

UNIVERSITY OF MALAKAND

Office of the Treasurer

NOTICE INVITING TENDERS (NIT)

NIT No.: Finance / 2026/01

The University of Malakand invites sealed bids, on Single Stage – Two Envelope basis (Rule 6(2)(b), KPPRA Rules, 2014), from eligible manufacturers, authorised distributors, importers, book sellers, publishers and IT/lab equipment suppliers for supply of Examination Stationery, Allied Items, Library Books and Project Equipment for Financial Year 2026–27, divided into nine (9) Lots:

Lot	Description
1	High-Security Examination Answer/Continuation Books
2	Paper & Printing Stationery
3	Degree Folders
4	Packaging & Dispatch Supplies
5	OEM Toners
6	RISO Duplicator Consumables
7	Library Books – Cyber Security, Data Science, Multimedia & Gaming, AI, Bioinformatics
8	GPU-Enabled Mobile Workstations (Laptop Computers)
9	SDR Equipment (NI USRP B210 or Equivalent) & RF Accessories – Project Equipment

Eligibility: Valid FBR/NTN registration & Active Taxpayer status; KPRA registration (Lots 1–6) / KPPRA e-Pads registration (Lot 7); OEM/authorised-dealer certificate (Lots 5, 6, 8 & 9); non-blacklisting affidavit; minimum 5 years' relevant supply experience (Lot 7); 2% Bid Security of the relevant Lot value; physical samples/compliance sheet with the technical bid, as applicable. Full eligibility, technical specifications and evaluation criteria are given in the Bidding Document.

Details

Bid Security (CDR)

Bid Submission Deadline

Technical Bid Opening Date & Time

Venue

Information

2% of Bid Cost

14/09/2026-10:30 AM

14/09/2026-11:00 AM (Same day)

Committee Room, University of Malakand

- Bid solicitation documents (BSD) can be downloaded from EPADS <http://kp.eprocure.gov.pk> after publication of this advertisement in the websites of University and KPPRA till last date for submission of Bids. BSD Fee Rs.2000/- per lot. (Non-Refundable)
- Clarification/queries (if any) may be obtained through EPADS during working days within office hours. No Query shall be entertained after 5th September 2026.
- Technical Proposal will be opened at Committee Room, University of Malakand, in the presence of bidders/representatives who wish to attend.
- Financial Proposal Opening (of technically qualified bidders): to be notified separately after technical evaluation (Rule 45).

General

- Bidders may quote for one, several, or all Lots; each Lot shall be evaluated and awarded independently.
- The University reserves the right to reject any or all bids at any stage prior to acceptance, under Rule 47 of the KPPRA Rules, 2014, without assigning any reason, and without liability to the affected bidder(s).

Contact: Treasurer Office, University of Malakand, Chakdara, Dir (Lower), Khyber Pakhtunkhwa | Tel: 0945-920516

TREASURER
University of Malakand

UNIVERSITY OF MALAKAND

Office of the Treasurer

BIDDING DOCUMENT

Procurement of Examination Stationery, Allied Items, Library Books & Project Equipment

Financial Year 2026–27

Governing Regulatory Framework

Khyber Pakhtunkhwa Public Procurement of Goods, Works and Services Rules, 2014

(Notified 3 February 2014, Finance Department, Government of Khyber Pakhtunkhwa)

Total Estimated Procurement Value (9 Lots)

PKR 20,053,050/-

(Rupees Twenty Million Fifty-Three Thousand Fifty Only – Lot 7–9 values are indicative, subject to Library Section/PI budget confirmation)

Bidding Procedure: Single Stage – Two Envelope (Rule 6(2)(b), KPPRA Rules, 2014)

1. Introduction & Scope

This bidding document governs the procurement of (i) examination stationery and allied items, (ii) library books for various academic departments, and (iii) specialised project equipment, required by the University of Malakand for Financial Year 2026–27, grouped into nine specialised Lots (Section 3). It is issued as a single consolidated tender under the Khyber Pakhtunkhwa Public Procurement of Goods, Works and Services Rules, 2014 (“KPPRA Rules, 2014”), Chapter II (Procurement of Goods), with the objective of securing best value for money — genuine competition among direct manufacturers, publishers, authorised dealers and suppliers, unambiguous and measurable specifications, and a transparent, directly scorable evaluation process.

2. Legal & Regulatory Basis

2.1 Applicable Rules

This is a procurement of Goods and is governed by Chapter I (General Provisions), Chapter II (Procurement of Goods, Rules 6–13) and Chapter V (Miscellaneous Provisions) of the KPPRA Rules, 2014.

2.2 Procurement Method – Rule 6(2)(b)

A Single Stage – Two Envelope bidding procedure shall be used, as this procurement is to be evaluated on technical and financial grounds, with price considered only after technical evaluation. The bid package shall contain two separately sealed envelopes marked “Technical Proposal” and “Financial Proposal.” Technical proposals shall be opened and evaluated first. Financial proposals of technically non-responsive bidders shall be returned unopened; financial proposals of technically qualified bidders shall be opened publicly at a notified date and time.

2.3 Advertisement & Response Time – Rules 11(2) & 34(1)

- The Notice Inviting Tenders (NIT) shall be published in at least one national English-language and one Urdu-language newspaper with nationwide circulation, in addition to posting on the University’s website and the KPPRA website.
- The bid submission deadline shall not be less than fifteen (15) calendar days from the date of first publication of the NIT.

2.4 Single Consolidated Procurement – Rule 31

This procurement is issued as one consolidated tender proceeding: one NIT, one set of bidding documents, one bid-submission deadline, and one public bid-opening date for the Technical Proposals of all six Lots. The division into Lots is a packaging technique to attract direct, specialised suppliers per item category (Section 3).

3. Lot-wise Categorisation & Estimated Value

The fourteen stationery items are grouped into six Lots by natural product/industry category; library books form Lot 7; and specialised project equipment forms Lots 8 and 9 — so that direct manufacturers, publishers, authorised dealers and specialised suppliers in each trade can bid without needing to aggregate unrelated goods through an intermediary.

Lot #	Description	Included Items & Quantities	Target Supplier Category	Estimated Value (PKR)
Lot 1	High-Security Examination Books	Answer Books 24-Page: 500,000 copies Continuation Books 12-Page: 350,000 copies	Security Printers / Industrial Printing Presses	9,125,000
Lot 2	Paper & Printing Stationery	Computer Paper A4 80gsm: 800 reams File Covers 300gsm: 7,000 nos for Examination and 2000(1000 Legal and 1000 A-4) for Finance, Exam Forms (Legal 68gsm: 60,000 nos Rechecking Forms Legal 68gsm: 25,000 nos	Paper Mills / Authorised Importers / Offset Printers	1,595,000
Lot 3	Degree Folders	Degree Folders (Rexine/Velvet): 8,000 nos	Specialised Bookbinders / Leatherette Manufacturers	1,752,000
Lot 4	Packaging & Dispatch Supplies	Question Paper Envelopes 14"x18": 15,000 nos A4 Printing Stickers: 15,000 sheets Plastic Bori/Nug 2.5'x3.5': 1,500 nos Soti Doori (10 mm bundles): 700 bundles	Packaging Manufacturers / Textile Wholesalers	1,029,000

Lot #	Description	Included Items & Quantities	Target Supplier Category	Estimated Value (PKR)
Lot 5	OEM Toner Supplies	26A Toner Cartridges: 25+2 =27units MP-2014=05, 131A Four Colour=1,76A=03, 85A=3, 26A=2, 216A colour=1 and 80A =1 Company HP or Equivalent	HP Authorised Tier-1 Partners / OEM Distributors	1075,000
Lot 6	RISO Duplicator Consumables	RISO SF5130 Ink Tubes: 14 tubes RISO SF5130 Master Rolls: 14 rolls	RISO Authorised Sole National Distributorship	372,050
Lot 7	Library Books – Various Departments	Academic & research books for Cyber Security, Data Science, Multimedia & Gaming, Artificial Intelligence and Bioinformatics; titles supplied on a call-off basis against departmental Purchase Orders during the contract validity period	Book Sellers / Publishers / Authorised Distributors / Importers	4,000,000 (indicative)
Lot 8	GPU-Enabled Mobile Workstations	GPU-Enabled Mobile Workstations (Laptop Computers): 02 units	Authorised OEM Dealers / IT Equipment Suppliers (Dell / HP / Lenovo or equivalent)	1,800,000 (indicative)
Lot 9	SDR Equipment & RF Accessories (Project)	NI USRP B210 Software Defined Radio (SDR) or equivalent: 02 units RF Accessories & Experimental Components: 1 Lot (antennas, RF cables, attenuators, adapters, terminators, shielding/Faraday enclosure)	Authorised Dealers/Distributors of NI/Ettus or Equivalent SDR & Scientific/Laboratory Equipment Suppliers	1,300,000 (indicative)

Tender Documents for Books for New Departments

1.LIST OF REFERENCE BOOKS REQUIRED FOR BS ARTIFICIAL INTELLIGENCE

S.NO	BOOK NAME	QTY	U/Rate	Total
1	(Course :Programming for Artificial Intelligence) 1. Russell, S. and Norvig, P. “Artificial Intelligence. A Modern Approach”, Prentice Hall, Inc.,Latest edition. 2. Artificial Intelligence with Python: Your complete guide to building intelligent apps using Python 3.x,Artasanchez, A. and Joshi, P., Packt Publishing, Latest Edition. 3. Introduction to Logic Programming (Synthesis Lectures on Artificial Intelligence and MachineLearning), Genesereth , M. et al., Morgan and Claypool, Latest dition. 4. AI for Games, Millington, I. , CRC Press, Latest Edition.	4		
2	(Course: Machine Learning) 1. An Applied Mathematics Introduction, Wilmott, P., Panda Ohana Publishing,Latest Edition. 2. Hands-On Machine Learning with Scikit-Learn and TensorFlow: Concepts, Tools, and Techniques to Build intelligent Systems, Geron , A., O'Reilly Media, Latest Edition. 3. Introduction to Machine Learning (Adaptive Computation and Machine Learning series), Alpaydin.,E.,The MIT Press, Latest Edition. 4. Pattern Recognition and Machine Learning, Bishop, C., Springer-Verlag, Latest Edition. 5. Machine Learning, Tom, M ., McGraw Hill, Latest Edition.	5		
3	(Course:Artificial neural networks and deep learning) 1. Principles of Artificial Neural Networks: Basic Designs to Deep Learning, Graupe , D., World Scientific Publishing Company , Latest Edition. 2. Neural Network Design, Hagan, T. et al., Martin Hagan, Latest Edition. 3. Fundamentals of Artificial Neural Networks, Hassoun , M., Bradford Book , Latest Edition. 4. An Introduction to Neural Networks, Anderson , J., Bradford Book , Latest Edition.	4		
4	(Course : Knowledge Representation and Reasoning) 1 . Knowledge representation and reasoning, Blokdyk, G., 5STARCOoks, Latest Edition. 2. Knowledge Representation, Reasoning, and the Design of Intelligent Agents: The Answer-Set Programming Approach, Gelfond , M., Kah l, Y., Cambridge University Press, Latest Edition. 3. Knowledge Representation and Reasoning, Brachman , R., Levesque, H ., The Morgan Kaufmann Seriesin Artificial Intelligence, Latest Edition	3		

5	(Course :Introduction to Computer Vision) 1. Computer Vision: Principles, Algorithms, Applications, Learning, Davies, E. R., Academic Press, Latest Edition. 2. Programming Computer Vision with Python: Tools And Algorithms For Analyzing Images ,Jan Erik Solem, O'Reilly, Latest Edition. 3. Computer Vision: A Modern Approach, David Forsyth, Jean Ponce, Prentice Hall, Latest Edition. 4. Digital Image Processing, by Rafael Gonzalez and Richard Woods.	4		
6	(Course :Natural Language Processing) 1. Introduction to Natural Language Processing, Einstein , J., MIT Press, Latest Edition. 2. Natural Language Processing in Action: Understanding, analyzing, and generating text with Python,Lane, H., Hapke, H., Howard, C., Manning Publications, Latest Edition. 3. Human-Centered Artificial Intelligence: Research and Applications.	3		
7	(Course :Deep Learning) 1. Neural Network Design, 2nd Edition, Martin T. Hagan, Howard, B. Demuth, Mark Hudson Beale and Orlando De Jesus, Publisher: Martin Hagan; 2 edition (September 1, 2014), ISBN-10: 0971732116 2. An Introduction to Neural Networks, James A Anderson, Publisher: A Bradford Book(March 16, 1995), ISBN-10: 0262011441 3. Fundamentals of Artificial Neural Networks, Mohammad Hassoun, Publisher: A Bradford Book (January 1, 2003), ISBN-10: 0262514672 4. Deep Learning by Ian Goodfellow, Yoshua Bengio, Aaron Courville (http://www.deeplearningbook.org/) Deep learning with python by Francoise Chollet, ISBN-10: 9781617294433, 2017	4		
8	(Course :Generative AI) 1. Applied Generative AI for Beginners- Practical Knowledge on Diffusion Models,ChatGPT, and Other LLMs by Akshay Kulkarni (2023) By Adarsha Shivananda ,Anoosh Kulkarni , Dilip Gudivada 2. Epstein, Ziv, et al. "Art and the science of generative AI." Science 380.6650 (2023) 3. Du, Hongyang, et al. "The age of generative AI and AI-generated everything." IEEE Network (2024). 4. Prasad Agrawal, Kalyan. "Towards adoption of generative AI in organizational settings." Journal of Computer Information Systems 64.5 (2024): 636-651. 5. Weisz, Justin D., et al. "Design Principles for Generative AI Applications." Proceedings of the CHI Conference on Human Factors in Computing Systems. 2024.	5		
10	(Course :Swarm Intelligence) 1. Fundamentals of computational swarm intelligence by Andries P. Engelbrecht,Wiley	1		
11	(Course :Robotics) 1. Introduction to Robotics: Mechanics and Control by John J. Craig 2. Robotics: Modelling, Planning and Control by Bruno Siciliano, Lorenzo Sciacivco, Luigi Villani, Giuseppe Oriolo. 3. Robot Modeling and Control" by Mark W. Spong, Seth Hutchinson, M. Vidyasagar 4. Programming Robots with ROS by Morgan Quigley, Brian Gerkey, and William D. Smart	4		
12	(Course :Speech Processing) 1. Rabiner, L. R., and Juang, B.-H. Fundamentals of Speech Recognition, Prentice-Hall, New Jersey. Latest Ed. 2. Mitra, S. K. Digital Signal Processing: A Computer-Based Approach, McGraw-Hill. Latest Ed.	2		
13	(Course :Reinforcement Learning) 1. R.S.Sutton and A.G.Barto, Reinforcement Learning: An Introduction. (Latest editions) 2. D.P.Bertsekas, Dynamic Programming and Optimal Control. (Latest editions) 3. Csaba Szepesvari, Algorithms of Reinforcement Learning. (Latest editions)	3		
14	(Course :Fuzzy System) 1. Fuzzy Logic with Engineering Applications by Timothy J. Ross 2. Fuzzy Sets and Fuzzy Logic: Theory and Applications" by George J. Klir and Bo Yuan 3. Fuzzy Logic and Control: Software and Hardware Applications by Mohammad Jamshidi. 4. MATLAB/Simulink for Fuzzy Logic by Suliman Hasan Al-Hawari	4		
15	(Course :Evolutionary Computing)	4		

	1. Introduction to Evolutionary Computing by A.E. Eiben and J.E. Smith 2. Genetic Algorithms in Search, Optimization, and Machine Learning by David E. Goldberg 3. An Introduction to Genetic Algorithms by Melanie Mitchell 4. Evolutionary Computation: A Unified Approach by Kenneth A. De Jong			
15	(Course :Statistical methods for AI) 1. Probability and Statistics for Computer Scientists, Latest Edition, Michael Baron. 2. Probability for Computer Scientists, Latest Edition, David Forsyth 3. Discovering Statistics using SPSS for Windows, Andy Field, Latest edition.	3		
16	(Course :Advanced topics in AI) 1. Advances in artificial and human intelligence in the modern era. IGI Global, 2023. By Rajest et al. 2. The ethics of artificial intelligence: Principles, challenges, and opportunities (2023) by Luciano Floridi.	2		
17	(Course : Agent based Modeling) 1. Advances in artificial and human intelligence in the modern era. IGI Global, 2023. By Rajest et al. 2. The ethics of artificial intelligence: Principles, challenges, and opportunities (2023) by Luciano Floridi.	2		
18	(Course :Knowledge Based Systems) 1. Russell, S. and Norvig, P. Artificial Intelligence: A Modern Approach. Third edition. 2. Gonzalez, A. J. and Dankel, D. D. The Engineering of Knowledge-based Systems 3. Artificial Intelligence – Elaine Rich, Kevin Knight. 4. Durkin, J., Expert Systems: Design and Development	4		
19	(Course : AI for Advanced Software Engineering) 1. Artificial Intelligence: A Guide for Thinking Humans by Melanie Mitchell Link: https://shorturl.at/3AtJP 2) Software Engineering at Google by Titus Winters Link: https://abseil.io/resources/swe-book 3) Generative AI for Beginners Made Easy: Master Artificial Intelligence and Machine Learning Fundamentals, Learn Creative AI, and Enhance Your Skills Link: https://shorturl.at/5WWw93) Trustworthy AI by Beena Ammanath Link: https://shorturl.at/kzipL	3		
20	(Course :Graph Neural Networks) 1. Artificial Intelligence: A Modern Approach by Stuart Russell and Peter Norvig 2. Albahri, A. S., et al. "A systematic review of trustworthy artificial intelligence applications in natural disasters." Computers and Electrical Engineering 118 (2024): 109409. 3. Trustworthy AI: A Guide to Developing and Deploying Responsible AI by Anant Sahai and Michael Jordan 4. Li, Yugang, et al. "Developing trustworthy artificial intelligence: insights from research on interpersonal, human-automation, and human-AI trust." Frontiers in Psychology 15(2024): 1382693. 5. Fehr, Jana, et al. "A trustworthy AI reality-check: the lack of transparency of artificial intelligence products in healthcare." Frontiers in Digital Health 6 (2024): 1267290	5		
21	(Course :Ethical Use of AI in Education) 1. Farina, Mirko, et al. "AI and society: a virtue ethics approach." AI & SOCIETY 39.3(2024): 1127-1140. 2. Li, Zhi. "Ethical frontiers in artificial intelligence: navigating the complexities of bias,privacy, and accountability." International Journal of Engineering and Management Research 14.3 (2024): 109-116. 3. Garwi, Jabulani. "Harmonizing Ethics With Artificial Intelligence: A Compassionate Path to Technological Advancement." Generative AI and Implications for Ethics, Security, and Data Management. IGI Global, 2024. 208-230.	3		
22	(Course :Trustworthy Artificial Intelligence) 1. Artificial Intelligence: A Modern Approach by Stuart Russell and Peter Norvig 2. Albahri, A. S., et al. "A systematic review of trustworthy artificial intelligence applications in natural disasters." Computers and Electrical Engineering 118 (2024): 109409. 3. Trustworthy AI: A Guide to Developing and Deploying Responsible AI by Anant Sahai and Michael Jordan 4. Li, Yugang, et al. "Developing trustworthy artificial intelligence: insights from	5		

	research on interpersonal, human-automation, and human-AI trust." <i>Frontiers in Psychology</i> 15 (2024): 1382693. 5. Fehr, Jana, et al. "A trustworthy AI reality-check: the lack of transparency of artificial intelligence products in healthcare." <i>Frontiers in Digital Health</i> 6 (2024): 1267290.			
23	(Course :Autonomous Vehicles) 1. Llorca, David Fernández, et al. "Testing autonomous vehicles and AI: perspectives and challenges from cybersecurity, transparency, robustness and fairness." <i>arXiv preprint arXiv:2403.14641</i> (2024).	1		
24	(Course :Evolutionary Super Intelligent Systems for Cyber Security) 1. Artificial Intelligence and Cybersecurity by Yassine Maleh, Mamoun Alazab 2. Introduction to Evolutionary Computing by A.E. Eiben and J.E. Smith 3. Applied Artificial Intelligence in Cyber Security by Mark Stamp 4. Evolutionary Algorithms in Cybersecurity by Ibrahim Kushchu 5. Towards the Future with AI: Work and Superintelligence." <i>AI Ethics: A Textbook</i> . Singapore: Springer Nature Singapore, 2023 by Paula Boddington. 6. Rayhan, Swajan. "AI Superintelligence and Human Existence: A Comprehensive Analysis of Ethical, Societal, and Security Implications." (2024). 7. Santos, Omar, Samer Salam, and Hazim Dahir. "The AI Revolution in Networking, Cybersecurity, and Emerging Technologies." (2024). 8. Duenas, Tom, and Diana Ruiz. "The path to superintelligence: A critical analysis of openai's five levels of ai progression." <i>ResearchGate</i> , 2024b. doi 10 (2024).	8		
25	(Course :Advance Topics in Databases) 1. Modern Database Management, Jeffrey A. Hoffer et al., Latest Edition. 2. Database Systems: A Practical Approach to Design, Implementation and Management. Thomas Connolly and Carolyn Beg, Latest Edition. 3. Database Management Systems by Raghu Ramakrishnan, Johannes Gehrke, Latest Edition 4.Database System Concepts by Avi Silberschatz, Henry F. Korth and S. Sudarshan Latest Edition. 5. Database Systems: The Complete Book, Latest Edition by Hector Garcia-Molina, Jeffrey D. Ullman,Jennifer Widom.	5		
26	(Course : Python Programming) 1. Lutz, Mark. <i>Learning Python</i> , O'Reilly Media, Latest Edition 2. Ramalho, Luciano. <i>Fluent Python: Clear, Concise Programming</i> . O'Reilly Media, Latest Edition 3. Sweigart, Al. <i>Automate the Boring Stuff with Python: Practical Programming for Total Beginners</i> . 4. Matthes, Eric. <i>Python Crash Course: A Hands-On, Project-Based Introduction to Programming</i>	4		
27	(Course: Visual Programming) 1. Java: How to Program, Latest Edition by Paul Deitel 2. Core Java Volume I – Fundamentals" by Cay S. Horstmann and Gary Cornell 3. JavaFX 8: Introduction by Example" by Carl Dea 4. Java Database Programming with JDBC and JDBC-ODBC" by Alan Bateman. 5. Object Oriented Programming in C++, 3rd Edition by Robert Lafore.	5		
28	(Course : Theory of Automata) 1. Introduction to computer theory, Daniel I. A. Cohen, Latest Edition 2. Automata, Computability and Complexity: Theory and Applications, by Elaine Rich, 2011 3. An Introduction to Formal Languages and Automata, by Peter Linz, Latest edition, Jones & Bartlett Publishers, Latest Edition 4. Theory of Automata, Formal Languages and Computation, by S. P. Eugene, Kavier, Latest Edition	4		
29	(Course : Web Technologies) 1. Duckett, J.. <i>Web Design with HTML, CSS, JavaScript and jQuery Set</i> (Latest ed.). Wiley Publishing 2. Nixon, R. <i>PHP: 20 Lessons to Successful Web Development</i> (Latest ed.). McGrawHill Education Group 3. Nixon, R. <i>Learning PHP, MySQL, JavaScript, and CSS: A step-by-step guide to creating dynamic websites</i> (Latest ed.). O'Reilly Media, Inc	3		
30	(Course : Human Computer Interaction) 1. Human-Computer Interaction by Alan Dix, Janet E. Finlay, Gregory D. Abowd, Russell Beale, Prentice Hall; Latest Edition December 20, 2003. ISBN-10: 130461091	5		

	2. Human-Computer Interaction: Concepts And Design by J. Preece, Y. Rogers, H. Sharp, D. Benyon, S. Holland, T. Carey, Addison Wesley; Latest Edition 3. Human-Computer Interaction Handbook: Fundamentals, Evolving Technologies, and Emerging Applications by Julie A. Jacko, CRC Press; Latest Edition 4. Interaction Design: Beyond Human - Computer Interaction by Yvonne Rogers, Helen Sharp, and Jenny Preece, Wiley; Latest Edition 5. Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Rules by Jeff Johnson, Morgan Kaufmann; Latest Edition.			
31	(Course : Mobile Application Development) 1. Android Programming with Kotlin for Beginners by Horton, John Latest Edition 2. Android App Development For Dummies by Burton, Michael. Latest Edition. 3. "Android 9 Development Cookbook by Boyer, Rick. 4. Android Developers Official Training Courses. Available at: developer.android.com	4		
32	(Course : Parallel & Distributed Computing) 1. Distributed Systems: Principles and Paradigms, A. S. Tanenbaum and M. V. Steen, Prentice Hall, latest Edition. 2. Distributed and Cloud Computing: Clusters, Grids, Clouds, and the Future Internet, K Hwang, J Dongarra and GC. C. Fox, Elsevier, latest Edition.	2		
33	(Course : Programming Fundamental) 1. Starting out with Programming Logic & Degin, Latest Edition by Tony Gaddis, 2. The C Programming Language, Latest Edition Edition by Brian W. Kernighan, Dennis M. Ritchie 3. Object Oriented Programming in C++ , Latest Edition by Robert Lafore 4. C How to Program, Latest Edition by Paul Deitel & Harvey Deitel 5. Problem Solving and Program Design in C++, Latest Edition by Jeri R. Hanly & Elliot B. Koffman	5		
34	(Course : Object Oriented Programming) 1. Java: How to Program, Latest Edition by Paul Deitel 2. Beginning Java 2, Latest Edition by Ivor Horton 3. An Introduction to Object Oriented Programming with Java, Latest Edition by C. Thomas Wu 4. Starting Out with C++ from Control Structures to Objects, Latest Edition, Tony Gaddis 5. C++ How to Program, Latest Edition, Deitel & Deitel. 6. Object Oriented Programming in C++, Latest Edition by Robert Lafore.	6		
35	(Course : Data Structure) 1. Data Structures and Algorithm Analysis in Java by Mark A. Weiss, Latest Edition 2. Data Structures and Abstractions with Java by Frank M. Carrano & Timothy M. Henry, Latest Edition 3. Data Structures and Algorithms in C++ by Adam Drozdek, Latest Edition 4. Data Structures and Algorithms Shaums Outline Series by Lipchautz, Latest Edition 5. Data Structures and Algorithm Analysis in C++ by Mark Allen Weiss, Latest Edition	5		
36	(Course : Computer Organization and Assembly Language) 1. Computer System Architecture, M. Morris Mano, Latest Edition, 2. Assembly Language Programming for Intel- Computer, Latest Edition 3. Computer Systems: A Programmer's Perspective, 3/E (CS:APP3e), Randal E. Bryant and David R.O' Hallaron, Carnegie Mellon University 4. Robert Britton, MIPS Assembly Language Programming, Latest Edition,	4		
37	(Course : Digital Logic Design) 1. Digital Fundamentals by Floyd, Latest Edition. 2. Fundamental of Digital Logic with Verilog Design, Stephen Brown, Latest Edition	2		
38	(Course : Operating System) 1. Operating Systems Concepts, Latest Edition by Abraham Silberschatz 2. Modern Operating Systems, Latest Edition by Andrew S. Tanenbaum 3. Operating Systems, Internals and Design Principles, Latest Edition by William Stallings	3		
39	(Course : Information Security) 1. Computer Security: Principles and Practice, 3rd edition by William Stallings 2. • Principles of Information Security, 6th edition by M. Whitman and H. Mattord 3. • Computer Security, 3rd edition by Dieter Gollmann 4. • Computer Security Fundamentals, 3rd edition by William Easttom 5. • Official (ISC)2 Guide to the CISSP CBK, 3rd edition	5		

40	(Course : Computer Network) 1.Computer Networking: A Top-Down Approach Featuring the Internet, by James F. Kurose and Keith W. Ross. (Latest Editions) 2. Computer Networks, Edition by Andrew S. Tanenbaum. (Latest Editions) 3.Data and Computer Communications, Edition by William Stallings. (Latest Editions) 4. Data Communication and Computer Networks, Edition by Behrouz A. Forouzan. (Latest Editions)	4		
41	(Course : Analysis of algorithms) 1.Introduction to Algorithms by Thomas H. Corman, Charles E. Leiserson, Ronald L. Rivest and Clifford Stein. (Latest editions) 2. Algorithm Design, Jon Kleinberg, Eva Tardos. (Latest editions) 3. Algorithms, Robert Sedgewick, Kevin Wayne. (Latest editions)	3		

2, List of Reference/recommended Books for BS Multimedia and Gaming

S.No	Book Title	Authors	Publisher	Edition	U/rate	Total
1	Fundamentals of Multimedia	Li, Ze-Nian, Drew, Mark S., Liu, Jiangchuan.	Springer.	Latest Edition		
2	Multimedia: From Computing to Communications	Ralf Steinmetz	Pearson Education.	Latest Edition		
3	Introduction to Multimedia	Michael Scott	McGraw-Hill Education.	Latest Edition		
4	The Art of Game Design: A Book of Lenses''	Jesse Schell	Taylor & Francis	Latest Edition		
5	Designing Games: A Guide to Engineering Experiences''	Tynan Sylvester	O'Reilly Media	Latest Edition		
6	3D Modeling for Beginners	Danan Thilakanathan	self-published	Latest Edition		
7	Mastering Unity Scripting	Alan Thorn	Packt Publishing	Latest Edition		
8	UX/UI Design: A Comprehensive UI & UX Guide to Master Web Design and Mobile App Sketches	Carl Jones	self-published	Latest Edition		
9	Hands-on unity Game Development	Nicolas Alejandro Borromeo	Packt Publishing	Latest Edition		
10	Building Virtual Reality with Unity and SteamVR	Jeff W Murray	CRC Press	Latest Edition		
11	Introduction to Game AI	Ian Millington	CRC Press	Latest Edition		
12	Physics for Game Developers	David M. Bourg	O'Reilly Media, Inc.	Latest Edition		
13	Unreal Engine 4 Game Development	Aram Cookson	Pearson Education	Latest Edition		

3. List of Reference books for BS Cyber Security

S. No	Book Title	Author	Edition	U/Rate	Total
1	Computer Security Fundamentals	Chuck Easttom	Latest		
2	Security+ Guide to Network Security Fundamentals	Mark Ciampa	Latest		
3	Security in Computing	C.P. Pfleeger, Prentice-Hall,	Latest		
4	Network Security Assessment: Know Your Network	Chris McNab	Latest		
5	Corporate Computer Security	Randall J. Boyle	3 rd		
6	Bulletproof Wireless Security	Praphul Chandra	Latest		
7	Network Security Essentials: Applications and Standards	William Stallings	Latest		
8	Threat modeling: Designing for security	John Wiley and Sons	Latest		
9	Software Security Engineering	Julia H. Allen.	Latest		
10	Information Assurance: Managing Organizational IT Security Risks	Joseph Boyce, Daniel Jennings	Latest		
11	Guide to Digital Forensics a Concise and Practical Introduction	Joakim Kävrestad	Latest		
12	Computer Hacking Forensic Investigator	EC-Council,	Latest		
13	The Art of Software Security Assessment: Identifying and Preventing Software Vulnerabilities	Mark Dowd	Latest		
14	"Security in Computing"	Charles P. Pfleeger, Shari Lawrence Pfleeger	Latest		
15	"Hardware Security: Design, Threats, and Safeguards"	Debdeep Mukhopadhyay, Rajat Subhra Chakraborty	Latest		
16	"Practical Malware Analysis: The Hands-On Guide to Dissecting Malicious Software"	Michael Sikorski and Andrew Honig	Latest		
17	Wireless Security: Know It All	Praphul Chandra	Latest		
18	Hacking Exposed Wireless: Wireless Security Secrets and Solutions	Joshua Wright and Johnny Cache	Latest		
19	Practical Mobile Forensics	Satish Bommisetty, Rohit Tamma	Latest		
20	Cybersecurity and Cyberwar: What Everyone Needs to Know	P.W. Singer and Allan Friedman	Latest		
21	Cyber Crime and Cyber Terrorism Investigator's Handbook	Babak Akhgar, Andrew Staniforth, and Francesca Bosco	Latest		
22	Industrial Network Security: Securing Critical Infrastructure Networks for Smart Grid, SCADA, and Other Industrial Control Systems	Eric D. Knapp and Joel Thomas Langill	Latest		
23	Certified Penetration Testing (C PENT)	EC Council Book	Latest		
24	Practical Cyber Intelligence: How action-based intelligence can be an effective response to incidents	Wilson Bautista	Latest		
25	Cyber Threat Intelligence	Ali Dehghantanha, Kim-Kwang Raymond Choo, and Reza Parizi	Latest		

4. Books for Data Science

S.NO	Book Name	Qty	U/Rate	Total
1	Foundations of data science, Blum, A., Hopcroft, J., and Kannan, R., Latest Edition.	5		
2	An Introduction to Data Science, Jeffrey S. Saltz, Jeffrey M. Stanton, SAGE Publications, Latest Edition.	5		
3	Python for everybody: Exploring data using Python 3, Severance, C.R., CreateSpace Independent Pub Platform.,Latest Edition.	5		
4	Doing Data Science, Straight Talk from the Frontline, Cathy O'Neil and Rachel Schutt, O'Reilly,Latest Edition	5		
5	Data Science and Big Data Analytics: Discovering, Analyzing, Visualizing and Presenting Data, EMC Education Services, John Wiley and Sons, Latest Edition.	5		
6	Probability and Statistics for Computer Scientists, Latest Edition, Michael Baron,Latest Edition	5		
7	Discovering Statistics using SPSS for Windows, Andy Field, Latest Edition.	5		
8	Jiawei Han and Micheline Kamber, Jian Pei (2011). Data Mining: Concepts and Techniques, Latest Edition	5		
9	Pang-Ning Tan, Michael Steinbach, and Vipin Kumar, Introduction to Data Mining. Latest Edition	5		
10	Charu C. Aggarwal (2015). Data Mining: The Textbook Latest Edition	5		
11	Exploratory Data Analysis with R” by Roger D. Peng, Latest Edition.	5		
12	W. H. Inmon, “Building the Data Warehouse”, Wiley-India Edition, Latest Edition	5		
13	Ralph Kimball, “The Data Warehouse Toolkit – Practical Techniques for Building Dimensional Data Warehouse,” John Wiley and Sons, Inc. Latest Edition	5		
14	Lutz, Mark. Learning Python, O'Reilly Media, Latest Edition	5		
15	Ramalho, Luciano. Fluent Python: Clear, Concise Programming. O'Reilly Media, Latest Edition	5		
16	White, Tom. “Hadoop: The definitive guide.” O'Reilly Media, Inc., 2012, Latest Edition	5		
17	Karau, Holden, Andy Konwinski, Patrick Wendell, and Matei Zaharia. “Learning spark: lightning-fast big data analysis.” O'Reilly Media, Inc., 2015, Latest Edition	5		
18	Miner, Donald, and Adam Shook. “MapReduce design patterns: building effective algorithms and analytics for Hadoop and other systems.” O'Reilly Media, Inc., 2012, Latest Edition	5		
19	Social Network Analysis: Methods and Applications” by Stanley Wasserman and Katherine Faust, Latest Edition	5		
20	Analyzing Social Networks” by Stephen P. Borgatti, Martin G. Everett, and Jeffrey C. Johnson, Latest Edition	5		
21	Python for Data Science For Dummies" by John Paul Mueller and Luca Massaron, Latest Edition	5		
22	Natural Language Processing with Python" by Steven Bird, Ewan Klein, and Edward Loper Latest Edition	5		
23	Data Visualization with Python and Matplotlib" by Ashwin Pajankar Latest Edition	5		
24	Python for Data Analysis" by Wes McKinney Latest Edition	5		
25	Designing Data-Intensive Applications” by Martin Kleppmann, Latest Edition	5		
26	The Data Warehouse Toolkit” by Ralph Kimball and Margy Ross, Latest Edition	5		
27	Ethics in Information Technology” by George Reynolds, Latest Edition	5		

5. LIST OF REFERENCE BOOKS REQUIRED FOR BS BIOINFORMATICS

S.NO	Book Name	Qty	U/Rate	Total
1	General Chemistry: Principles and Modern Applications (10th Edition) by Petrucci, Ralph H., Herring, F. Geoffrey, Madura, Jeffry D., Bissonnette, Carey (2010)	5		
2	Chemistry: The Central Science (14th ed) by Brown, Theodore; LeMay, H.; Bursten, Bruce; Murphy, Catherine; Woodward, Patrick; Stoltzfus, Matthew (2017)	5		
3	Lehninger: Principles of biochemistry. Nelson, D and M Cox. 6th ed. New York: W.H. Freeman and Company, 2012.	5		

4	Herron, J. C., and S. Freeman. (2014). Evolutionary Analysis, 5th edition. Pearson Education, Boston, USA. ISBN 0-321-61667	5		
5	Marco Tamborini (2023) The Architecture of Evolution: The Science of Form in Twentieth-Century Evolutionary Biology ISBN978-0822947356	5		
6	Glenn-Peter Saetre and Mark Ravinet (2019) Evolutionary Genetics: Concepts, Analysis, and Practice ISBN 978-0198830924	5		
7	Michael P. Muehlenbein (2010) Human Evolutionary Biology ISBN 978- 0521705103	5		
8	Eva Jablonka and, Marion J. Lamb (2020) Inheritance Systems and the Extended Evolutionary Synthesis ISBN 978-1108716024	5		
9	Arthur Lesk (2019) An Introduction to Bioinformatics ISBN 978-0198794141	5		
10	Jonathan Pevsner (2015) Bioinformatics and Functional Genomics 3rdEdition ISBN 978-1118581780	5		
11	Richard E. Neapolitan (2009) Probabilistic Methods for Bioinformatics: Withan Introduction to Bayesian Networks ISBN 978-0323165464	5		
12	Dr. Robert I Colautti (2022) R Crash Course for Biologists: An introduction to R for bioinformatics and biostatistics (Coding and Quantitative Biology) ISBN 979-8849115917	5		
13	Mitchell L. Model. (2010) Bioinformatics Programming Using Python: Practical Programming for Biological Data ISBN 978-059615	5		
14	“Bioinformatics Computing” Bryan Borgeron, Pearson Education (US), 19 November 2002 .	5		
15	“Methods in Biotechnology and Bioengineering”, Vyas S.P. and Kohli D.V.2002.	5		
16	Bioinformatics Methods and Techniques. Banatao, R. Stanford University, Stanford Center for Professional Development, 2002.	5		
17	"What's Next in High-Performance Computing?" Bell, G. and J. Gray. Communications of the ACM.2002.	5		
18	Essentials of Knowledge Management. Bergeron, B. New York: John Wiley and Sons, 2003.	5		
19	“Bioinformatics Concepts, Skills and Applications” Namita M, CSB Publishers.	5		
20	“Bioinformatics Managing Scientific Data”, Lacroix Zor, Morgan Kauffmann Publishers.	5		
21	Legal and Ethical Issues in Acquisitions. Edited by Katina Strauch. A Bruce Strauch.	5		
22	Computer Ethics: Cautionary Tales and Ethical Dilemmas in Computing By Tom Forester, Perry Morrison.	5		
23	Public Management Information Systems. By Bruce A Rocheleau.	5		
24	Security in Computing, By Willis H. Ware, Charles P. Pfleeger, Shari Lawrence Pfleeger.	5		
25	Dive Into Deep Learning, A. Zhang, Z.C. Lipton, M. Li, A. Smola.	5		
26	Deep Learning” by Goodfellow, Bengio, and Courville	5		
27	Paul S. Ganney, Introduction to Bioinformatics and Clinical Scientific Computing, Taylor and Fracis Group.	5		
28	György Marko-Varga, Genomics and Proteomics for Clinical Discovery and Development , Springer	5		
29	Xiangdong Wang, Christian Baumgartner, Denis C. Shields, Application of Clinical Bioinformatics, Springer	5		
30	Klipp, E., Wolfram L., Christoph W., Axel K., Hans L., and Ralf H., “Systems biology”, Wiley.	5		
31	Ullah, M., and Olaf W., “Stochastic approaches in systems biology”, Springer.	5		
32	Newman M., “Networks: An Introduction”, Oxford University Press, USA.	5		
33	Alon U., “An introduction to systems biology: design principles of biological circuits. Boca Raton”, Chapman and Hall/CRC.	5		
34	In silico methods for predicting drug toxicity. Humana Press. Benfenati, E. (Ed.). (2016).	5		
35	Pharmacology in Drug Discovery and Development: Understanding Drug Re- sponse. Academic Press. Kenakin, T. (2016).	5		
36	Pharmacology in drug discovery and development Kenakin, T. P. (2017).	5		

Cumulative Estimated Procurement Value: PKR 20,053,050/- (Lot 7–9 values are indicative and shall be confirmed by the Library Section / concerned Principal Investigator against approved budgets prior to NIT issuance).

4. Measurable & Unambiguous Technical Specifications

Lot 1 – High-Security Examination Answer & Continuation Books

- Paper Quality & Grammage: 68 GSM (± 2 GSM tolerance), high-finish wood-free offset paper, minimum brightness 85% ISO, minimum opacity 90%.
- Dimensions: Sheet 8.5" $\times$ 13" / 216 mm $\times$ 330 mm, folded booklet 8.5" $\times$ 6.5" (± 2 mm manufacturing tolerance). The size and dimension of finance file covers for legal size as per examination while for A-4 size as per sample available in finance section.
- Binding & Stitching: Thread-sewn along the central fold with one-side overlock safety stitching using high-tensile polyester thread, to prevent sheet extraction/tampering.
- Printing & Serial Numbers: Front page printed with university crest/monogram, candidate instructions, and sequential high-security numbering (minimum 6-digit, non-repeating). Inner pages uniformly ruled at 7 mm line spacing in light tint ink.
- Continuation Sheets: 12-page format, header pre-printed with examination code block and serial numbering matching the main book series.

Lot 2 – Paper & Standard Stationery

- Computer Paper A4: 80 GSM, original Double-A or equivalent premium paper (ISO 9001-certified mill), sheet size 210 mm $\times$ 297 mm (A4), 500 sheets per ream, moisture content 4.5–5.5%, minimum opacity 92%.
- File Covers: 300 GSM hard card stock with Nimbo fold, legal size (9" $\times$ 14"), front single/multi-colour offset print as per sample, fitted with a 2-inch heavy-duty woven cloth strip reinforcement down the central spine.
- Exam & Rechecking Forms: Legal size (8.5" $\times$ 14"), 68 GSM high-finish paper; Exam Forms double-sided print, Rechecking Forms single-sided print; clear crisp offset printing.

Lot 3 – Degree Folders

- Material & Cover: 500 GSM heavy-duty matte-quality Rexine/Leatherette wrapped over rigid binder board; board thickness 2 mm ± 0.2 mm.
- Inner Lining & Ribbon Corners: Premium dark green/navy velvet fabric inner lining with 8 corner-holding satin ribbons (4 top, 4 bottom) to secure degree certificates.
- Embossing: Hot-foil golden metallic embossed University logo and title on the front exterior cover.

Lot 4 – Packaging & Dispatch Supplies

- Question Paper Envelopes: 14" $\times$ 18" with expansion pick/gusset of 1.5", reinforced with internal heavy-duty cloth lining (minimum 70% thread coverage), heavy gummed flap closure.
- A4 Printing Stickers: Self-adhesive matte white paper label sheets (A4), 80 GSM face stock, 80 GSM release liner, jam-free adhesive suitable for high-speed laser printing.
- Plastic Bori / Woven Sacks: 2.5' $\times$ 3.5', virgin high-density polypropylene (HDPP), minimum weave density 10 $\times$ 10 threads/inch, minimum load capacity 50 kg.
- Soti Doori (Cotton Cord Bundles): 8 mm diameter braided cotton cord, 100% natural unbleached cotton, minimum breaking strain 40 kg, standard 10-metre lengths per bundle.

Lot 5 & Lot 6 – Toners & Duplicator Consumables

- HP 26A Toners (CF226A): 100% Original Equipment Manufacturer (OEM) HP 26A Black LaserJet Toner Cartridges in original security-sealed box with valid holographic verification seal.
- RISO SF5130 Consumables: Genuine OEM RISO SF5130 Black Ink tubes (1000 ml) and RISO SF5130 Master Rolls (A4/B4 format). Refilled, compatible, or re-manufactured cartridges/inks are strictly rejected.

Lot 7 – Library Books (Cyber Security, Data Science, Multimedia & Gaming, AI, Bioinformatics)

- Edition & Authenticity: Only original, latest available editions shall be supplied unless a specific edition is stated on the Purchase Order; imported titles shall be sourced only from the original Publisher or an authorised distributor.
- Condition: Books shall be free of printing defects and physical damage, and shall exactly match the title, author, ISBN, edition and Publisher specified on the Purchase Order.

- Non-Availability: Where a specified title is unavailable, documentary evidence from the Publisher confirming unavailability shall be furnished in lieu of supply.
- Delivery Timeline: 3–4 weeks for locally published titles; 6–12 weeks for imported titles, unless otherwise agreed in writing.
- Packing & Pricing: Books shall be securely packed against transit damage; prices shall be supported by Publisher invoices and shall not exceed the Library Rates issued by the Government of Pakistan; Tax Exemption Certificates (where applicable) shall be furnished. Availability of an economical Indian edition of the same title/ISBN shall be preferred where offered.
- Replacement: Defective, damaged or incorrectly supplied books shall be replaced at the Supplier's own cost within a reasonable period specified by the University.

Lot 8 – GPU-Enabled Mobile Workstations (Laptop Computers) – 02 Units

- Condition & Brand: Brand new, unused, genuine OEM product; professional/business/high-performance series.
- Processor & Graphics: Intel Core i9 (latest available generation); NVIDIA RTX 4070 or RTX 4080 dedicated GPU with minimum 8 GB dedicated VRAM; minimum 18 MB smart cache.
- Memory & Storage: Minimum 32 GB DDR5 RAM, expandable to at least 64 GB; minimum 1 TB PCIe NVMe Gen4 SSD, with an additional storage slot preferred.
- Display & Connectivity: Minimum 15.6" FHD/QHD IPS anti-glare display; Wi-Fi 6 or higher; Bluetooth 5.2 or higher; minimum 2× USB 3.x, 1× USB Type-C, 1× HDMI, audio combo jack; backlit keyboard; HD/Full HD webcam; integrated stereo speakers and microphone.
- Power, Cooling & OS: Minimum 4-cell battery with fast charging, minimum 8 hours normal-use backup; advanced thermal cooling; genuine licensed Windows 11 Pro 64-bit pre-installed; TPM 2.0 or equivalent security; AI-framework compatibility (PyTorch, TensorFlow, CUDA).
- Accessories, Certification & Warranty: Original charger, carrying bag, wireless mouse; CE/FCC/RoHS or equivalent certification; minimum 2–3 years local warranty with mandatory local after-sales support.

Lot 9 – SDR Equipment & RF Accessories (Project Equipment)

- NI USRP B210 Software Defined Radio or Equivalent – 02 Units: Brand new; 70 MHz–6 GHz continuous RF coverage; minimum 12-bit ADC; 2 TX and 2 RX channels (full duplex); up to 56 MHz instantaneous bandwidth; Xilinx Spartan-6 XC6SLX150 FPGA (or equivalent open/reprogrammable FPGA); USB 3.0 interface; laboratory-grade frequency stability; supported on GNU Radio, MATLAB, Python and UHD drivers; compatible with Linux and Windows; supplied with power adapter, USB 3.0 cable, antennas and required RF accessories; minimum 1-year local warranty; PTA-approved device.
- RF Accessories & Experimental Components (1 Lot), all compatible with the SDR units and rated for operation up to at least 6 GHz: wideband antennas (4), 2.4 GHz Wi-Fi antennas (4), LTE antennas (2), SMA male-male RF cables (6), SMA male-female RF cables (4), fixed RF attenuators – 10 dB (4), 20 dB (4), 30 dB (4), SMA adapter kit (1 set), 50 Ω RF terminators (4), RF shielding/Faraday bags (2), and one RF shield box/Faraday enclosure.

5. Eligibility & Evaluation Framework

Part A is a pass/fail eligibility gate — a bidder failing any Part A item is not scored further. Part B is the 100-mark technical matrix used only for bidders who clear Part A, presented in four versions since Lots 1–4 (manufactured goods), Lots 5 & 6 (OEM consumables), Lot 7 (library books) and Lots 8–9 (project/IT equipment) are evaluated on structurally different grounds.

5.1 Part A – Mandatory Eligibility (Pass/Fail, All Lots)

- Valid registration with the Federal Board of Revenue (FBR) and active listing on the Active Taxpayer List (ATL) for Income Tax and Sales Tax/GST.
- Valid registration with the Khyber Pakhtunkhwa Revenue Authority (KPRA) for services/applicable sales-tax trades.
- Bid Security equal to 2% of the total estimated value of the Lot(s) bid for, in the form of a Call Deposit Receipt (CDR) or unconditional Bank Guarantee, placed sealed inside the Financial Proposal (Rule 12(1)); an affidavit confirming this in the Technical Proposal, without stating the amount in words (Rule 12(3)).

- Original Affidavit on PKR 100 stamp paper confirming the firm/vendor has never been blacklisted or defaulted with any government, semi-government, or autonomous body.
- Submission of physical samples with the technical bid (minimum 5 sample answer books / paper reams / degree folders / envelopes, as applicable to the Lot bid for). Bids lacking samples, or failing physical laboratory verification, are non-responsive and shall not proceed to scoring.

Additional Part A items – Lots 5 & 6

- Lots 5 & 6 only – Manufacturer Authorisation: A valid Manufacturer Authorisation Letter/Certificate issued directly by HP or RISO (as applicable), or proof of Tier-1 Authorised Partner/Sole National Distributorship status, is mandatory. Bidders without this proof are non-responsive and are not evaluated further.

Additional Part A items – Lots 1 & 3

- Lots 1 & 3 only – Manufacturing Capacity: Proof of direct ownership of a manufacturing press/binding facility, or a direct agreement with a paper mill, is mandatory.

Additional Part A items – Lot 7

- Lot 7 only – Registration with KPPRA e-Pads.
- Lot 7 only – Minimum five (5) years' documented experience in the supply of academic/research books, supported by a Company Profile and the names and contact details of authorised representatives.

Additional Part A items – Lot 8

- Lot 8 only – Valid Authorised Dealer/Reseller Certificate from the OEM brand quoted (Dell/HP/Lenovo or equivalent), confirming eligibility to supply and provide local after-sales warranty support for the quoted model.

Additional Part A items – Lot 9

- Lot 9 only – Valid Authorised Dealer/Distributor Certificate from NI/Ettus, or from the manufacturer of the equivalent SDR platform quoted, confirming genuine product supply and local technical/after-sales support.

5.2 Part B – Technical Evaluation Matrix (Lots 1–4)

Total 100 marks. Minimum qualifying threshold: 70 marks (70%). Award to the Lowest Evaluated Financial Bid among technically qualified bidders.

Code	Parameter	Sub-Criteria & Scoring Breakdown	Max
C1	Financial Standing	Financial Capability & Annual Turnover • Average annual turnover (last 3 years) $\geq$ Lot value = 10 marks • Average annual turnover (last 3 years) $\geq 2 \times$ Lot value = 20 marks (Verified via audited accounts / bank statements)	20
C2	Past Experience	Relevant Experience & Track Record • 3–5 completed Purchase Orders of similar magnitude = 12 marks • More than 5 completed Purchase Orders = 25 marks	25
C3	Supply Directness	Direct Manufacturer = 20 marks • Authorised Sole Agent = 15 marks • General Trader = 0 marks	20
C4	Sample & Quality Verification	Physical evaluation of submitted sample by the Technical Committee – paper GSM, thread sewing/binding integrity, material density, structural finish, dimensional accuracy – scored against the Section 4 specification sheet, item by item.	35

5.3 Part B – Technical Evaluation Matrix (Lots 5 & 6)

Total 100 marks. Minimum qualifying threshold: 70 marks (70%). 'Supply Directness' is not scored here as OEM/authorised-partner status is already a Part A pass/fail gate for these two Lots (Section 5.1).

Code	Parameter	Sub-Criteria & Scoring Breakdown	Max
C1	Financial Standing	Average annual turnover (last 3 years) $\geq$ Lot value = 10 marks • $\geq 2 \times$ Lot value = 20 marks	20
C2	Past Experience & Distribution Track Record	• 3–5 completed supply orders of similar consumables = 15 marks • More than 5 completed supply orders = 30 marks	30
C4	Product Authenticity & Quality Verification	Verification of holographic seal, QR code, and OEM serial number against the manufacturer's portal; physical inspection of packaging integrity by the Technical Committee.	50

5.4 Part B – Technical Evaluation Matrix (Lot 7 – Library Books)

Total 100 marks. Minimum qualifying threshold: 70 marks (70%). Given the variable and continuous nature of departmental book requirements, the University may empanel all technically qualified (≥ 70 marks) bidders under Lot 7 as

approved suppliers; individual Purchase Orders for specific titles shall then be placed against the empanelled supplier offering the most economical, Library-Rate-compliant price for that title, consistent with the Lowest Evaluated Financial Bid principle applied at the order level.

Code	Parameter	Sub-Criteria & Scoring Breakdown	Max
C1	Financial Standing	Average annual turnover (last 3 years) • $\geq$ Lot value = 10 marks • $\geq 2 \times$ Lot value = 20 marks	20
C2	Past Experience	• 5–8 years' book-supply experience = 15 marks • More than 8 years' book-supply experience = 25 marks	25
C3	Supply Directness	• Publisher / Authorised Distributor = 20 marks • General Bookseller = 10 marks	20
C4	Catalogue Depth & Title Verification	Demonstrated catalogue coverage of the five subject areas (Cyber Security, Data Science, Multimedia & Gaming, AI, Bioinformatics) via publisher authorisation letters/sample invoices; verification of a University-supplied sample title list for correct edition, ISBN and pricing against Library Rates.	35

5.5 Part B – Technical Evaluation Matrix (Lots 8 & 9 – Project Equipment)

Total 100 marks. Minimum qualifying threshold: 70 marks (70%). 'Authorised Dealership/OEM Backing' is scored here (rather than treated only as a Part A gate) since more than one tier of authorised supply relationship is commercially possible for branded IT/lab equipment; award to the Lowest Evaluated Financial Bid among technically qualified bidders.

Code	Parameter	Sub-Criteria & Scoring Breakdown	Max
C1	Financial Standing	Average annual turnover (last 3 years) • $\geq$ Lot value = 10 marks • $\geq 2 \times$ Lot value = 20 marks	20
C2	Past Experience	• 3–5 completed supply orders of IT/lab/scientific equipment = 12 marks • More than 5 completed supply orders = 20 marks	20
C3	Authorised Dealership / OEM Backing	• Direct/Tier-1 Authorised Dealer of the quoted brand = 20 marks • Sub-dealer with manufacturer's written backing = 10 marks	20
C4	Technical Compliance & Verification	Line-by-line technical compliance statement cross-checked against the Section 4 specification and the OEM datasheet; live demonstration/sample unit verification where called for by the Technical Committee.	40

5.6 Bid Evaluation Scoring Worksheet

For direct use by the Technical Evaluation Committee – one sheet per Lot, one row per bidder. Use the matrix in Section 5.2, 5.3, 5.4 or 5.5 matching the Lot (leave the C3 column blank/marked '–' for Lots 5 & 6).

Bidder Name	C1	C2	C3/–	C4	Total /100	Pass $\geq$ 70? (Y/N)

Reproduce this worksheet once per Lot at the time of evaluation.

6. Workable Bidding Terms & Conditions

Anti-middleman controls and legal clauses applicable to all Lots unless otherwise specified.

Bid Validity Period (KPPRA Rule 35)

All submitted bids must remain valid for ninety (90) calendar days from the date of technical bid opening. Bids with a shorter validity are non-responsive. An extension may be requested in writing in exceptional circumstances, with a corresponding extension of Bid Security.

Bid Security (KPPRA Rule 12(1)–(2))

Bidders must furnish a 2% Bid Security of the total estimated Lot value as an original CDR or unconditional Bank Guarantee from a scheduled bank in Pakistan, enclosed within the Financial Proposal envelope. For Lots 7–9, the 2% shall

be calculated on the indicative value stated in Section 3, to be confirmed by the Library Section / concerned Principal Investigator before NIT issuance.

Manufacturer Authorisation (MAF) *(Mandatory Eligibility – Part A)*

Bidders for Lots 5 & 6 must submit a valid Manufacturer Authorisation Letter from HP/RISO. Bidders for Lots 1 & 3 must prove direct ownership of a manufacturing/binding facility or a direct paper-mill agreement.

Pre-Evaluation Physical Sample Submission *(Mandatory Eligibility – Part A)*

Physical samples must accompany the technical bid. Bids lacking samples, or failing physical laboratory tests, are rejected as non-responsive.

Ban on Subcontracting *(General Conditions of Contract)*

Subcontracting, transferring, or outsourcing any part of the supply order to third-party resellers is banned and will result in contract cancellation and blacklisting proceedings.

Performance Guarantee *(General/Special Conditions of Contract)*

The successful bidder shall deposit a 10% Performance Security (Bank Guarantee/CDR) prior to contract signing, retained until full warranty/supply completion.

Liquidated Damages (LD) *(General Conditions of Contract)*

Late delivery attracts liquidated damages of 0.5% per day of the undelivered stock value, capped at 10% of total contract value.

Disqualification & Blacklisting *(KPPRA Rules 43–44)*

A bidder found to have submitted false or materially inaccurate information shall be disqualified, subject to a right of appeal under Section 35 of the Act. Persistent poor performance, fraud, or premature abandonment of work may lead to blacklisting after due hearing.

Rejection of Bids & Re-Bidding *(KPPRA Rules 47–48)*

The procuring entity may reject all bids at any stage prior to acceptance, with reasons communicated on request. Re-bidding may follow a review of specifications and evaluation criteria.

Mis-Procurement *(KPPRA Rule 54)*

Any breach of the KPPRA Rules, 2014 in the conduct of this procurement constitutes mis-procurement, and the responsible officer(s) shall be liable to proceed against under the relevant law.

7. Tools & Methods for Post-Delivery Quality Inspection

All physical testing tools listed below are standard industrial testing instruments, readily available in the local hardware, scientific-equipment and laboratory markets.

Lot	Inspected Items	Key Parameters	Verification Tool & Method
Lot 1	Answer & Continuation Books	Paper GSM (68 GSM); stitching/overlock security; dimensions & page count	Digital GSM scale (± 0.5 g precision) + cutter; digital vernier caliper for sheet thickness; manual tear test and page-by-page count verification.
Lot 2	Paper, File Covers & Forms	Paper weight (80/68 GSM); moisture content & print finish	GSM quadrant scale; digital paper moisture meter (target 4.5–5.5%); laser-printer jam and ink bleed-through test.
Lot 3	Degree Folders	Rexine/velvet quality; ribbon tensile strength	Digital/dial thickness gauge for binder-board thickness; ribbon tension/pull test; foil-embossing scratch test.
Lot 4	Packaging & Bags	Envelope cloth density ($\geq 70\%$); bag load capacity	Magnifying thread counter / pick glass for weave density; load/tensile test for plastic bori (minimum 50 kg).
Lot 5 & 6	HP & RISO Consumables	Genuine OEM verification	Mobile QR/holographic verification app for OEM seals; cross-checking serial numbers against the official OEM portal.

Lot	Inspected Items	Key Parameters	Verification Tool & Method
Lot 7	Library Books	Title/author/ISBN/edition match; physical condition; price vs. Library Rates	Line-by-line check against the Purchase Order and publisher invoice; visual inspection for printing defects/damage; price verification against Government of Pakistan Library Rates.
Lot 8	GPU-Enabled Mobile Workstations	CPU/GPU model, RAM, storage, display and OS genuineness	Cross-check of system properties/BIOS/Device Manager against the OEM datasheet and PO specification; benchmarking software (e.g., CPU-Z, GPU-Z) to confirm processor/GPU model and VRAM; licence verification for pre-installed OS.
Lot 9	SDR Equipment & RF Accessories	Frequency range, channel count, FPGA/chipset match; RF accessory count & rating	Bench test with UHD/GNU Radio to confirm RF coverage, channel count and bandwidth; physical count and rating check of RF accessories against the Section 4 list; PTA-approval and warranty documentation check.

8. Transparency, Disclosure & Grievance Provisions

- Evaluation Report Disclosure (Rule 45): the Technical Evaluation Report shall be communicated to all bidders before the Financial Proposals are opened.
- Award Notice (Rule 45): the final evaluation result, with justification for acceptance/rejection of bids, shall be published on the University's and KPPRA's websites at least ten (10) days prior to contract award.
- Public Access (Rule 53): after contract award, documents related to the bid evaluation and award shall be made available for public access, subject to withholding of genuinely proprietary information with the prior approval of the administrative department.
- Grievance Redressal (Rules 43–44 and Section 35 of the KPPRA Act, 2012): an aggrieved bidder may appeal a disqualification or blacklisting decision to the Administrative Secretary of the procuring entity or to the Authority.