets are available on front wall of classroom and labs.</u> Installation should be included with power cabling, ducting required with HDMI Cable laying from Screen to Podium. With all required accessories.	05	
	DMS(must be same brand) with ability to manage and control all devices. Digital Signage Remotely install apps, Remote Management + Alert Announcement + Digital Signage, Live Streaming on panels through device management system,		

B) Wireless headgear / collar Mic For Teacher – Integrated with LED Screen OPS for clear voice of teachers particularly on zoom / Teams Free Power Professional UHF Mic Model AK-460II . or equivalent With Mono to Stereo convertor	05	
c) Branded HDMI Cable 10 meter Fiber Optics, 4K, Best Quality.	05	
d) Wireless Keyboard, Mouse, Mouse Pad, Best Quality . Range up to 08 Meter .	05	
Delivery & Installation at Air University Islamabad Campus		
Terms & Conditions - Only professional Firms have more than 05 Years of experience in the field of selling Interactive Screens with strong technical trained team on their own payroll and having their own service center in Islamabad / Rawalpindi can quote. - Supplier should have Purchase orders of more than 100 similar Interactive LED Screens on their portfolio. - Supplier should have supply and services relationship with at least 10 different organizations during last 03 years for the supply and installation of interactive LED screens. - Supplier will provide Demo Unit at Air University Islamabad Campus for POC. Screen will be finalized purely based on the Demonstration of equipment and technical features set. System ruggedness, equipment performance, features set which are more supporting to teaching methodology, customer's feedback on the product and best suitable for Air University will be selected. - Installation of panels with configuration of software at Air University ISLAMABAD Campus. - AU reserve the right to increase or decrease the quantities.		

LOT # 10 (Photocopier Machine)		Qty
Country of Origin	Japan	01
CPM + Functionality	45 CPM. Copy, Print, Colour Scan	
Memory + Processor	Minimum 04 GB or higher + 1.2 GHz or better	
Hard Disk	128 GB SSD	
Dual Printing-	DADF - Single pass for Dual side copying (No RADF) + Duplex Printing copying	
Resolution	Print 1800 1200 dpi & Scan / Copy 600 x 600 dpi or better	
Input Trays Capacity	Input Paper Capacity – At least 1000 sheets	
Colour Scanner	Built-in colour scanner over Network	
Paper Size	A3, A4 and lower	
Tray Capacity	Bypass with At least 100 Sheets + 1000 Pages on other trays	
Touch screen size	9" Touch Screen full coloured LCD Panel or larger	
USB Ports	USB2 x 01, USB3 x 01, USB 2.0 x 1 Device	
Network Interfaces	Standard 1 Gbps – RJ-45 connector	
Trolley	PPC Trolley	
Warranty	02 Year with parts and service on site at Air University Islamabad.	
Delivery	Air University ISLAMABAD Campus -	
Copy Cost	Please mention following	
Terms and conditions	1. Mention the cost of Toner, Developer, and Drum with their yields. Also calculate the Copy cost by dividing cost of Drum, Developer, and toner with number of copiers. 2. Mention the cost of consumable parts up to 5 Lac copies. Copy and consumable cost will be considered in financial evaluation. Supplier will replace the consumables in case parts does not complete their life. 3. Only Authorized Distributors by principal can quote – Provide Authorized Letter 4. Only renowned brands having more than 100 installations can quote 5. Bidder may have Service centre in Islamabad / Rawalpindi with professional engineers can quote.	

LOT # 11 (ENTERPRISE BACKUP, RECOVERY & STORAGE SOLUTION)

Description / Specifications	Qty.	Unit Rate	Total Cost
The bidder shall supply, install, configure, test and commission a complete Enterprise Backup and Recovery Solution, including: - Enterprise backup and recovery software licenses for minimum 20 physical/virtual servers. - Dedicated backup server/appliance. - Dedicated backup storage with sufficient usable capacity. - Backup software with centralized management. - Automated backup scheduling and policy-based protection. - Deduplication and compression. - Immutable/ransomware-protected backup capability. - Full server, VM, application, database and file-level recovery. - Bare-metal recovery capability. - Disaster recovery/replication capability. - Backup monitoring, reporting and alerting. - Installation, configuration, testing and commissioning. - Administrator training. - Minimum 3 years warranty/support/subscription.	20 Server Machines		

LOT # 11 (Detailed Description and Specifications)

DETAILED TECHNICAL SPECIFICATIONS

Scope: The bidder shall supply, install, configure, test and commission a complete Enterprise Backup and Recovery Solution comprising backup software, backup server/appliance, backup storage, recovery capability, monitoring, support and training.

1. Backup Software

- Minimum licensing for 20 physical/virtual servers/workloads, expandable to at least 50 servers.
- Centralized web-based management console. Support for Windows and Linux servers. Support for Microsoft Hyper-V and VMware ESXi/vSphere. Image-level backup for physical and virtual machines. Full, incremental and synthetic full backup capability. Changed Block Tracking or equivalent technology. Automatic scheduling and policy-based backup. Automatic backup verification and retry of failed jobs. Compression and source-side/global deduplication. Backup retention and automatic cleanup policies. Encryption and secure transmission of backup data. Bandwidth throttling and configurable backup windows. Email/configurable notifications, dashboards, logs and reports. Role-Based Access Control and preferably MFA support.

2. Recovery Requirements

- Full server recovery and bare-metal recovery. Recovery to replacement hardware. Complete and rapid/instant virtual machine recovery.
- Recovery of individual files and folders. Recovery of deleted files from available restore points. Application/database-level recovery for supported enterprise applications. Recovery to an alternate server/VM where supported.

3. Backup Storage Hardware

- Enterprise-grade rack-mountable backup storage appliance. Minimum 30 TB usable backup capacity after RAID protection, expandable to at least 50 TB. Enterprise-grade 24×7 hard drives with hot-swappable drive bays. RAID 6 support with hardware RAID controller and protected write cache. Hot-swappable disks and redundant power supplies. Minimum 64 GB ECC RAM, expandable. Minimum 2 × 10GbE network interfaces plus dedicated management interface. Remote hardware management such as IPMI/iLO/iDRAC or equivalent. Web-based storage management and monitoring. Expansion capability for additional storage.

4. Automatic Backup & Retention

- Automatic daily incremental backups. Weekly full or synthetic full backups. Configurable monthly/long-term retention. Automatic cleanup according to retention policy. Automatic retry of failed jobs. Automatic notification of backup failures and status. Support for protection policies for newly added workloads where available.

5. Deduplication & Compression

- Block-level deduplication. Global deduplication where supported. Compression of backup data. Storage and bandwidth optimization.
- Reporting of deduplication/compression efficiency.

6. Immutable Backup & Ransomware Protection

- Mandatory immutable backup capability. Protection against ransomware, malicious deletion and unauthorized modification.
- Support for hardened repository, WORM/object lock or equivalent immutable technology. Configurable immutability/retention period.
- Separate administrative credentials for backup and storage infrastructure. Audit logs for administrative activities.

7. Disaster Recovery & Off-Site Protection

- Backup copy/replication to a secondary location. Scheduled replication of selected servers/VMs. Support for recovery from secondary/off-site backup. Configurable Recovery Point Objective (RPO) and Recovery Time Objective (RTO). Failover/failback capability where supported. Disaster recovery testing without affecting production systems.

8. Backup Server

- Rack-mounted enterprise server. Minimum 8-core Intel Xeon/AMD EPYC or equivalent processor. Minimum 32 GB ECC RAM, expandable to 64 GB or more. Minimum 2 × 480 GB enterprise SSD in RAID 1 for operating system. Minimum 2 × 10GbE network ports.
- Hardware RAID controller. Redundant power supplies. Remote management capability. Supported Windows Server or Linux operating system.

9. Security Requirements

- AES-256 or equivalent encryption. Encryption at rest and in transit. Role-Based Access Control. Multi-factor authentication where supported. Separate backup administrator credentials. Comprehensive audit logs. Secure communication using current TLS standards.
- Protection against unauthorized deletion/modification.

10. Automatic Verification & Recovery Testing

- Automatic backup integrity verification. Scheduled test recovery. Recovery verification and reporting. Identification of corrupt or unusable backup files. Recovery reports/evidence for audit purposes.

11. Installation & Commissioning

- Installation and configuration of hardware and software. Configuration of storage, RAID and backup repositories. Configuration of backup policies and retention. Configuration of at least 20 servers/workloads. Configuration of email alerts and user roles.
- Demonstration of successful backup. Demonstration of file-level and complete server/VM recovery. Backup integrity and recovery testing. Submission of commissioning and test report.

12. Training

Minimum 3 days administrator training covering: backup configuration, recovery, VM recovery, bare-metal recovery, storage management, monitoring, troubleshooting, ransomware recovery, disaster recovery and reporting.

13. Warranty & Technical Support

- Minimum 3-year comprehensive hardware warranty. Minimum 3-year software subscription/support. Software updates and security patches during support period. Firmware updates where applicable. Remote technical support. On-site support for critical failures where required. Replacement of defective hardware.

14. Recommended Backup Architecture

The proposed solution should support a **3-2-1-1-0 backup strategy**: three copies of data, two different storage media, one off-site copy, one immutable/offline copy, and zero recovery errors through automated verification.

Terms and Conditions

- Bidder should be authorized partnership for the quoted brand of software with minimum 05 similar installations
- Bidder should have trained manpower on quoted software and equipment
- Delivery and installation at Air University Islambabad Campus
- Warranty and support for the period of 03 years from the data of installation and acceptance certificate

LOT # 12
Cyber Security Tools / Hardware / Equipment

#	Items / Equipment	Qty	Description
1.	Complete Forensic Adapter Kit	3	SATA, IDE, SAS, NVMe/M.2, PCIe, mSATA, ZIF/LIF, USB-A/C, Thunderbolt, SD, microSD, CF, Memory Stick, power adapters and forensic cables
2.	High-Capacity Evidence Drives	20	Enterprise 12–24 TB HDDs and 4–8 TB SSDs; evidence/working-copy separation
3.	Dedicated backup appliance	1	At least 40 TB usable; snapshots and scheduled backup of priority datasets, code and results.
4.	Cyanoacrylate Fuming Chamber	1	Controlled chamber with humidity/temperature control and exhaust
5.	Fingerprint Imaging Station	1	DSLR/mirrorless camera, macro lens, alternate light source, filters
6.	Research network equipment	1	Managed 25 GbE switch, compatible server adapters, cables and transceivers.
7.	Forensic Evidence Imaging SSDs	6	High-endurance 4–8 TB SSDs for temporary working images
8.	Digital Evidence Camera	2	24 MP+; macro capability; RAW; timestamp; tripod; evidence scale/measurement accessories
9.	Forensic Light Source Kit	2	UV, blue, green, alternate light wavelengths; filters and goggles
10.	Android tablet,	10	10-11", >=128 GB storage, >=4 GB RAM, with case; compatibility testing, assisted sign-up, loan devices, session and interview recording; reused in NCSA labs
11.	Barcode/QR Evidence System	3	Thermal barcode printer; scanner; sequential labels; QR/barcode support; evidence tracking software
12.	Tablet Test Devices	6	Android/iPadOS; Wi-Fi/cellular variants
13.	Faraday Evidence Box	2	RF isolation; 2G/3G/4G/5G/Wi-Fi/Bluetooth/GPS; 2.4/5/6 GHz; RF-isolated power; USB-C/USB feed-through; viewing window; mesh gloves; 80 dB+ attenuation preferred
14.	Rack and power distribution	1	Suitable-depth rack, metered PDUs, rails, cable management and temperature monitoring.

15.	Forensic Evidence Server	1	32+ CPU cores; 256 GB ECC RAM; 2× enterprise NVMe; minimum 100 TB raw storage; RAID-6/RAIDZ2; hot-swap; 10/25 GbE; encryption; snapshots; audit logs; redundant PSU
16.	Digital Microscope	2	10×–200×; 4K camera; measurement; LED/polarized illumination; image/video capture
17.	Macro Lens	4	90–105mm macro, 1:1 reproduction
18.	Digital Microscope	2	4K camera, 10×–200×+, measurement and image capture
19.	Stereo Microscope	4	10×–80×, binocular/trinocular, transmitted/reflected illumination
20.	Forensic Evidence Examination Tables	4	Chemical-resistant, washable, illuminated, lockable storage
21.	Crime Scene Photography Kit	4	Camera, macro lens, tripod, flash, scales, color chart, evidence markers
22.	Network Data Switches	1	Enterprise-level switch only; 24×1G copper; 2×10G optical autosensing ports; 2×10G electrical copper RJ45 ports; MAC-based VLAN assignment; access/trunk/hybrid interface types; Layer-2 fully manageable via GUI & CLI; 802.1x, MAC-based and RADIUS authentication; 6× Single Mode SFP 10 KM; delivery 2–8 weeks maximum.
23.	AI Fixed Dome Camera	4	8MP; 4K; WDR 120 dB+; IR; IP67/IK10; human/vehicle detection; privacy masking; edge analytics
24.	Forensic Hardware Write Blocker – SATA/USB	2	Professional standalone hardware write blocker for forensic acquisition of SATA HDD/SSD and USB storage media . Supports SATA I/II/III, 2.5"/3.5" drives, USB 2.0/3.x ; USB 3.0+ host interface; hardware-enforced read-only/write-blocking ; blocks ATA/SCSI write, erase and format commands; LED indicators for power, media detection, host connection, write-block status and activity; SATA data/power cables; external power adapter; HPA/DCO detection preferred; compatible with FTK, EnCase/OpenText, X-Ways, Magnet and other forensic imaging tools; Windows/Linux compatibility; firmware upgrade capability; rugged/portable design; NIST CFTT-tested or equivalent independently validated ; minimum 1-year warranty and OEM technical support.
25.	Smartwatch/IoT Mobile Evidence	3	Apple Watch, Wear OS device, Bluetooth wearable
26.	Fingerprint Chemical Development Kit	2	Ninhydrin, DFO/indanedione-compatible teaching setup

27.	Tableau T8u Forensic USB 3.0 Bridge (hardware write blocker)	1	Enterprise-level switch only; 24×1G copper; 2×10G optical autosensing ports; 2×10G electrical copper RJ45 ports; MAC-based VLAN assignment; access/trunk/hybrid interface types; Layer-2 fully manageable via GUI & CLI; 802.1x, MAC-based and RADIUS authentication; 6× Single Mode SFP 10 KM; delivery 2–8 weeks maximum.
28.	Dedicated SDN Whitebox Switch Laptop	1	Hardware
29.	Complete Crime Scene Investigation Kits	6	evidence collection, PPE, forceps, swabs, bags, rulers, markers, evidence tags, tweezers, packaging
30.	Evidence Collection Bags	1 lot	Paper/plastic bags in multiple sizes, breathable biological-evidence packaging
31.			
32.	UPS	1	APC Easy UPS SRV 3KI 3000VA Tower or equivalent.
33.	Alfa AWUS036ACHM wireless adapter (monitor mode + injection)	1	Synology 2-bay NAS DS224 with 1×3.5" 8TB SATA HDD and 1×2.5" 8TB SATA SSD, or equivalent.
34.	Security Testing / Assessment	1	Professional Service
35.			
36.	Evidence Markers	8	Numbered/alphabetical scene markers, tents and scales
37.	Portable Evidence Examination Light	12	Rechargeable LED, adjustable intensity
38.	Fingerprint Development Kits	8	Black/gray/white magnetic and conventional powders; brushes; applicators
39.	Faraday Bags	20	Multi-layer RF shielding; 5G, Wi-Fi, Bluetooth, GPS; tamper-evident; mobile/tablet/laptop sizes
40.	Solana Mainnet SOL Allowance	1	Blockchain / Service
41.	Fingerprint Specimen Collection Kit	10	Ink pad, roller, cards, biometric capture accessories
	Terms and conditions • Vender can quote any one or combinations of items • Deliver installation at Air University Islamabad Campus • Warranty and support for the period of 01 year		

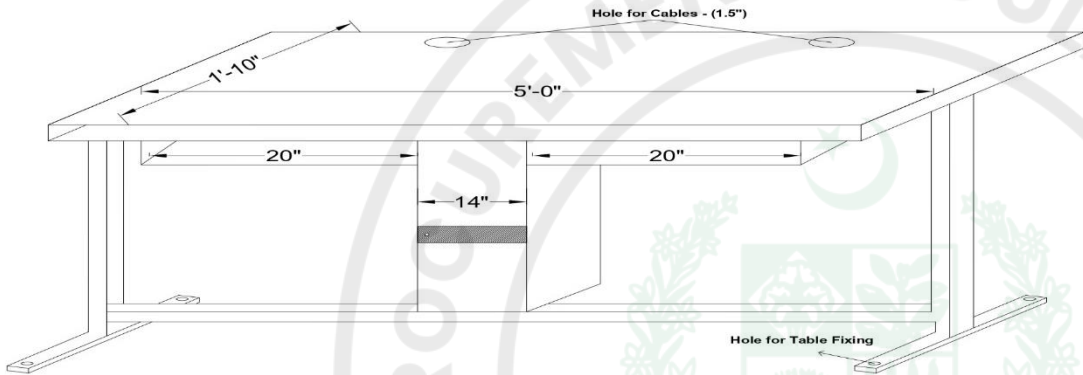
LOT # 13 Cyber Security Software Tools

#	Equipment		Software / Items	Unit Price	Total Price
1	Rapid7 InsightVM (current successor to Nexpose)	1	Network vulnerability assessment, asset discovery, risk prioritization, vulnerability scanning and remediation workflow. Suitable for enterprise vulnerability management and research environments.		
2	Invicti Web & API Security / Acunetix	2	Automated Dynamic Application Security Testing (DAST) for web applications and APIs; automated vulnerability discovery, verification and reporting.		
3	IDA Pro Essential – Academic	15	Professional reverse-engineering and malware-analysis platform; disassembly, decompilation, debugging and analysis of executable binaries. Academic/classroom licensing subject to institutional eligibility.		
4	Burp Suite Professional	6	Professional web-application security testing platform for VAPT, manual penetration testing, vulnerability discovery, API testing and security assessment.		
5	Shodan lifetime membership	50	Threat Intelligence		
6	Fingerprint Comparison & Analysis Software	1	Fingerprint image enhancement, comparison, examination, measurement and teaching/research functions. Vendor-specific software/license to be selected.		
7	Microsoft Sentinel – SIEM/Security Monitoring Allowance	1	Cloud SIEM/SOAR platform for security-log ingestion, analytics, threat detection, alerting and investigation. Budget should be based on expected daily log ingestion and retention.		
8	Google Colab Pro / Paid Colab Subscription	6	Cloud-based Python/Jupyter research environment with access to accelerated compute for machine learning and data-science experimentation.		
9	Claude Code Max – AI Development Subscription		AI Development Tool		

10	VirusTotal Private API / Google Threat Intelligence API		Private threat-intelligence API for malware, URL, domain, IP and file intelligence; automated threat-enrichment and research integration. Enterprise/private API pricing is quote-based.		
11	AbuseIPDB Premium API	1	IP reputation, abuse reporting and blacklist intelligence API for threat intelligence, SOC research and automated IP-risk assessment.		
12	RunPod GPU – RTX A6000 48GB	1	On-demand cloud GPU compute with NVIDIA RTX A6000 48GB; suitable for AI/ML training, inference, computer vision and large-model experimentation. Usage-based allowance.		
13	Backblaze B2 Cloud Storage	1	Cloud object storage for encrypted research-data backup, datasets, forensic artifacts and experiment results. Usage-based storage and egress charges.		
14	Domain, SSL certificate and off-site encrypted backup, 6 months	1	Domain registration, SSL/TLS certificate and six-month off-site encrypted backup service for research platforms and web applications.		
15	IPFS / Pinata Storage Allowance	1	Managed IPFS storage/pinning and gateway service for decentralized storage, research datasets and blockchain/Web3 experiments.		
16	Solana Mainnet SOL Allowance	1	Operational SOL allowance for Solana Mainnet transaction fees and blockchain research activities.		
17	Solana RPC Infrastructure	1	Managed Solana RPC/API service for blockchain data access, transaction queries, application development and blockchain research.		
18	RunPod Network Storage (model weights)	2	Persistent cloud storage for AI/ML model weights, checkpoints, datasets and experiment artifacts associated with RunPod GPU workloads.		

LOT # 14 Misc. Items			
Sr No.	Description	QTY	Price with all Taxes
1	Hard Disk 2 TB – Shock Proof. Portable . Lexar, Transcend , A Data	02	
2	Hard Disk 5 TB – Shock Proof. Portable . Lexar, Transcend , A Data	02	
3	Hp laser jet 4003 DN – with duplex printing	03	
4	Hp laser jet 404DN – with duplex printing	03	

Lot 15 - (Furniture) Item N0. 01 – Computer Tables

Description / Specifications Item-1 (Computer Tables)	Qty.	Unit Rate	Total Cost
Computer Tables: Two-Seater 5'-0"x1'-10" Steel Frame with Wooden top and CPU Box of 14" Wide.  COMPUTER TABLE 2 SEATER	125		
Computer Tables: Three Seater 8'-0"x1'-10" Steel Frame with Wooden top and CPU Box of 14" Wide.- Design with the same as above	15		

Lot 10 - (Furniture) Item N0. 02 – Computer Tables

Computer Chairs:
Hydraulic, Moveable without Arms.
As per Sample



275

LOT No. 16 - Data Center (Islamabad Campus)

#	DESCRIPTION OF ITEMS	QTY
	Scope of Work - Air University desires to establish a modern state of the art Data Center at its Islamabad Campus. The scope of work includes the design, supply, installation, integration, testing, commissioning, and handover of a complete Smart Row Data Center at Air University, Islamabad Campus. The project shall include server racks, UPS and backup power systems, generator with ATS, precision cooling, fire detection and suppression, environmental monitoring, electrical distribution, earthing, structured cabling, flooring, civil works, access control, CCTV, and NOC room facilities, including LED and display screens as specified in the BOQ. Terms and Conditions - Vendor only having certified manpower for Data Center with own office in Islamabad / Rawalpindi with more than at least 05 similar projects in their portfolio can quote - Quote the price of each item separately and also the total lot price. - Every vendor will design their own data centre Design with diagrams of room, cable paths, and placement of equipment, and will submit with the technical bid. Room size would be 18 x 20 sq ft. - The vendor shall be responsible for the provision of all necessary equipment, accessories, cabling, installation, configuration, testing, documentation, staff training, and warranty support required to deliver a fully operational Data Center in accordance with Air University's technical specifications and requirements. - Vendor will add anything additional required with respect to this BOQ which is mandatory to complete the data centre setup even if it is missing from the given BOQ.	

	Decision of Data Center will be made purely bases on the technical design, equipment reputation, existing users feedbacks, Vender's expertise, design, support available with the vender.	
1.	Recommended Brands Huawei, Vertiv, APC Schneider, equivalent or better Brands only	
2.	General Specification of Data Center - 7 x Racks POD Solution. - The modular data center facilities include the power supply and distribution system, cooling system, cabinet system, and monitoring system. - The data center adopts the modular architecture. The hot and cold aisles containment. A single module must be integrated with the cabinet system, power supply and distribution system, cooling system, management system, and integrated cabling system of same OEM. - The power supply, distribution, and cooling systems must be configured for the module and meet the load requirements of 20 kW. - Front cold aisle and back hot aisle - The front door of the cold aisle should be configured with double thermal insulation glass. An independent cold aisle containment should be configured at the front of the cabinet.	
3	Data and Server Racks Facility 7 x 42U Racks: (6 x Racks for IT & 1 x Facility Rack) - IT Rack 600 mm x 1350 mm x 2000 mm – or equivalent - The cabinet complies with IEC 60297-2 and is compatible with the 19" rack international standard. - Two horizontal line trays should be installed at the top of the front of the cabinet. - Cabinet design complies with IEC 60297-2 and ANSI or EIA RS-310-D standards. - Overall protection level must be greater than or equal to IP20	

	• Cabinet color should be black. • The material must be high-intensity class A carbon cold rolled steel plate and zinc-coated steel plate • Must have front and rear ventilation channels • Each cabinet must provide 42 U available space; the position of each U is marked on the vertical mounting bars. • PDUs with Rack Level Monitoring 32(A), single phase • Two vertical metered PDUs are installed in each cabinet. Each PDU provides 16 output ports (C13 x 12 + C19 x 4). • The power distribution module must have at least 12 IT outputs • Power distribution module: includes the power indicator, UPS input, UPS output, UPS maintenance bypass switch, surge protection switch, IT power distribution, and air conditioner power distribution.	
4	Precision Air Conditions with Humidification for Data Center • Three rack-mounted precision cooling unit. The unit includes indoor, outdoor, piping work, power cable, gas and all other accessories • Supply, installation, testing and commissioning of in-rack horizontal cooling precision air condition CRAC units with each having cooling capacity 12.5 KW with power supply • 208–240 V AC, 50 Hz/60 Hz, - 1Ph+N+PE/2Ph+PE • Installation along with copper pipe installation, gas filling, condensate drain piping, water tanks for humidifiers, team work function and all necessary controls complete in all respect. • Cooling mode: Air cooled • Refrigerant: R410A - Air supply mode: Horizontal flow - IP rating: IP20 • To simplify maintenance and installation, the module must use rack-mounted air conditioner. • The space occupied by a single air conditioner is no more than 11 U.	

	• Certification: Normal-temperature model: REACH, RoHS, CE, CCC, and CQC • Material for Installation and commissioning of precision cooling system. As per the site requirement.	
5	Fire Detection & Suppression / Extinguishing system: • The controller and fire cylinder should be integrated. • Built-in point-type smoke and heat detectors are used for dual-channel • Interlock startup (the fire cylinder is started only when both smoke and heat • Detectors report alarms). • Multiple devices can be connected in parallel for communication linkage. • Three types of dry contact signals (fire extinguishing, fault, and fire alarm) • Can be reported, and audible and visual (indicator) alarms are provided. Users • Can press the specific button to clear the alarms. Specifications: • Storage pressure (at 20°C): ≤ 1.6 MPa - Filling capacity Per fluorohexanone: ≥ 6.3 kg • Backup time: 24 hours - Startup mode: Active startup, dual-channel interlock startup for smoke and heat detectors - Alarming mode: Dry contact signal feedback -Operating temperature: 0–50°C - Storage temperature: –20°C to +60°C - Relative humidity: ≤ 95% RH (non-condensing at 40°C) - Dimensions: ≤ 6 U (height) x 700 mm (depth) x 442 mm (width) •	01

6	Environmental Monitoring System main module • The data center must have an overall environment and power monitoring system. The built-in monitoring host can monitor the power supply and distribution, air conditioners, temperature of the room in the module as well as. • The system should be capable to send alerts on Email, SMS, Alarms etc. System should has the visibility of data center with integrated Cameras and should be accessible on mobile devices for remote monitoring for Temperature and other factors mentioned. • Rack Temperature and Humidity Sensor, Smoke sensor, Alarm with Sound, Water Leak Sensor 30ft rope, Temperature and Humidity sensor., Smoke detection sensor. Water leakage sensor. • Intelligent Lock. - Detect and display the input current. - Detect and display the total input current. • Detect and display the input voltage; display the voltage and current alternately. • Provide remote input management. Remotely query the input voltage, total input current, input power, and input energy through a serial port. • Remotely query the PDU status through a serial port. The status that can be queried includes normal input power, overcurrent, overvoltage, and undervoltage, as well as the communication status (normal or abnormal) of the monitoring board. • Highly Sensitive Smoke Detection (HSSD) System. • Testing and commissioning of the entire system, ensuring full compatibility and performance optimization. All accessories to power up and commission above equipment must be included in the proposal. No additional payment will be made in later stages.	01
07	Electrical Panel (ATS & MDB).	

	▪ All in-door panels must have compliance with IP-40 rating or higher & Form 2 with segregation of Components and Copper Bus Bars etc ▪ All breaker must be from Schneider or ABB only ▪ 4-Pole 60kVA Main Distribution with main input breaker, breakers for POD System, comfort ACs and lighting load ▪ 4 pole 60KVA ATS with MOR along with complete distribution system for POD and general wiring ▪ Surge protectors ▪ Phase sequence • STS. 1 x rack mounted STS, 32A	
08	UPS for Data Center – 20 KVA UPS –	
09	• 02 x 20 KVA Pure Sine Wave Double Conversion UPS – Rack Mount • Three Phase IN - Three / Single Out - Power Factor 1.0 • Supply and installation of 20KVA online mode with high efficiency high power factor UPS with installation cabinets for power modules. • The module must use lead-acid batteries (VRLA or better) to provide backup power for 20 kW loads for atleast 30 Minutes. • Rated capacity: 20 kVA with Output power factor: 1 • Rated input voltage: 380 V AC/400 V AC/415 V AC (three-phase input) • 208 V AC/220 V AC/230 V AC/240 V AC (single-phase input) • Rated output voltage: 220 V AC/230 V AC/240 V AC • 380 V AC/400 V AC/415 V AC • Output voltage precision: $\pm 1\%$ • System efficiency: 95% • The UPS must work in redundancy mode and in N+1 mode.	02

	- The rated capacity of the UPS should be 20kVA and must be installed in a 19-inch rack and occupies only 2U space in the cabinet. - The power distribution cables, power distribution cabinets, and corresponding circuits must meet the design load of the power consumption. - The battery cabinet can be deployed. <u>Power distribution.</u> Power distribution module must include: - - The power indicator, UPS input/ UPS output, UPS maintenance bypass switch - Surge protection switch, IT power distribution, - Manual Bypass switch for multiple Power Inputs.	
10	Emergency Shutdown Switch for Data Canter	01
11	ELECTRICAL PANELS , Power Cabling and Accessories	
	ATS PANEL (03 x Wapda + Generator - Output to M.D Panel	1
	Cable 25 mm 4 Core flexible / or as per requirement to connect UPS A grade – OR as per requirement of DC	100 Meter
	Main Distribution Panel Wall Mounted Indoor type IP40/42	1
	UPS Output Sub-Distribution Panel For Critical Load Wall Mounted Indoor type IP40/42	1
	Sub-Distribution Panel For Non Critical Load Wall Mounted Indoor type IP40/42	1
	Any other required accessories to complete the installation.	
12	GROUNDING, EARTHING & BONDING	

	• Required 06 earth pits for data center including digging, boring, grounding material, main hole and earth bar: - UPS, HVAC, SPD, IT, Genset & Neutral • Ohm value of less than 1 • Installation of earth pits (Less than 1 Ohm rating) with copper bar for distribution in each room including, excavation, copper plates, rods, racks and all other accessories for Earthling. • Supply of 1" dia & 10 ft long copper Rod filled with chemical compound as earth electrode including 1 No of wire having length approximately 100-120 Rft 70 mm² Bare standard copper conductor having purity 93% or above from rod to ground surface in each Earth Pit, 1 No Copper thimble 70 mm, 12" Wide & 12" deep Chamber for maintenance purpose. Covered with Metal Cover. • Supply of Earth Terminal copper plate with brass nuts, bolts & PVC insulator (Spacers) used for back spacing installed on walls for ECP & Pits • <u>Electrical Cable</u>. All electrical cables required as per survey should be included in the scope.	
13	<u>Diesel Generator for Data Center – 60 KVA – Diesel with ATS</u> • Recommended brands : Caterpillar / Perkins/ Stamford, Cummins • The bidder shall supply, deliver, install, test and commission one (1) brand-new 60 kVA prime-rated, silent-canopy diesel generating set with automatic transfer switch (ATS), complete and ready for operation. • Recommended brands of Generator be • Scope includes: • Generating set (engine + alternator on common base frame) with acoustic weatherproof canopy • Digital auto-start / mains-failure controller and ATS panel • Base fuel tank, first fill of lube oil and coolant, starting battery and charger • Power and control cabling between generator, ATS and main LV panel (up to 25 m) • Earthing (two independent earth pits), exhaust silencer and flue extension	01

	• Transportation to site, unloading, placement on civil plinth, installation and commissioning • On-site load test, operator training and as-built documentation • Generator Cement PAD / Concrete Base	
14	<u>Civil Work.</u> Civil work involves complete server room renovation including (but not limited) to following: - • Server room fire rated paint • Cable Tray work • Datacenter, Power room, MMR. • Fire rated door for Datacenter, Power room. • Laying of power cables from main Power DB of room and Genset to room • Any other work required to complete the Data Center	
15	<u>Structured cabling for Datacenter:</u> Cat6A & OM4 Optical fiber distribution as per requirement from Server Racks to Data Switch Rack and Optical Fiber Rack 04 x 24 Port Patch Panels for Cat-VI A 01 x 48 port Patch Panel for Cat-VI A Cabling Cabling within Racks – approx. 02 rolls	
16	Comfort Cooling Units for NOC & MMR Area • 03 x comfort cooling units 24,000 BTU/hr for MMR – Gree / Samsung • Sequence controller to run Acs sequentially	03
17	Tray for Power, Cooling & Data (Inside Room Only)	As per site requirement 300 RFT

	- Galvanized Insulated perforated cable trays for Data, power and cooling system separately including bends, Tee, cross, joints etc. - Trays should be of Different colors for Power, Data, and Cooling units.	
18	Anti-Static ESD Vinyl Flooring	
	Supply of Vinyl flor SD (Static Dissipative) (UK) vinyl flooring, thickness 2mm with F.Ball (UK) Red Bag self level smoothing compound @3mm thickness with Installation of vinyl flooring with wastage and complete in all respects.	400 Sq Ft
19	MS Fire Rated Single leaf door. Made of 16swg (Fire retardant up to 1 Hour). Size 3.5' x 7' ft. Door with frame, door closer, Hinges, motise lock set.	02
20	Access Control System Finger Print + Card Reader + Pin Code Reader - Access Control TCP/IP Based System with complete all respect	01
21	Surveillance System for Data Center only	
	Plug N Play NVR 8 Port PoE – integratable to EMS System and mobile monitoring	1
	Dome/Bullet cameras 2MP.	05
	4TB Hard disk	1
	Cabling testing & commissioning	1 – Job
22	SERVICES, INSTALLATION & COMMISSIONING	
	Services, installation commissioning of above work	1 – Job
23	<u>Establishing NOC Room</u> - Providing 3 x 55" LED Screens for monitoring – TCL/EcoStar etc - Required power points for NOC Room Approx 10 - Required network points for NOC Room (approx. 10) - Provision of Rack level monitoring in NOC	01

	• 4K Supported HDMI Cables for TV to PC	
24	<u>Ceiling for Data Center and NOC Room</u> • Recommended false ceiling for Data Center	360 Sq ft
25	<u>Warranty</u> Equipment Warranty = 02 years Services and support = 03 years	
	<u>Design</u> Vender will design and submit following with Technical bid • A complete system architecture. • An equipment compatibility matrix. • A rack and cooling layout. • A power single-line diagram. • UPS and battery-sizing calculations. • Cooling and airflow calculations. • A monitoring and alarm architecture. • Layout of power cabling for Genset and Wapda • Cameras layout and design • A responsibility matrix for all supplied equipment. • Confirmation of unified warranty and support responsibilities. • Confirmation that the proposed solution can integrate with Air University's existing network and monitoring infrastructure. •	

	<u>Optional Quote</u> <u>AVR.(Automatic Voltage Regulator)</u> 1 x AVR of minimum following specifications: - • Brand: Delta (Turkey), DataTurk (Turkey) or Equivalent or better, Capacity: 60KVA • Servo Control/ Microprocessor Controlled, Output Power Factor 0.8 or more • Input voltage range: (285VAC to 440VAC), Output voltage: 380V±2-3%, Output Voltage can be selectable 380VAC/400VAC/415VAC according to customer requirements. Independent phase regulation, Manual bypass, Speed minimum 90V/Sec, Efficiency minimum 96%, Digital Display • Real-time display of output voltage, output current, Protections: Over voltage/Under voltage & Overload/short , Built in SPD & Remote Monitoring through RS-485 • Installation of AVR behind the Data Center	01

LOT # 17 (Interactive LED Screens 86”) Air University Campuses					
Islamabad Campus 60		Multan Campus 10		Kamra Campus 20	
Description / Specifications				Qty	Price
- Resolution: 4K (3840 x 2160) - Built-In Camera: 48 MP, AI-Based 4K Voice Tracking Camera - Built-in 08 Microphones Array or better with Clear sound pickup at 6-8 Meter. Echo cancellation and Noise reduction - Build-In Speaker: Minimum 02 x 15 Watts or better - Glass: Anti-Glare / Anti-Reflective /Anti blue Glass with Mohs 7 (4mm glass thickness) - Intelligent Whiteboard for Smooth Writing with minimum response time and maximum accuracy will be preferred. - Built in Wi-Fi, 2.4 / 5.0 Ghz Supported – Wi-Fi 6 - Finger Multi Touch options 02 x Magnetic pen / stylus pen - Lifetime Free White Board Software for windows. - Palm Rejection option should be available. - Android 14 or better (OTA-Auto Firmware Update) - Android Spec: Android 14, 08 GB, 128GB - AI handwriting tracking – Handwriting to Digital form - Multitouch gesture e.g. Select, move, zoom and erase - Touch Points: 20 Points (Windows)- 20(Points Android) - Facility of Hotspot - Whiteboard saving mode (QR code scan/Email/Local storage/USB) - Remote Control of LED - Refresh rate: 60Hz – Contrast ratio: 4000 :1 - One tap switchover from Android to Windows - Wired and Wireless Projection: up to 4K 50000 Hrs. Life for LED Panel - HDMI Wired Projection + USB Type-C wired projection x 1, - Wireless projection of multiple users + through mobile App - Free for lifetime Computer Software for Screen Sharing		- Supported windows, Android & Mac OS. - Mention Int. Certification if available for Brand. Windows OPS Spec: - Core i5/i7, 12th Generation or better, 16GB RAM, 512GB SSD Ports: 02 x HDMI In + 01 x HDMI Out, 02 x USB Ports (Type-A 2.0,3.0,3.1) 01 x USB Type-C, (should be available on Front and Rear Panel both). 01 x USB Type-B), 01 x Touch USB. - LAN In x 1, LAN Out x 1, Bluetooth 5.1 (preferred) - OPS Port x 1, Line-in, Line-out, Earphone, RS232 x 1, - SPDIF out (optional) - Remote management of multiple devices through software - Integration of additional teacher camera Wall Mount Bracket with Installation - Wall mount kit with complete installation and configuration, Ducting & Cabling at Air University ISLAMABAD Campus. Surge Protector: Install Surge protector on input of the Screens (Voltage Controller with Back Box) Warranty: 02 Years on site at Air University ISLAMABAD Campus With lifetime software upgrades and updates. Delivery Time: 06-08 weeks’ maximum Installation : Power Sockets are available on front wall of classroom and labs. Installation should be included with power cabling, ducting required with HDMI Cable laying from Screen to Podium. With all required accessories.		05	

DMS(must be same brand) with ability to manage and control all devices. Digital Signage Remotely install apps, Remote Management + Alert Announcement + Digital Signage, Live Streaming on panels through device management system,		
B) Wireless headgear / collar Mic For Teacher – Integrated with LED Screen OPS for clear voice of teachers particularly on zoom / Teams Free Power Professional UHF Mic Model AK-460II . or equivalent With Mono to Stereo convertor	10	
c) Branded HDMI Cable 10 meter Fiber Optics, 4K, Best Quality.	60	
d) Wireless Keyboard, Mouse, Mouse Pad, Best Quality . Range up to 08 Meter .	05	
Delivery & Installation at Air University Campuses as mentioned above		
Terms & Conditions - Only professional Firms have more than 05 Years of experience in the field of selling Interactive Screens with strong technical trained team on their own payroll and having their own service center in Islamabad / Rawalpindi only can quote. - Supplier should have Purchase orders of more than 100 similar Interactive LED Screens on their portfolio. - Supplier should have supply and services relationship with at least 10 different organizations during last 03 years for the supply and installation of interactive LED screens. - Supplier will provide Demo Unit at Air University Islamabad Campus for POC. Screen will be finalized purely based on the Demonstration of equipment and technical features set. System ruggedness, equipment performance, features set which are more supporting to teaching methodology, customer's feedback on the product and best suitable for Air University will be selected. - Installation of panels with configuration of software at Air University ISLAMABAD Campus. - AU reserve the right to increase or decrease the quantities.		

LOT # 18 (Interactive LED Screens 86”) FRPMC Karachi

Description / Specifications		Qty	Price
- Resolution: 4K (3840 x 2160) - Built-In Camera: 48 MP, AI-Based 4K Voice Tracking Camera - Built-in 08 Microphones Array or better with Clear sound pickup at 6-8 Meter. Echo cancellation and Noise reduction - Build-In Speaker: Minimum 02 x 15 Watts or better - Glass: Anti-Glare / Anti-Reflective /Anti blue Glass with Mohs 7 (4mm glass thickness) - Intelligent Whiteboard for Smooth Writing with minimum response time and maximum accuracy will be preferred. - Built in Wi-Fi, 2.4 / 5.0 Ghz Supported – Wi-Fi 6 - Finger Multi Touch options 02 x Magnetic pen / stylus pen - Lifetime Free White Board Software for windows. - Palm Rejection option should be available. - Android 14 or better (OTA-Auto Firmware Update) - Android Spec: Android 14, 08 GB, 128GB - AI handwriting tracking – Handwriting to Digital form - Multitouch gesture e.g. Select, move, zoom and erase - Touch Points: 20 Points (Windows)- 20(Points Android) - Facility of Hotspot - Whiteboard saving mode (QR code scan/Email/Local storage/USB) - Remote Control of LED - Refresh rate: 60Hz – Contrast ratio: 4000 :1 - One tap switchover from Android to Windows - Wired and Wireless Projection: up to 4K 50000 Hrs. Life for LED Panel - HDMI Wired Projection + USB Type-C wired projection x 1, - Wireless projection of multiple users + through mobile App - Free for lifetime Computer Software for Screen Sharing	- Supported windows, Android & Mac OS. - Mention Int. Certification if available for Brand. <u>Windows OPS Spec:</u> - Core i5/i7, 12th Generation or better, 16GB RAM, 512GB SSD <u>Ports:</u> 02 x HDMI In + 01 x HDMI Out, 02 x USB Ports (Type-A 2.0,3.0,3.1) 01 x USB Type-C, (should be available on Front and Rear Panel both). 01 x USB Type-B), 01 x Touch USB. - LAN In x 1, LAN Out x 1, Bluetooth 5.1 (preferred) - OPS Port x 1, Line-in, Line-out, Earphone, RS232 x 1, - SPDIF out (optional) - Remote management of multiple devices through software - Integration of additional teacher camera <u>Wall Mount Bracket with Installation</u> - Wall mount kit with complete installation and configuration, Ducting & Cabling at Air University ISLAMABAD Campus. <u>Surge Protector:</u> Install Surge protector on input of the Screens (Voltage Controller with Back Box) <u>Warranty:</u> 02 Years on site at Air University ISLAMABAD Campus With lifetime software upgrades and updates. <u>Delivery Time:</u> 06-08 weeks' maximum <u>Installation : Power Sockets are available on front wall of classroom and labs.</u> Installation should be included with power cabling, ducting required with HDMI Cable laying from Screen to Podium. With all required accessories.	20	
DMS(must be same brand) with ability to manage and control all devices. Digital Signage Remotely install apps, Remote Management + Alert Announcement + Digital Signage, Live Streaming on panels through device management system,			

B) Wireless headgear / collar Mic For Teacher – Integrated with LED Screen OPS for clear voice of teachers particularly on zoom / Teams Free Power Professional UHF Mic Model AK-460II . or equivalent With Mono to Stereo convertor	06	
c) Branded HDMI Cable 10 meter Fiber Optics, 4K, Best Quality.	20	
d) Wireless Keyboard, Mouse, Mouse Pad, Best Quality . Range up to 08 Meter .	05	
Delivery & Installation at Air University FRPMC Karachi		
Terms & Conditions - Only professional Firms have more than 05 Years of experience in the field of selling Interactive Screens with strong technical trained team on their own payroll and having their own service center in Karachi only can quote. - Supplier should have Purchase orders of more than 100 similar Interactive LED Screens on their portfolio. - Supplier should have supply and services relationship with at least 10 different organizations during last 03 years for the supply and installation of interactive LED screens. - Supplier will provide Demo Unit at Air University Islamabad Campus for POC. Screen will be finalized purely based on the Demonstration of equipment and technical features set. System ruggedness, equipment performance, features set which are more supporting to teaching methodology, customer's feedback on the product and best suitable for Air University will be selected. - Installation of panels with configuration of software at Air University ISLAMABAD Campus. - AU reserve the right to increase or decrease the quantities.		

Updated 10 Oct 2026 @ 3:20 PM



LOT # 18 SAN Storage			
#	Item Description	Minimum Technical Specifications	Qty.
	Scope of Work Air University desires to purchase Install, Configure, Test and Commission a Enterprise SAN Storage for e-Filing System of Enterprise SAN Storage for Air University e-Filing System. Detailed BOQ is as follows:-		
1	Enterprise Hybrid SAN Storage Array	Enterprise-grade rack-mount SAN with dual active-active controllers; support for NVMe SSD and enterprise SAS HDD storage tiers; minimum 50 TB usable capacity after RAID protection and hot-spare allocation; RAID 5, RAID 6 and RAID 10 support; redundant power supplies and fans; non-disruptive failover; online expansion; centralized management; 3-year OEM warranty and support.	01
2	NVMe SSD Storage Tier	Enterprise-grade, hot-pluggable NVMe SSDs supported by the proposed SAN; minimum 7.68 TB usable NVMe capacity after applicable RAID protection; suitable for high-performance e-Filing application data, databases, indexes, metadata and frequently accessed files; support for monitoring drive health and wear.	01 Set
3	Enterprise SAS HDD Storage Tier	Enterprise-grade hot-pluggable SAS HDDs, preferably 12 Gbps or better, with drive capacity and quantity sufficient to meet the required overall usable storage capacity; RAID 6 support; online replacement and expansion; suitable for e-Filing documents and other capacity-intensive data.	01 Set
4	RAID Protection and Hot-Spare Drives	RAID 5, RAID 6 and RAID 10 support; dual-parity RAID 6 configuration for critical data volumes; automatic rebuild; dedicated or global hot-spare drives in accordance with OEM recommendations; drive failure alerts.	01 Set
5	SAN Fibre Channel Connectivity	Minimum four 10 Gbps Fibre Channel host ports across the array, with at least two ports per controller; support for redundant Fibre Channel fabrics and multipathing; all required FC transceivers included.	01 Set
6	Fibre Channel SAN Switches	Two enterprise-grade 10 Gbps FC switches, each with at least 08 physical ports and the required ports activated; redundant fabric configuration; management interface; required licenses, power supplies, and accessories.	02
7	Fibre Channel Host Bus Adapters (HBAs)	OEM-compatible 10 Gbps FC HBA cards for each e-Filing application, database, or virtualization server requiring SAN connectivity; dual-path connectivity through separate FC switches; include required drivers, firmware, and accessories.	As required

8	FC Transceivers and Optical Cables	OEM-compatible 10 Gbps FC transceivers and multimode OM4 LC-LC fiber-optic cables for all required SAN-to-switch and switch-to-server connections; provide sufficient quantities for redundant paths and spare connections.	01 Lot
9	SAN Management Software	SAN administration and monitoring software; centralized management of storage pools, volumes, RAID groups, performance, capacity, alerts, and hardware health; include all necessary licenses.	01 Lot
10	Data Protection Features	Support for point-in-time snapshots, volume cloning, thin provisioning, and replication capability where supported by the proposed system; include required licenses for the offered features.	01 Lot
11	Rack Mounting and Accessories	Rack rails, cable management, power cords, labeling, mounting hardware, and all accessories required for installation in the existing Data Center rack.	01 Lot
12	Installation and Commissioning	Supply, installation, configuration, RAID and storage-pool creation, LUN/volume provisioning, FC zoning, server connectivity, multipathing configuration, performance verification, and commissioning at Air University Islamabad	01 Lot
13	Documentation and Training	As-built connectivity diagrams, storage configuration details, capacity report, licenses, manuals, configuration backup, and training for Air University technical staff.	01 Lot
14	OEM Warranty and Technical Support	Minimum three-year OEM-backed warranty and technical support for the SAN array, drives, controllers, FC switches, and associated supplied equipment.	01 Lot

Past Experience / Contracts

Contracts over <i>[insert amount]</i> during the last three years:				
Procuring Agency	Value	Year	Goods/Services Supplied	Country of Destination



Current Contract Commitments / Works in Progress

Bidders and each member to a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Current Contract Commitments					
No.	Name of Contract	Employer's Contact Address, Tel, Fax	Value of Outstanding Work [Current Eq. PKR]	Estimated Completion Date	Average Monthly Invoicing Over Last Six Months [Eq. PKR/month]
1					
2					
3					
4					
5					

Financial Situation and Performance

[The following table shall be filled in for the Applicant and for each member of a Joint Venture]

Applicant's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member Name: *[insert full name]*

IFP No. and title: *[insert IFP number and title]*

Page *[insert page number]* of *[insert total number]* pages

1. Financial data

Type of Financial information in (currency)	Historic information for previous <i>[insert number]</i> years, <i>[insert in words]</i> (amount in currency, currency, exchange rate*, PKR equivalent)				
	Year 1	Year 2	Year 3		
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

* Refer ITA 14 for the exchange rate

3. Financial documents

The Applicant and in case of JV, members of JV shall provide copies of financial statements for *[number]* years pursuant Section III, Qualifications Criteria and Requirements. The financial statements shall:

- (a) reflect the financial situation of the Applicant or in case of JV member, and not an affiliated entity (such as parent company or group member).
 - (b) be independently audited or certified in accordance with local legislation.
 - (c) be complete, including all notes to the financial statements.
 - (d) correspond to accounting periods already completed and audited.
- ☐ Attached are copies of financial statements¹ for the *[number]* years required above; and complying with the requirements.

¹ If the most recent set of financial statements is for a period earlier than 12 months from the date of Application, the reason for this should be justified.

Average Annual Turnover (Annual Sales Value)

[The following table shall be filled in for the Applicant and for each member of a Joint Venture]

Applicant's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member Name: *[insert full name]*

IFP No. and title: *[insert IFP number and title]*

Page *[insert page number]* of *[insert total number]* pages

Annual Turnover Data			
Year	Amount Currency	Exchange rate* (If applicable)	PKR equivalent
<i>[indicate calendar year]</i>	<i>[insert amount and indicate currency]</i>		
		Average Annual Turnover **	

* Refer ITA for date and source of exchange rate.

** Total PKR equivalent for all years divided by the total number of years. See Section III, Qualification Criteria and Requirements, ITA.