Request for Proposal

Implementation of Campus Management, Learning Management & Financial Management Solution

Last Date for Submission: November 03, 2022 at 10:00 AM

Bid Opening Date: November 03, 2022 at 10:30 AM

Rawalpindi Women University
Rawalpindi

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(Rs. 5,000/-)

Contents

This document is compiled to provide necessary information to the potential bidders about the organization that is requesting for proposals, its functions, circumstances that necessitate the assignment and how the whole process of award of work will be handled. The primary objective is to help the prospective bidders understand the pertinent needs and enable them to devise solutions that are capable of serving the purpose.

1. Introduction

The Rawalpindi Women University, Rawalpindi goes back a long way. Originally, it was first established as a degree college in 1950 in the heart of city, spread over 160 kanals, its aim was to impart quality education to women. With the passage of time & its commitment to excellence, the government deemed it fit to raise its status to a Postgraduate college in 1983. In 2010, 26 best colleges were selected with an aim to launch BS Honors program and this institution was on the top of the list. In 2014, it was selected as the Sub-Campus of the University of Gujrat. Since then, its functioning and capacity has been equal to that of any university in the province. The institution has been running 15 BS Honors, 16 Masters programs successfully.

The university has had a unique role in women education. While assiduously imparting theoretical knowledge, it has enthusiastically promoted sports and co-curricular activities for the wholesome development of the students. Since its establishment, it has won several trophies and accolades at the national and international level. The university stands way above many institutes in the country and is proud of a distinguished alumni in different walks of life.

Our Vision is to be renowned as a forward-thinking, enterprising and research-engaged University. We will be known for providing a high quality and cutting edge learning experience for research which has a real world impact and for being a catalyst in economic and social transformation. We will build on our existing strength to attain a reputation as a leader in the field of providing first-rate Undergraduate and Post-graduate education, leading-edge research, and committed public service.

Our Mission is to provide a high quality education at the Undergraduate and Post-graduate levels in order to prepare students to meet lifelong intellectual, ethical, social, and career challenges.

2. Background of the Proposed Assignment

Presently, University has partial automation mainly working in academics, admissions, visiting faculty hiring and scholarship management. Rest of the work is carried out manually. Manual processing of data makes it hard to force standards and improve the quality of the services across various units of the University. Processing data of faculty and students in traditional way is very time consuming and has very poor accuracy. The university has massive expense over printing cost that occur during communication among departments related to different tasks performed by different departments of the university. Information management, processing and its dispense require a central information technology solution that provide automated tasks facilitation to each individual at the university campus. With these limitation, to provide high quality education with the help of Technology, University, desires to develop a complete **University Management System (UMS)** that has the capability to automate its processes in order to improve the quality of its services.

Thus, University desires to assign the task of providing a well customized system that caters to the pertinent needs detailed in the Scope of Work or Design & Develop a system to meet these requirements to a qualifying firm interested in and capable of providing such a system.

The interested firms are advised to carefully read the Scope of Work and other sections of this document to understand the technical as well procedural requirements and submit proposals that are not only complete in all respects but are also compliant with the relevant procedures and regulations.

3. Scope of Work

The scope of **Campus Management, Learning Management & Enterprise Resource Solution)** comprises on the following major components:

a) Subscription of a web based UMS, either off-the-shelf or designed & developed from scratch, that fulfills the requirements outlined in this document,

b) Software implementation, configuration and customization according to the University requirements

c) Technical consultancy, advisory, training of the staff and necessary troubleshooting to ensure smooth transition from manual to completely MIS/ERP assisted operations.

To explain the requirements further, the above main components are further divided into various modules and sub-modules. The broader overviews of the required functionalities in the CMS & ERP are following:

- Complete CMS & ERP solution.
- Process automation and Monitoring.
- Multi-dimensional Reporting
- Excel integration.
- User friendly interface.
- Mobile Capabilities.
- Training and knowledge transfer.
- Train the trainers.
- Training Manuals (End User as well as administrative roles)

General Technical Requirements

- The system must be web-enabled.
- The software can be centrally maintained and administered.
- Built-in excel reporter and document tracking.
- Data import and export facility.
- Must have an access control module built-in to control input screens individually/group wise.
- Must have a complete audit trail system for each and every entry.
- Must have automated backup and recovery system.
- Must have built-in **Dashboards & Business Intelligence**.

The purpose of these details is to lay down the requirements of University in as much detail as possible and to clear any ambiguities; however, in some instances the automation may require creation of new processes or reengineering of the existing ones to facilitate the transition. The central objective would be to facilitate the University to automate its operations and business processes to increase efficiency, productivity, transparency, ease of reporting and facilitation to the stakeholders that include University administration, campuses, faculty, staff, students and society at large. These services must be capable to provide uninterrupted access to a large number of users especially during the admissions and results announcement. In this section some basic requirements are enlisted, detailed Scope of Work is available at annexure-VI.

4. Deliverables

In addition to the actual development/deployment/implementation of the desired solution following deliverables are expected from this project:

a) Detailed plan for the project execution

b) Requirements Specification Document(s) and their Design Document(s) based on Requirements Specification

c) Installation, configuration, customization, and integration covering the scope of project System's documentation in the form of installation and configuration guides, user and administration manuals etc.

5. Bid Submission Requirements

The objective of this part of the RFP is to provide bidders with the guidelines to enable them to submit their bids according to the specifications, format, order and manner compliant with the relevant regulations. Therefore, all the bidders must follow the below requirements while preparing and submitting their proposals.

a) The responses to this RFP will be accepted in accordance with the PPRA's Rule 38(a) "Single Stage - Two Envelope" procedure of open competitive bidding;

b) Two separate envelopes, one containing Technical Proposal and the other containing Financial Proposal, and clearly marked as such; further enclosed/sealed in a Single Envelope labeled with the name, address and contact number of the Bidder, and Title of the Assignment for which the bid is being submitted.

c) Bidders shall submit Three (03) copies (both hard and soft) of Technical Proposal and one copy of Financial Proposal.

d) The bid validity/ prices quoted should be valid for 120 days and extendable for another 30 days.

e) In exceptional circumstances prior to expiry of original bid validity, the university may request the bidders to extend the period of validity for a specified additional time period which shall in no case be more than the original bid validity period. The request and the response thereto shall be made in writing. A bidder may refuse the request without forfeiture of its earnest money. A bidder agreeing to the request will also be required to extend the validity period of its earnest money for the period of the extension.

f) Bidders shall submit a signed letter bearing their Official Stamp as per the format given in Annex I as a cover letter to the Bid/Proposal enclosed in the Technical proposal envelope. Bid/Proposal submitted without this cover letter shall be liable to rejection.

g) Technical proposals shall contain Company profile, location of branch offices, company experience in related field, technical staff details, projects completed & firm's references as per the format given in Annex II, equipment's technical details (brochures, etc.) mentioning compliance and properly highlighted all the compliance specification.

h) Bidders are required to follow professional way of submission of both Technical and Financial Proposals, for example, pagination of overall Technical proposal, tagging of various sections aligned with the RFP, strictly following the format defined in the RFP, table of contents, etc.

i) Bidders are required to fill and sign the Annex VI "Scope of Work", as provided in this RFP and must submit it along with Technical Proposal.

j) Bidders shall provide all the information in context as well as in sequence as set forth in Annex III "Technical Evaluation Criteria". Bidders must also provide filled Technical Evaluation Criteria as self-assessment (not binding on RWU) and provide references to page numbers of the proposal proving the claim of scores. Bids not following the format and sequence defined in this RFP are likely to be rejected.

k) The bidder must provide project execution plan complete with timelines in the Technical Proposal.

l) Bidders are required to submit their financial proposals in Pak Rupees (PKR) only, no variations in exchange rates (of any foreign currency) shall be permissible for any of the components/modules of the assignment.

m) Two (02) percent of the estimated cost must be enclosed with the bid as earnest money (refundable to the unsuccessful bidders) in favor of Treasurer, Rawalpindi Women University. Bid(s) without earnest money will not be considered. The earnest money should be in the form of Bank Draft/Pay Order/Call Deposit Receipt. No Crossed-Cheque/ Bank Challan/ Cash will be accepted.

n) Any bid not accompanied by the earnest money shall be treated non-responsive and rejected by the University.

o) The earnest money of unsuccessful firm(s) will be returned upon award of contract to the successful firm(s) or on the expiry of validity of bid whichever is earlier.

p) The earnest money of the successful firm will be returned when the firm has furnished the required Performance Guarantee and signed the Contract Agreement, where applicable.

q) A bidder must quote for complete solution as given in the Annex VI "Scope of Work", partial quotations or missed out items may lead to rejection of bid.

r) Product warranties, support services, software licensing and post-deployment support must be quoted as per project requirements.

s) Sealed proposals received thereafter will not be accepted.

t) RWU reserves the right to request submission of additional information from applicants in order to clarify/further understand aspects of technical proposal, if required.

u) RWU reserves the right to verify any information provided by the Bidders.

5.1. Technical Proposal

This document is governed by the procedure approved by RWU management. The technical proposal of eligible organizations will be evaluated using the required criteria attached as Annex-III and forms of technical proposal are given as Annex-II.

Technical proposal should contain;

a) Covering Letter on company letterhead.

b) Company Profile. (Including status, services offered, number of offices, credential & partnership status.).

c) Details of Technical Staff of proposed open source ERP / Odoo ERP Solution.

d) Copy of authorized dealership certificate.

e) Company registration document.

f) National Tax Number (NTN), and GST registration certificate.

g) Proposal for CMS & ERP Solution. Must also including:

   i. Implementation plan & Methodology.
   ii. Complete Hardware requirement in all aspects.
   iii. System maintenance service.
   iv. Customer support service.
   v. Project Timelines.
   vi. Post Go Live for 03 months
   vii. The ideal system will be web-based and work equally well with any modern browser such as Microsoft Edge, Firefox, Chrome, Safari.
   viii. The user interface should be consistent across various modules and subsystems.
   ix. The proposed system holds records for 7,000 students at present and capable of managing year on year growth.

5.2. Financial Proposal

a) The financial proposals of only eligible bidders with technically qualified specifications will be opened. Financial bid evaluation will be done on quality and cost basis of provision and installation of CMS & ERP solution given in Financial Bid Form "Annex–IV".

b) Commissions and gratuities, if any, paid or to be paid by bidders and related to the assignment will be listed in the Financial Proposal Form.

c) Financial proposal should contain;

    i.   Covering Letter on company letterhead.

    ii.   Development/Implementation cost.

    iii.   License Cost

    iv.   Documentation cost.

    v.   Annual maintenance cost details.

    vi.   Module-wise breakup cost details.

6. Selection Procedure

The objective of this section is to define the steps and procedures that shall be adopted for the award of the tender to the Selected Bidder. Following procedures will be followed for the Selection of the successful bidder.

i. In the first stage, only Technical Proposals will be opened in the presence of the bidders' representatives who choose to attend.

ii. Technical evaluation of the bids shall be based on the information provided in the respective Technical Proposals.

iii. As a part of technical evaluation, bidders will be asked to appear, on a prescheduled time, a Presentation/Demonstration/Proof of Concept (PoC) session.

iv. On the basis of technical evaluation, the Financial Proposal of only technically responsive bidders (qualified bidders) will be opened in the presence of their representatives if they choose to attend.

v. For the overall evaluation the weightage of Technical and Financial proposals shall be 70% and 30% respectively. The bid shall be awarded on Quality and Cost Based Selection (QCBS) procedure, taking into account the quality of proposal and cost of the Services.

vi. In order to qualify on Technical responsiveness, bidders must fulfill all the requirements as laid down in the Technical Evaluation Criteria and secure at least 70% of the overall weightage assigned to the Technical Proposal (a minimum of 70 points).

vii. From amongst the "Technically Responsive" bids the one found highest scorer for the cumulative value of both Technical and Financial scores (Score on Technical Evaluation + Score on Financial Evaluation), will qualify for the award of tender.

viii. After the "Award of Tender" is approved, a Contract on the stamp paper (the worth of stamp paper shall be determined as per the relevant rules) shall be executed between the University and the Selected Bidder.

ix. RWU will enter into a lump sum contract with the successful bidder. Further it would be extendable with the mutual consent of both the parties subject to satisfactory performance of the firm.

7. Terms of Payment

i. The earnest money of the successful bidder will be returned after the signing of the contract within 30 days.

ii. Bidders are required to define the assignment milestones and milestone based magnitude of work involved in the total work. This will form the basis for milestone based payment schedule, to be decided with mutual agreement.

iii. Payments against the Product Warranty Support shall be made after expiry of first year of any such warrantee.

iv. The successful Bidder will provide a performance security equal to 10% of the total cost of the solution in form of Bank Guarantee valid for at least one (01) year.

v. All payments shall be made through cross cheque in the Pakistan Rupees (PKR).

vi. Taxes will be deducted at source as per government rules at the time of payment.

vii. No payments will be made in advance.

viii. In case of delay a penalty not exceeding 10% of the total amount of the contract @ 1% for each week of delay as per agreed project plan will be imposed. The amount of penalty will be deducted at source while making the payment.

8. Contract Terms

8.1. Arbitration

All disputes or differences, whatsoever, arising between the two parties out of or relating to the interpretation, meaning and operation or effect of this contract or the breach thereof, shall be referred to the Grievance Redressal Committee constituted for the Purpose and resolved through mutual consultation and negotiation. The recommendations will be forwarded to the Vice Chancellor, RWU and the decision of VC will stands final.

8.2. Source Code & Updates

i. The vendor should hand-over the source code of all the systems/ module developed/upgraded/integrated exclusively for the RWU.

ii. The vendor should also provide the development tools, technologies, APIs etc. for future enhancements by the RWU.

iii. The vendor should provide updates of any new release from time to time during the agreed period.

iv. The vendor should impart training and transfer skills for onward customization and maintenance.

8.3. Service Levels

The vendor should specify the service levels for:

i. Fixation of critical and non-critical bugs and errors

ii. Response to any queries

iii. Time required for maintenance and upgrades

iv. The vendor should also quote the technical support services charges after the expiration of free services.

8.4. Availability

Software solution should be available for internal users 24 x 7 x 365 with minimal downtime.

8.5. Training Manuals

i. Vendor should provide online help and user manuals covering each option for all the systems and modules discussed above.

ii. Vendor should provide installation manual.

iii. Vendor should provide technical documents such as data dictionary, schema, system architecture, DFDs, class diagrams and other necessary documentation for the customization of software.

iv. All the manuals discussed above should be updated time to time by the vendor.

8.6. Trainings

The vendor should impart training to the RWU project team and the end-users by taking the following initiatives:

i. Provision of hands-on training to the end-users to allow them to test key processes.

ii. Train the trainer of the RWU for their capacity building.

iii. Train and empower the technical team so that they can add new modules, enhance, and customize the existing software according to their needs.

8.7.   Confidential Information

The RWU shall be the First Party and the Service Provider shall be the Second Party. The Firm/Vendor (Second Party) shall have to acknowledge and agree to maintain the confidentiality of Confidential Information provided by the RWU (the "First Party"). The Second Party shall not disclose or disseminate the First Party's Confidential Information to any person without proper permission of the First Party. In addition, the Second Party-

- Shall take all necessary steps to prevent unauthorized access to the First Party's Confidential Information.

- Shall not use the First Party's Confidential Information or authorize other persons or entities to use the First Party's Confidential Information, for any purposes other than in connection with performing its obligations.

- Shall require all persons and entities that are provided access to the First Party's Confidential Information, to execute confidentiality or non-disclosure agreements.

8.8.   Non-Disclosure

The firm/vendor (Second Party) and their personnel shall not, either during the term of the contract or after expiry of this contract, disclose any proprietary or confidential information relating to the services, contract, terms, prices or the client's business or operations details without the prior written consent of the RWU (First Party).

9. General Requirements

9.1.   System Architecture

- Software should be preferably be an open source i.e. .Net Core technologies, Odoo, etc.
- The systems should be platform independent and compatible with all the leading Operating Systems such as Microsoft, Linux, etc.
- Systems should be web based and can be accessible from anywhere.
- The System should be compatible and responsive.
- System should have unified architecture such that any setup student, employee, department etc. created in one module should be accessible to other modules.
- All systems/ modules should be well integrated with each other to share financial effects and transaction references.

9.2.   System Security

- Systems should have secure communication where required, especially the applications developed/deployed for front end communication.
- All the sensitive information should be stored in encrypted form in the database (System should be compliance GDPR).

9.3.   Data Migration

- Vendor should submit data migration/integration plan for existing software to the newly acquired system.
- The vendor should only execute the migration/integration plan only approved by Focal Person/ Module Coordinator.
- The vendor should verify the migrated data with the assistance of the Focal Person/Module Coordinators.

9.4.   Source Code & Updates

- The vendor should hand-over the source code of all the systems/ module exclusively for the RWU.
- The vendor should also provide the development tools, technologies, APIs, etc. for future enhancements.

- The vendor should provide updates of any new release from time to time during the agreed maintenance period.
- The vendor should impart training and transfer skills for onward customization and maintenance.
- The original source code of customization made by the vendor shall be the property of the RWU. The RWU shall have full access & complete rights to modify and enhance the software time to time according to its requirements.

9.5. Service Levels

The vendor should specify the service levels for:

- Fixation of critical and non-critical bugs and errors

- Response to any queries

- Time required for maintenance and upgrades

- The vendor should provide 1-year technical support services after the successful deployment of the software

- The vendor should also quote the technical support services charges after the expiration of free services.

9.6. Availability

- Software solution should be available for users 24 x 7 x 365 with minimal downtime.

9.7. Training Manuals

- Vendor should provide help and user manuals covering every option for all the systems and modules discussed above.

- Vendor should provide installation manual.

- Vendor should provide technical documents and other necessary documentation for the customization of software.

- All the manuals discussed above should be updated time to time by the vendor.

9.8. Trainings

- The vendor should impart training to the RWU's project team and the end- users by taking the following initiatives:

  - Provision of hands-on training to the end-users to allow them to test key processes.

  - Train the operational users for system operations, administration and capacity building.

  - Train and empower the programmers so that they can add new modules, enhance and customize the existing software according to the needs of RWU.

9.9. Deployment Model

- The vendor should quote only on premises solution or online specified/on cloud with the ownership of RWU. The vendor should not propose Software as Service (SAS) model. It will not be considered and subject to the rejection of the proposal.

10. Clarifications and Amendments

Interested bidders may request, in writing, for clarification of any of the provisions of the RFP document no later than five (05) days before the last date for proposal submission. Any request for clarification must be sent in writing (by courier, facsimile, or email) to the RWU's official contacts indicated below. A query will, generally, be responded using the same means through which it is received and a copy of the response (including the query but without identifying its source) will also be made available to the other interested bidders.

The address for requesting clarifications is:

Mr. Tanzeel ur Rehman **Network Administrator** Rawalpindi Women University, 6th Road, Satellite Town, Rawalpindi **Phone:** +92 (51) 9290903 **E-mail:** tanzeel@rwu.edu.pk	Yasir Mumtaz **Database Administrator** Rawalpindi Women University, 6th Road, Satellite Town, Rawalpindi **Phone:** +92 (51) 9290903 **E-mail:** yasir.mumtaz@rwu.edu.pk
	Mr. Abdul Khaliq **Additional Director (ITS)** Rawalpindi Women University, 6th Road, Satellite Town, Rawalpindi **Phone:** +92 (51) 9290903 **E-mail:** abdulkhaliq@rwu.edu.pk

Annex I: Proposal Submission Form

(To be submitted as Cover Letter with the Proposal)

The Registrar
Rawalpindi Women University Rawalpindi (RWU)
6th Road, Satellite Town, Rawalpindi,
Pakistan

Sir

We, the undersigned, offer to provide the solution along with required services for the assignment "**Campus Management, Learning Management & Enterprise Resource Planning Solution**" in accordance with your Request for Proposal dated _____, and our proposal is enclosed herewith. We, hereby, submit our Proposal, which includes both the Technical and Financial proposals, sealed in separate envelopes, along with all the necessary attachments.

We understand that you are not bound to accept any of the proposals you receive and that you reserve the right to accept or reject any offer, and/or to annul the bidding process and reject all proposals without assigning any reasons or having to owe any explanation whatsoever.

We also understand that the decision of the Technical Evaluation Committee shall be final and cannot be challenged on any ground at any forum and that the said committee or the University or any office holder of the University will not be liable for any losses or damages that may be caused to this bidder as a consequence of the decision on our proposal.

Yours' sincerely

Authorized Signature:
Name and Title of the Authorized Signatory:
Name of the Firm:
Detailed Contacts:

Annex II: Firm's References

(To be filled by the bidder for each mentioned experience and to be attached with the technical proposal for evaluation)

Please provide details of the relevant Services/Assignments carried out in the past (starting from the most recent) that Best Illustrate Qualifications/Experience of your firm.

Using the format below, provide information on each reference assignment for which your firm, either individually or as a partner company within an association, was legally contracted. Please attach a copy of completion certificate issued by the referenced organization, without which the reference claim may not be considered.

Assignment Name:		
Client's Name/Title		
Client's Address		
Key Professional Staff Provided by Your Firm	Name	Responsibility
Duration of assignment	(Total Man Months):	
Timeframe of assignment	Start Date:	Completion Date:
Apprx. Value of Project		
Description of Project		
Description of Solution Provided		

Annex III: Technical Evaluation Criteria

S. No.	Attributes	Reference Page # for Documentary proof
Part A) Mandatory		
1.	Registered firms with Income Tax Certificate and GST Number and year of registration/ incorporation in Pakistan (Active status with FBR)	
2.	Affidavit on Stamp Paper (that the firm has not been blacklisted and not in litigation with any of the private, Govt., Semi Govt. and Autonomous Body)	
3.	At least Five (05) years of relevant experience Sale , Service , Implementation of ERP/ CMS/ LMS (Proof of company being in operation for at least 3 years in Pakistan in relevant business)	
4.	Project Execution/ Implementation Plan (Timelines, Resources, dedicated Staff, Shared Staff, etc.)	
5.	Must be Gold or Silver Partner for the proposed solution implementation since least Two (02) years in Pakistan.	
6.	Successful Implementation Certificates of deployment of open source solution or furnish the references, at three (03) universities in Pakistan.	
7.	Participating firm should have local presence have office in Rawalpindi/ Islamabad.	
8.	Participating firm must quote complete solution in one bid (CMS, ERP & LMS) partial bids will not be accepted. And cover implementation of all the modules mentioned in the Scope of Work, clearly mention any additional requirement, in the bid.	
9.	Minimum Rs. 20 million Annual Turnout (Last 3 Years Audited Financial Reports)	

S. No.	Attributes	Max. Score	Weight age	Criteria	Reference Page# Documentary Proof
Part B) General Evaluation - Corporate Profile					
1.	Company in Operations (No. of years)	10	10	No. of year of Bid in consideration/ Maximum Year amongst all of the Bids * 10	
2.	Financial Strength (last Two years)	10	10	Turnover of Bidder in consideration/ Maximum Turnover amongst all the Bidders * 10	
3.	Company Association with Product Principal	10	10	No. of year of Bid in consideration/ Maximum Year amongst all the Bids * 10	
	Relevant Technical Staff				
4.	Quoted solution certified professionals (Documentary proof and Certification Copy required)	10	10	No. of Certified Resources of Bid in consideration/ Highest No. of Certified Resources amongst all bids * 10	
5.	Quoted database developer / Administrator/ designer (Documentary proof and Certification Copy required)	10	10	No. of Resources of Bid in consideration/ Highest No. of Resources amongst all bids * 10	
	Relevant projects				

6.	Firm has **completed Similar Projects** in Pakistan (based on deployment of Campus Management Solution (Documentary proof and references required)	20	20	No. of Projects of Bid in consideration/ Highest No. Projects amongst all bids * 20	
7.	Firm has **CMS Projects In hand** nationally (based on quoted product. (Documentary proof and references required)	20	20	No. of Projects of Bid in consideration/ Highest No. Projects amongst all bids * 20	
8.	Firm has **Projects In hand (**Maintenance Contract for development / maintenance of Campus Management Solution). (Documentary proof and references required)	20	20	No. of Projects of Bid in consideration/ Highest No. Projects amongst all bids * 20	
Sub Total		**110**			
Weight of the Part (B) 10% and firm's Score for this part will be calculated using following formula: **Firm's Score = Marks Obtained by Firm in Part (B)/ Total Max. Marks of Part (B) * 10**		**10**			
Part C) Product Technical Strength					
Product Market Share and Market Resources					
9.	Quoted Product/ solution **(CMS) based Projects in Pakistan** (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects of all the Bids * 10	
10.	Quoted Product/ solution **ERP Projects completed in Academia.** (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects of all the Bids * 10	
Product Third Party Rating					
11.	**Product (Security and High Availability Product Portfolio)** (Documentary proof and references required)	10	10	No. of security features of Bid in consideration/ Highest No. Applications amongst all the Bids * 10	
12.	Quoted Product projects in integration with Learning Management System & Enterprise Resource Planning (Documentary proof and references required)	10	10	No. of Projects of Bid in consideration/ Highest No. Projects of all the Bids * 10	
Product Features Rating					

13.	Web Interface Completeness in quoted solution	20	20	Complete Web Interface for all function (Administrator, Designer, End User, Public User)	
			10	Complete Web Interface for (Designer, End User, Public User) and for Administrator GUI based application	
			5	Complete Web Interface for (End User, Public User) & for Administrator and Designer GUI based application	
14.	Task-oriented navigation (automation features)	10	10	A task-oriented Graphical navigation to allow users to use business process based navigation to complete tasks.	
15.	Web Customization and Migration tasks	10	10	Online Customization and Editor to Customize dynamic layouts/ CSS Sheets	
			7	GUI Based WEB Customization Tool for Dynamic layouts/ CSS sheets	
			4	Manual CSS Sheet/ Reports Editing and Offline customization with separate tool	
16.	Concrete plan for Disaster Management plan	10	10	Detailed plan for Disaster Recovery	
17.	Compliance to the Features desired in this Scope of Work	30	30	No. of Features complied/ Total No. of Features listed in Annex VI * 30	
Sub Total		**120**			
Weight of the Part (C) 20% and firm's Score for this part will be calculated using following formula: **Firm's Score = Marks Obtained by Firm in Part (C)/ Total Max. Marks of Part (C) * 20**		**20**			

Part D) Operation and Maintenance

		Corporate Profile			
18.	Dedicated Resources deputed to run O&M	20	20	Min. No. of resources among all bids/ No. of resources of bid in consideration * 20	
19.	HR dedicated for the O&M (Consultants)	20	20	No. of HR of Bidder in consideration/ Highest No. of HR amongst of all Bidders * 20	
20.	HR dedicated for the O&M (Engineers)	20	20	No. of HR of Bidder in consideration/ Highest No. of HR amongst of all Bidders * 20	
Sub Total		**60**			
Weight of the Part (D) 20% and firm's Score for this part will be calculated using following formula: **Firm's Score = Marks Obtained by Firm in Part (D)/ Total Max. Marks of Part (D) * 20**		**20**			

Part E) Project Execution

21.	Project Execution Plan	30	30	Detailed low level project execution plan enlisting all the project activities (dependent, critical etc.) with assigned resources and timelines.	

				High level project plan covering only the major activities while assigning the resources.	
			15		
22.	No. of Days required to install and commissioning the Base product ERP	10	10	Details provided	
23.	No. of Days required to install and commissioning all features of ERP	10	10	Details provided	
24.	No. of Days required to install and commissioning the Base product CMS & LMS	10	10	Details provided	
25.	No. of Days required to install and commissioning all the features of CMS & LMS	10	10	Details provided	
Sub Total		**70**			
Weight of the Part (E) 20% and firm's Score for this part will be calculated using following formula: **Firm's Score = Marks Obtained by Firm in Part (E)/ Total Max. Marks of Part (E) * 20**		**20**			
Part F) Presentation/POC					
26.	Distinguished Features of product	20		To be assigned by Technical Evaluation committee	
27.	Implementation Firm Value Added Features of project	20		To be assigned by Technical Evaluation committee	
28.	Project Roll out Methodology and Phasing	20		To be assigned by Technical Evaluation committee	
29.	Solution Design/ deployment Methodology	20		To be assigned by Technical Evaluation committee	
30.	Solution Security and High Viability Design / Methodology	20		To be assigned by Technical Evaluation committee	
Sub Total		**100**			
Weight of the Part (F) 30% and firm's Score for this part will be calculated using following formula: **Firm's Score = Marks Obtained by Firm in Part (F)/ Total Max. Marks of Part (F) * 30**		**30**			
Firm's Total Score = Part (B:F)		**100**			

Note: All mandatory requirements mentioned at Part-A, are to be fulfilled by the participating bidders. All bids will be evaluated on basis of above given evaluation criteria and the bidders who do not obtain 70% marks as per above mentioned evaluation criteria will be considered as technically non- responsive bidders and will not be taken into consideration for further proceedings.

Annex IV: Financial Evaluation Criteria

Weightage of the financial scoring is 30% and the score of a bidder will be calculated using the following formula.

$$Bidder's\ Score = \frac{Value\ of\ the\ Lowest\ Bid}{Value\ of\ the\ Bid\ in\ Consideration} \times 30$$

Note:

The final decision will be based on the Overall Evaluation achieved by adding the scores of Technical and Financial proposals.

Annex V: Bill of Cost

Details of cost in PKR

S. No.	Item	Per Unit Cost (Without Taxes)	Quantity	Total cost without taxes	Taxes	Total cost with all applicable taxes
1.	Licensing Cost, if any					
2.	Complete solution implementation/ installation, customization and training cost					
3.	Annual fee for fully managed Service Level Agreement (SLA)					

Total Cost of Financial Proposal (Lump Sum) **in Figures [Without taxes]**	
Total Cost of Financial Proposal **in Words [Without taxes]**	
Total Cost of Financial Proposal (Lump Sum) **in Figures [With all applicable taxes]**	
Total Cost of Financial Proposal **in Words [With all applicable taxes]**	

- In case of discrepancy between the cost/ price quoted in Words and in Figures, the lower of the two will be considered.
- If there is a discrepancy between unit price and total price in the submitted bid which is obtained by multiplying the unit price and quantity, the unit price shall prevail and total price shall be corrected. If there is a discrepancy between the words and figures, the amount in words shall prevail. If there is a mistake in addition/ totaling, that shall be corrected. If the bidder does not accept the corrected amount of bid, his bid shall be rejected and his Earnest Money forfeited.

Annex VI: Scope of Work

Campus Management System (CMS)

The salient features of the module should include but not limited to the following:

- Facility to define student information such as name, contact number, email address, mailing address, academic records and other details (citizenship, ethnic information, CNIC, gender, domicile). Facility to maintain multiple campuses and affiliated colleges, addresses, contact information, higher management profile, etc.
- Facility to define different fee structures.
- Facility to define quota rules.
- Facility to define academic rules for admission, enrollment, exams, double degree, semester freeze and un-freeze, semester repeat, attendance, grading system and other rules and scenarios defined in the prospectus and university directives.
- Facility to define scholarship programs, donors and criteria for awarding scholarships.
- Facility to setup faculties, their departments and affiliated colleges.
- Facility to define affiliated colleges and their departments
- Facility to setup admin staff such as VC, Deans, Chairpersons, Directors, Addl. Directors, Dy. Directors, Assistant Directors, Registrar, Addl. Registrar, Dy. Registrar, Assistant Registrar, lab Incharge, superintendents, etc.
- Facility to maintain bank accounts for fee collection.
- Facility to maintain Semester and Annual Academic Programs and their details such as number of years, number of semesters, regular and summer semester, maximum credits hours, degree duration, batches with the following information:-
- Batch Code and Name.
- Years to pass such as MA/ MSc previous year, MA/ MSc final year, BA/BSc 3rd year, BA/ BSc 4th year.
- Maximum Credit Hours to Pass.
- Number of Core Credit Hours to Pass.
- Number of Major/Minor Credit Hours.
- Date of Admission.
- Registration Number Template if any.
- Passing Marks of a Course.
- Batch Timings (Morning or Evening etc.).
- Number of Probations.
- Probation starts CGPA and ends CGPA.
- Any Specialization is offered.
- Any Thesis/Project is offered.
- Any other setup required for the processing of CMS related transactions.

1. Admission Module

The salient features of the module should include but not limited to the following:

The module starts at the stage when a student applies for the online admission and ends when the student is selected in a program.

- Facility to manage notified admission committee in the system for the period.
- Facility to allow students to apply for online admission. In case of receiving manual

application, the concerned admission staff can enter the credentials of students such as particulars of students registered for different programs.

- Facility to verify applicants' data based on criteria defined in the system.
- Facility to define merit including quota for district, provinces, marks of previously attained qualifications such as Matric, Secondary, Bachelor and other qualifications possessed by the candidate.
- Facility to publish merit list and send alert to successful candidates for interview and pay admission fee and submit their credentials online.
- Facility to tag the student who qualifies the interview and document verification process.
- Facility to generate notification to the successful candidates to deposit fee as per the schedule.
- Provision to apply for other facilities offered by the university such as transport, hostel, etc.
- Facility to cancel, suspend student admission based on the rule defined in the system such as low GPA, misconduct, non-payment of dues etc.
- Facility to conduct and maintain Hafiz-e-Quran/ Disable test/ interview records.
- Facility to re-admit a student whose admission has been cancelled due to non- payment, absence or any other administrative issues.

i. Requirements for applicant portal:

User Interfaces for data acquisition should be user friendly / understandable / divided into sections along with proper instructions and validation checks. In addition following controls needs to be implemented:

- The program offered from OAS must be removed automatically on last day to apply (according to working session from admin panel).
- App ID / Tracking ID (counters) must be configurable from admin panel side preformatted with degrees (BS, Lateral Entry, provision of MPhil, MS and PhD) and programs (morning/evening/weekend).
- There is option to add/update Province/Domicile details on admin side.
- Total number of options/choices in which an applicant can apply at maximum should be configurable from admin side as per decision for active admissions for each program.
- For example: Options/Choices should be configurable at Degree/Program level, like for MSc it will be 3 and for MPhil it will be 2 and for BS it will be 6.
- Data Summary form for each Program should be configurable from admin side.
- Applicants from previous admission session (not selected in any program) should be able to apply in next active session instead of creating new profile and fill out the complete form.
- Important dates to display at Student Application Portal should be automatically fetch from Admission Session setup e.g. last date to Apply, Verification Dates, test dates, application processing fee submission last date, leftover documents upload etc.
- After due dates, data edit option should be disabled. Whereas in special cases admin should have the access to unlock any specific student account to enable data edits option.
- For example: For left over documents upload, academic information update in case of late result announcement from any board or test information such as LAT/GRE etc.
- Responsive Layouts.
- Quota Scheme Implementation as per defined rules in admin panel:
  - Provincial Quota (AJK / BAL / FATA / KPK / PUN / SNDR / SNDU / SELF)
  - Reserved Seats (Special Persons/ Armed Forces / Minorities / Foreigners / Sports / Employee Daughter etc.)
- Quota Scheme Selection Limitations as per defined rules in admin panel:
  - For example: For BS it will be 6 (3 Regular Provincial and 3 Self at max).

- Automated/Manual SMS/Email/Push massages sending facility as per defined templates, to communicate with applicants for application submission/verification/rejection, test/sports trial schedules, selection, and other important announcements etc.
- Data Summary Sheet/Challan form/Test slip must be in PDF format and can be downloadable along with HTML.
- Few department of MPhil have specialized fields as well.
  - For example: MPhil Chemistry has three major fields such as Organic and In-Organic Chemistry. These departments are requested when applicant opt option of MPhil Chemistry, applicants should be able to select there field of specialization as well.

ii. Requirements of merit lists:

- Facility to configure Merit List generation process (Provincial Quota/Reserved Quota) as per ***RWU Admission business rules/policy*** (centralized/decentralized) ***changes time to time***.
- Facility to configure eligibility Degree/Course wise
- Facility to configure Merit Calculation Formulas for each offered programs
- Facility to configure Regional Quota Scheme.
- Facility to configure Regional Quota seat allocation.
- Facility to configure Reserved Seat Quotas
- Facility to configure Reserved Seat Quotas seat allocation
- Facility to configure Percentage/Division Eligibility requirements departments/program wise.
- Facility to configure Age Eligibility (max/min age for degree application)
- Facility of Admission Test Management
  - Facility to configure Test score eligibility (max/min Scores for each degree e.g. NTS, GRE etc.).
  - Facility to import/export bulk Test scores against defined/configured test.
- Facility of Admission Fee Management
  - Facility to configure admission processing fee (programs/options/choices wise) left over document fee etc. for local/in Pakistan foreigners/overseas foreigner applicants.
  - Admission processing and related fee verification facility (manual/bank scroll/host to host integration etc.)
  - Facility to configure challan templates
- Application verification/data correction facility to Admission Section.
- Facility to check either applicant is dropped/seized previously from university in same program/degree in which he/she applied and should not be included in any merit list generation process of the same program/degree.
- Facility of Merit List reversal process at previous state.
- Facility of Direct admission placements and automated seat adjustment.
- Facility of admission cancellation and automated seat adjustment as per university rules.
- Proper tracking/logging of records during merit list generation process.
- Facility to generate an output file of each merit list generation process for troubleshooting/tracing.
- Facility for all departmental users to manage the joining, document verification and generation of first semester challans and automated updation of seat allocations of relevant department.
- Facility to manage student registration that includes allotment of student registration

number as per defined format department wise.

iii. Requirements for reports:

Reports should be exportable in Excel, PDF, WORD and other formats. Following reports are needed:

- Departmental wise Aptitude test report.
- Merit-wise departmental report. (for single department as well as for all departments)
- Merit-wise report to upload on University website.
- Merit List Joining Report.
- Shift/Transfer Cases Report.
- List of Applicants previously dropped/seized from university in same pro- gram/degree in which he/she applied
- All reserved seats department wise, and reserved quota wise, and aggregate wise.
- Provisional List
- Lowest/Maximum aggregate List
- Applicant complete record for data verification (for DEOs)
- Number of applicants/Joining/Vacant seats statistics report. (After each merit list displayed).
- Finalized Confirmed Students report
- Registration Report department wise
- Applicant Top Priority Report (Faculty/Department wise).
- Top priority Regular/Self (Faculty/Department wise).
- Domicile wise report (Faculty/Department wise).
- Domicile Regular/Self wise report (Faculty/Department wise).
- Domicile Gender wise regular/self-wise report.
- Applicant gender wise self/regular report.
- Applicant gender wise report.
- Self to Regular conversion report.

iv. Requirements for hostel challan generation (fresh apply, first semester students only)

- Applicant will submit first semester fee at bank and system acknowledge the same
- As soon fee paid acknowledged, Hostel apply link will be visible on applicant portal.
- Student applies for hostel from the said link
- System will maintain first come first serve list
- Hostel list for approval will be displayed to Hostel head in ascending order
- As soon any request is approved then hostel challan will be visible to student at his/her admission portal.
- Applicant will submit fee and confirm his/her seat
- System will provide reports
    i. Confirm seats
    ii. Available seats

2. Enrollment Module

The salient features of the module should include but not limited to the following:

- The module starts at the stage when a student gets admission in a program and ends when

the student is enrolled in a program.

- Facility for the student to select courses offered in a semester through the system upon new admission.
- Facility to select/Drop/Swap courses for new semester by the students.
- Facility to define and implement course selection rules as defined in the prospectus such as number of credit hours, eligibility of re-selection of repeat courses, pre- requisite courses selection etc.
- Facility to review enrollment list/ course selection chose by the students.
- Facility to assign CMS Registration number for record tracking.
- Facility to maintain study schemes in which students have been enrolled.
- The system should have the facility to allocate courses from multiple study schemes to students where a student can select a course from new scheme though she has been enrolled to old study scheme.
- Facility to freeze/Drop semester or course and generation of alerts to all the concerned departments.
- Facility to cancel admission of student
- Facility to block/stop enrollment if any flag such as unpaid fee, unfair means, disciplinary cases, and admission cancelled, student ceased etc.
- Facility to setup batch/ session to be attached with each student.
- Facility to close enrollment of student at the completion of study programs

3. Class Scheduler Module & Workload Calculator

The salient features of the module should include but not limited to the following:

- Facility to define parameter such as number of students per discipline, number of students per course in each discipline, number of labs per course, number of classes per week, teachers' maximum load, section per course, etc.
- Facility to define number of rooms and their usage (classrooms, labs, etc.)
- Facility to assign faculty members to the subject/ course
- Facility to define calendar such as shifts (morning, afternoon, night etc.), working days (Monday, Tuesday, etc.) and class duration (1 hour, 2 hours, etc.)
- Facility to define common subject combination into a single class.
- Facility to define lecturer day preference (Monday, Tuesday, etc.), lecturer time preference.
- Facility to support cancelation, replacement and relocation of classes.
- Based on the above parameters, the system should auto generate timetable with clash, checking for classrooms, faculty members and students.
- Facility to generate various reports based on timetable.
- Facility to assign workload to faculty
- Facility to assign additional workload
- Facility to generate actual workload and extra workload
- Facility to assign separate components of similar course such as lab to one teacher and lecture to other teacher

4. Academic/ Event Calendar Module

The salient features of the module should include but not limited to the following:

- Facility to create semester creation with semester start date and end date.
- Facility to add course enrollment/change/drop start and end date for students
- Facility to enrollment verification date for staff (optional)

- Facility to setup semester fee calendar/due dates
- Facility to enter thesis submission date with/without fine
- Facility to enter course/ semester add/ drop deadline date.
- Facility to enter tentative examination (mid-term & final-term) date sheets.
- Facility to enter result submission date.
- Facility to enter tentative result declaration date.
- Facility to enter convocation dates.
- Facility to enter dates of other non-academic events such as sports event, job fairs, drama & debate competitions, naat & qirat competitions, or any other external event.
- Facility to define and generate alerts of the upcoming events.

5. Examination Module

The salient features of the module should include but not limited to the following:

- Facility to propose tentative semester wise date sheet by Controller of Examinations.
- Facility to publish final date sheet on university website as well as on student portal after getting approvals.
- Facility to schedule exam and resources such as seating capacity, supervisory staff, etc.
- Facility for the faculty/ Exam section to setup scoring or grading scheme/multiple scoring or grading scheme (defining rules for result later on courses or in progress courses, for each course such as Weightage of mid-term exam, final-term exam, assignments, quizzes, class participation, etc. to compute GPA.
- Provision to adjust score based on absolute marking.
- Facility for the faculty to upload scores of mid-term, final-term, quizzes, assignments, etc.
- Facility to verify and approve award list at different levels (HOD, etc.) compiled by different faculties. The award list contains the results of mid and final terms exam and score of assignment obtained by the students.
- Online hosting of final results and transcript (Result card semester wise, Result notices, session and terminal result reports, degree/ cutoff degree as per defined rules) so that the student can view or print result from student web portal.
- Facility to constitute committee of external examiner, supervisor and other member to examine the thesis submitted by students and to conduct viva.
- Facility to attach each batch of students with the committee, supervisors, etc.
- Provide an online access to supervisor/ exam section to record result of thesis and viva to prepare award list (results).
- Facility to handle students migrated to and from other institutes.
- Facility to handle course equivalency of migrated students.
- Support/Flexibility for change in university semester by laws.
- Inventory of answer sheets, management
- Report management of all relevant reports related to exam

6. QEC Module

The salient features of the module should include but not limited to the following:

- Facility to define custom surveys such as teacher's evaluation, course evaluation, etc. as required by the HEC or any other bodies.
- Facility to define rating scales, score and Weightage of questions.
- Facility to host survey online and invite audience to participate through email / SMS.

- Facility to produce analysis of survey data through Business Intelligence (BI) tools.
- Facility to specify time for collecting feedback and subsequent reminders.
- Facility to export data of the collected feedback in CSV/Excel/ or any other format.
- Facility to generate status of pending and completed feedback.
- Accreditation and assessment processes & procedures for new/ existing degree program
- Provision of data for Universities / Departments / Programs Ranking to HEC and QS, THE etc.
- Data provision for Self-Assessment of university programs with the purpose of Quality Enhancement.
- Data provision for Institutional Performance Evaluation.
- Maintenance of record relevant to Plagiarism/ Turnitin software.

7. ORIC Module

The salient features of the module should include but not limited to the following:

- Facility to maintain and track faculty research proposals information.
- Facility to maintain and track CPD activities
- Facility to track incubates information.
- Facility to track seminar and conferences information
- Facility to track consultancy information provided by faculty members.

8. External Linkages Module

The module should contain following salient features, but not limited to the generation of following reports/activities:

- Details of all MoUs.
- Access of relevant departments/ focal persons with the provision of multiple departments to access MoU and to submit their continuous input of operational activities as per MoUs.
- MoU-wise report generation including assigned and achieved tasks.
- Provision of detailed information of foreign students.
- Details of the student exchange program.
- The External Linkages department will explore the national/international scholarships/ avenues for students and will keep posting the relevant information at website. Report shall be generated from the website.
- Provision of reports on seminars, conferences, consultative/training sessions.

9. Hostel Management Module

The salient features of the module should include but not limited to the following:

- Facility to manage notified hostel supervisory committee for a period.
- Facility to manage master data of hostel buildings, rooms, mess and stores.
- Facility to manage hostel management supervisors and staff
- Facility to manage hostel admissions date for the term/semester
- Facility to manage hostel applicants applied through their portal at the time of admissions or anytime later during the degree.
- Room allotments, shifting, cancellations and suspension/holding for a period.
- Facility to manage hostel mess and billings (daily/monthly/semester).
- Facility to manage the hostel fee installments requests
- Facility to manage general hostels store stocks and inventory of each room.

- Facility to manage Hostel Check in/out data along with guardian details.
- Facility to manage Hostel students left records along with clearance.
- Facility to manage Hostel Students fee records i.e. Full fee /Installment fee exemption for each semester.
- Facility to manage Hostel Students Medical issues records.
- Facility to manage Vendors Records, Hostel Stock for food items & miscellaneous items, Stock Purchase order /Issue records.
- Facility to manage Hostel Guest records for specific period.
- Facility to manage Hostel Students Cards.

10. Scholarship Management Module

The salient features of the module should include but not limited to the following:
- Facility to define different scholarship programs offered by different bodies i.e. HEC, USAID, OGCDL, Faculty Development Program, Overseas Scholarship, etc.
- Facility to define criteria for shortlisting of applicants for each scholarship program.
- Facility to record and process request raised by the donors i.e. HEC for the advertisement of scholarship slots for submission of scholarship applications.
- Facility to host online application form on the RWU website to collect application from the applicants who wish to avail scholarship.
- Facility to attach supporting documents with the application form.
- Facility to view the application in tabular form and assign scores based on the credential provided by the applicant.
- Facility to shortlist the applicants based on the scores and rules defined by the University.
- Provision to plan interview sessions with the applicants who qualify for next round of interview and send call letter to the student for interview.
- Facility to enter score of applicants during the interview session.
- Provision to prepare merit list and waiting list of shortlisted applicants.
- Provision to record award of scholarship for qualified applicants.
- Facility to record invoice in the system to release funds from the donor. The system should be integrated with Receivable module to post the financial effect of invoice
- Facility to record the receipt against invoice through Cash Management module discussed above.
- Facility to disburse payment to the applicant through the Cash Management module or adjust the amount against fee Challan generated from the Student Financial module of CMS.
- Facility to generate the scholarship grants utilization report from the accounting system.
- Facility to enter closing of scholarship award upon successful completion of the program by the student.

11. Attendance Module

The salient features of the module should include but not limited to the following:
- Attendance module should be integrated with the electronic machine such as bio- metric or Radio-Frequency Identification (RFID) machine.
- System should maintain the attendance of students and faculty members of each class.
- Facility to rectify data fetched by the attendance machine by the authorized personnel.
- Facility to integrate with the Timetable & Class Scheduler module to record class- wise attendance of teachers and students.

- Facility to record the check-in and check-out times of teachers, students, employees, etc. at entry and exit points of the university through swipe cards and electronic barrier gates (i.e. tripod, flap, etc.).

12. Transport Management Module

The salient features of the module are as under but not limited to the following:
- Transport Committee management for the period
- Transport Section budgets management
- Vehicle Management
- Mileage tracking
- Fuel Consumption Monitoring
- Vehicle Repairs/Maintenance Monitoring
- Vehicle Issuance management
- Vehicle Requisition management (e.g. for Trips, Official Meetings and employees personal events etc.)
- Buses routes and timings management with the provision to display on students and employees dashboards.
- Relevant reports and analysis
- Any other requirements by the transport section of the University

13. Library Management System Module
- Integration with KOHA Open Source Library Management System

14. Degree/ Transcript Module

The salient features of the module should include but not limited to the following:
- Maintain student application status for issuance of required certificate or degree
- Maintain stock and movement of blank copies of transcripts, provisional certificates, degrees and distinction certificates
- Maintain issued Transcript, Provisional Certificate, Degree and Distinction Certificate along their numbers records of a student
- Integration with Student Financial Module to ensure that students' outstanding dues have been cleared and fee for degree/ transcript has been paid.
- Facility to maintain history of issuance of certificate to the student i.e. original, duplicate, etc.
- Facility to handle Degree and Transcript verifications of passed out students requested by either any other organization or student.

15. Student Discipline and Conduct Module

The salient features of the module should include but not limited to the following:
- Facility to maintain record of student conduct and discipline.
- Facility to maintain record of student disciplinary committee members with tenure setup
- Facility to issue show cause notices to students.
- Facility to send SMS/Email for personal hearing before the discipline committee.
- Facility to inform Parents/ Guardian regarding student misconduct if needed.
- Facility to maintain record of show cause notices/penalties.
- Facility for student to appeal against the decision of disciplinary committee to the appellate committee.

- Facility to communicate decision of disciplinary/ appellate committee to the student concerned.
- Facility to hold student enrollment /student clearance as per committee decision
- Facility to manage major and minor penalties on particular students imposed by UDC as per university rules
- Provision to enter adjustments to rectify errors
- Provision to create bank reconciliations (manual through bank scroll/host to host integration)
- Facility to handle final settlement of students through the system
- Facility to generate projected fee estimates of any program enrolled with reference to any particular student.
- Facility to generate Challan based on different category such as batch, individual student, semester wise, program wise, etc.
- Facility to cancel Challan of individual/batch students for any selected semester
- Facility to maintain history of semester wise fee charged to the student.
- Integration with General Ledger (a module of ERP software) to post financial effects of different receipts in the form of journal voucher.
- Facility to revise student fee Challan (waiver, scholarship, penalty etc.)
- Facility to enter student fee payments for Adjustment of student Challan form by staff
- Facility to enable student Challan forms on student portal with deadlines setup.

16. Complaint Management/ Trouble Ticketing System

Main scope of this module but not limited to the following is to record and organize students/employees complaints into tickets and tracks their progress up from receipt toresolution.

- Content management system for knowledge base publishing
- Facility to manage Points of contact/Support Channels. This refers to how customers contact your support e.g. phone, email, chat, self-service etc.
- Facility of ticketing management (automated assignment of tickets to relevant department/ section of the university, ticket priorities, ticket statuses and ticket tracking etc.
- A knowledge base or self-service. Compliance of students/employees questions and structures them into retrievable FAQs or how-to articles. Repetitive queries should be directed to this section, freeing up your agents to focus on more urgent issues.
- Facility to manage escalation feature where agents can route difficult tickets to the higher-ups in order to allow multi-level submission where supervisors get to resolve issues within their authority instead of escalating the ticket further up.
- Agents/Employee/Student Help-desk Dashboards.
  - Agents Dashboard: Agents upon logging in should see the most important data i.e. pending, urgent and new tickets.
  - Supervisor Dashboard: To get the information on key metrics like overall agent performance, resolution rate, and the number of issues resolved per week or month.
- Satisfaction surveys.
- Any other required by relevant section such as Network team, Central Workshop or maintenance cell of the university.

17. Event Management Module

The Event Management module should assist the user to plan and execute various activities that need to be performed to organize any event hosted by different department/ section i.e. ORIC, Career Center, Faculties, Sports, Provost office, Directorate of Student Societies etc. The system will have the following salient features:

- Facility to define event calendar which should be displayed on the RWU Website.
- The system should be able to generate alerts (SMS and Email) to the staff and student regarding upcoming event.
- Provision to define event schedule to plan various activities to organize an event. The user should be able to define timeline, budget and resource for each activity.
- Facility to update actual cost and time for each activity.
- This module should be integrated with the Workflow system to raise demand for getting approval from the competent authority.
- Reservation of venue and allocation of space for any event through Email and SMS to all participants.
- Facility to integrate with social media applications to share events related information.

18. Content Management System Module (Main University Website Pages, Departmental Pages)

The salient features of the module should include but not limited to the following:

- Facility to manage University Website themes, Templates, colors and widgets.
- Facility to manage website pages.
- Facility to manage important announcements and news
- Facility to derive events information from Event Management Module. (Conferences, Seminars etc.)
- Facility to create departmental websites and derive faculty, courses and other relevant information recorded through other modules.
- Facility to manage Events Gallery.
- Facility to manage FAQ's.
- Facility to manage the Download section. (Forms, Challans etc.)
- Facility to manage Advertisements/Jobs/Tenders.

19. Online Job Application/ Internship Portal

The salient features of the module should include but not limited to the following:

- Facility to manage Admin and Candidate panel
- Posting of multiple vacant positions on the job portal
- Specify the basic requirements of each vacant position(s)
- Add job opening and closing dates
- Export data of applicants in excel format
- Filtration of data as per the university requirements i.e. qualification, experience etc.
- Generation of merit lists as per the university requirements
- Update online applications status according to the hard copies received against each online submitted applications, in process, shortlisted, selected etc.
- Queries & complaint resolution for candidates
- Detailed personal profile builder including qualification, professional experience, publications & related skills

- Upload required scanned documents, if necessary
- Proper validation controls according to the specified eligibility criteria against each specific position
- Submission of online application form
- Print the Challan form against the applied position, upload the scanned copy of paid challan & provide payment details for completion of application submission process.
- Application tracking
- Display of candidates list, shortlisted candidates, selected candidates lists etc.
- SMS & emails intimation to the candidates
- Previous history of candidates according to his/ her previously submitted applications
- Facility to manage Industry Linkage with departments
- Facility to manage Organizations where Department/Students intend to complete their Internship
- Facility to manage prerequisites of completion of Internships
- Facility to manage Internship completion reports of students
- Facility to generate generic and analytical reports
- Any other requirements by the concerned department/section of the University

20. University ID Card Workbench Module

The salient features of the module should include but not limited to the following:

- Facility to issue university ID card to employees and students
- Facility to generate different designs/formats university ID cards
- Facility to print multiple ID cards on single page
- Facility to take picture and integrate it in the ID card

21. Alumni Module

The salient features of the module should include but not limited to the following:
- Facility to assign Alumni status to ex-faculty members and graduated students.
- Facility to keep record of Alumni current status (employed/non- employed), their addresses, contact numbers and emails etc.
- Facility to take inputs from alumni about the courses taught and market trends
- Facility about donations from alumni

22. Surveys

The salient features of the module should include but not limited to the following:
- Facility to manage Survey types e.g. Polls, Research Questionnaires and Curriculum Studies etc.
- Facility to manage targeted audience (specific group of students/faculty/staff or public)
- Facility to generate analysis based on defined surveys
- Any other requirement from concerned department/section of the university

23. Research Portal/Research Bank

Since the Higher Education Commission (HEC) was established in 2002, university researchhas made considerable strides. The HEC has launched a series of research funding programmes and has made publication a core criterion for advancement to senior faculty positions.

The salient features of the module should include but not limited to the following:

- Facility to manage and record all on-going and completed research projects information that includes funding by donor agencies, focal person/supervisors of project, timelines and outcomes etc.
- Facility to manage relevant documents against each project
- Facility to manage all participants against each project
- Facility to manage project timelines and funding
- Facility to manage and display all completed projects with information
- Facility to manage all Synopsis/Thesis submitted by the students in electronic format, so that they can be available for reference to other students.
- Facility to manage the information of all Research Publications by Faculty/Student of the University
- Facility to generate generic/analytical reports
- Any other requirements by the Faculty/Research Board of the University.
- Facility to manage MoUs/agreements with higher education institutions and industries with a focus on research and its commercialization aspects or support joint research grant applications as well as capacity building.
- Facility to the organization of scientific events to showcase the research interests at RWU and promote research culture for development of research collaborations and exchange of knowledge with academia and scientific community belonging to national/international, and public/private sectors.
- Facility to establishment of scientific journals in the fields of Science and Social Science from RWU.
- Facility to protect RWU inventions and innovations, literary & artistic works, designs, and symbols/images generated by Patenting and copyright and formation of IP policy.
- Facility to manage travel grants by faculty/research students for the representation of RWU at national/international forums.
- Facility to organize Seminar, Conference, Training & workshop to faculty members and departments to secure funding and grants to conduct scientific/research events at RWU.
- Facility to maintain record of research outcome in terms of research publications to highlight the research efficiency of faculty members/research students at RWU
- Facility to process all queries related to reimbursements of charges incurred upon research students/faculty members to participate in scientific events.
- Facility to procurements of research items from University research budget head.
- Facility to provide basic infrastructure and allied facilities for researchers and young entrepreneurs in developing early-stage business ventures by producing successful firms that make the program financially viable and freestanding through Business Incubation Centre (BIC) and University Science and Technology Park.
- Facility to provide analytical services through high tech equipment to scientific community outside the RWU either for research collaborative work or on payment.
- Facility to devise strategies for revenue generation through utilization of non-traditional sources of the University.
- Facility to support and underline the research protocol/proposal and state whether or not it is ethically acceptable, especially when a living subject is under consideration, through Intuitional Ethics Committee.
- Facility to organize outreach activities in the form of events or information sessions to impart services for empowerment of the community in the form of presentations, workshops, public talks and lab visits etc.

24. Research and Final Year Project (FYP) Module

The salient features of the module should include but not limited to the following:

- Facility to enroll students for final year projects and thesis.
- Facility to approve proposals and thesis by evaluation committee.
- Facility to define schedule for proposal, presentation and final reports
- Facility to record FYP, thesis, research project and publications by faculty members
- Facility to record grade for completed projects and thesis
- Facility to record feedback for proposal/thesis, presentation and reports
- Facility to record and archival of proposal and thesis for undergrad and postgrad students
- Integration with central repository/ achieving system for storing project related material
- Facility to record payments of both local & external examiners Payable system
- Facility to generate alerts and reports for enrolled students and users
- Facility to attach images/ MS Office files along with submission of proposal and other requirements

25. Student Clearance Module

Salient features of module are as under:

- Student Clearance cycle and flow as per university rules.
- Facility to maintain student clearance rules for Completion, Seizure, Cut-off degree and admission cancellation request by the Student.
- Facility to maintain and manage clearing bodies/section of the university (e.g. Department, Library, Student Affairs, Scholarship, Accounts, Sports, Computer Centre and Examination Section etc.)
- Facility to manage flags/objections in case of holding the clearance process by any clearing body/section of the university.
- Facility to manage SMS/Email templates.
- Automated/Manual SMS/Email/Push massages sending facility as per defined templates, to communicate with students on clearance from each clearing body/section, marking flag, and clearance completion etc.
- Facility to students to apply for clearance in case of completion from Student Portal.
- Facility to Departmental User to enable the clearance link to any student applying for cut-off degree, admission cancellation as well as for completing students who submitted her/his hard binding of Degree Thesis where applicable.
- Facility to generate custom Reports

Integrated Learning Management System (LMS)

i. Teachers' Portal/ Dashboard

The salient features of the module should include but not limited to the following:

- The Teacher's Portal should be integrated with other core module of CMS to perform the teacher's specific tasks.
- Facility to record attendance entry by classes.
- Facility to enter marks of each exam.
- Facility to auto lock of lecturer exam screen once the marks entry has been posted.
- Facility to view complete student profile.

- Facility to create e-learning courses.
- Facility to develop e-learning subject, quiz and online exam.
- Facility to upload multimedia e-learning contents.
- Facility to upload e-learning content assignment by the students.
- Facility to monitor student upload of homework and assignment, track by time.
- Facility to send messages and chat with student and University administration.
- Facility to raise expense claims, demands, etc. and monitors its status.

ii.   Students' Portal/ Dashboard

The salient features of the module should include but not limited to the following:

- Students should access the portal using their own login id and password.
- Facility to view and update the following information
    - Email/ contact number/ mailing address
    - View academic calendar
    - Register in a program
    - Register for an exam
- View program/ subjects registered
- View exam results
- View exam results
- View attendance
- View event calendar
- Access online library
- Print fees Challan
- Print grade report/ transcripts
- View payment information such as invoice
- Provision to generate various request such as request for transfer of program, request for hostel transfer, etc. and monitor its status.
- Facility to generate applications i.e. leave, freeze, unfreeze, migration etc.
- Facility to conduct online quizzes and exams.
- Facility to download homework and assignments, lectures and e-learning contents.
- Facility to submit homework and assignments to lecturer.
- Facility to send messages and email to instructors.
- Facility to distribute class-related content through forums and message boards
- Facility of chat rooms so that students can discuss with each other or teachers can quickly review information.
- Facility to participate in a survey conducted by the university.
- Facility to access portal through mobile application of the university.

iii.   Departmental Coordinator Administration Portal / Dashboard

The salient features of the module should include but not limited to the following:
- Students should access the portal using their own login id and password.
- Facility to view and update the following information
    - Email/ contact number/ mailing address
    - View academic calendar
    - Register in a program
    - Register for an exam

- View program/ subjects registered
- View exam results
- Capable of recording the audio video lectures
- Timetable management
- View & maintain attendance

Data Migration from SIS to Proposed System

Migration of all (current and archived) data of student's life cycle from Student Information System SIS) to proposed system in a systematic way so that transition between both system environments may occurseamless.

Enterprise Resource Planning (ERP)

Financial Management System

The Financial Management System (FMS) should be integrated with all the relevant modules i.e. Fixed Asset Module, Purchase, Inventory etc. Further implemented for the following functional areas:

1. General Ledger

The General Ledger system (GL) will be fully integrated with all other modules having financial effects such as Payable, Receivables, HRMS, Fixed Assets, etc. The integration will be done to the extent that any financial transaction generated by other modules, will be periodically posted into the control accounts in the GL. The GL system will have thefollowing salient features but not limited to the following:

- The General Ledger should support cash basis/ double entry system.
- Provision to maintain financial accounts of multiple campuses/ entities/ employee funds within a same database thereby helping the user to consolidate the financial information at Group level.
- Facility of maintaining multiple years of data jointly allowing previous and current year's data to be accessed simultaneously.
- Handling of multi-level chart of accounts with a flexibility of defining user specific structure of the chart of accounts in line with the requirements set-out by PIFRA by devising new accounting model.
- Providing multi-level cost center structure to record transactions with reference to different segments like department, campuses, etc. to produce segment wise analysis.
- Calendar with user-defined financial periods according to reporting requirement of the RWU.
- Facility to define standard vouchers with customized printing options.
- Providing options to maintain automatic numbering of all documents.
- Facility to lock entered data to protect against any changes.
- Provision for standard/ recurring vouchers.
- Flexible user defined on-screen inquiries to analyze the entered vouchers with different logical operator and filters.

1.1 General Reporting
- Printing of transactions list, voucher type wise.
- Printing of trial balance at any level of the chart of accounts with data range selection.
- Printing of general journal, ledger activity and ledger balances.

1.2 Financial Reports
- Comparison of data of different periods
- Balance sheet, profit/ loss statement, income / expense statement.

- Cost center definition enabling cost-center wise reporting.

2. Budget Module

The Budget module is designed to allocate the financial budgets at group or detail account code level, in accordance with the RWU's requirements. The system will also maintain track of budget revisions during a financial year. The proposed module will have the following salient features:

- Facility to enter annual budgets for different heads of account and campuses with a breakup of financial periods defined by the user.
- Facility to define multiple budgets such as HEC budgets as well as recurring budgets.
- Facility to allocate budget figures with reference to business segment i.e. cost center, department, campuses, etc.
- Facility to copy previous year's budgeting values or get new allocation using a factor of previous data to minimize the data input efforts.
- Facility to view consolidated budget covering all the departments and campuses.
- Facility to import budget data from the spreadsheets.

3. Accounts Receivable

The Accounts Receivable module will cover the transactions of parties, employees other than students. The module should be fully integrated with the General Ledger system. The main features of the module are as follows:

- Facility to enter invoice into the system thereby producing a corresponding accounting voucher into the general ledger system to book the financial effects in customer ledger
- Maintenance of customer account balances
- Facility to knock off invoices with cash receipts
- Facility to maintain details of outstanding invoices
- Facility to enter credit and debit notes to handle effects of sales returns, bad debts, replacements etc.
- Facility to incorporate adjustment notes

3.1 Reports

- Details of outstanding invoices
- Printing of customer ledger/ customer statement
- Customer balances report
- Aging analysis of receivables
- Tax reporting

4. Accounts Payable

The user will be able to enter supplier's invoices and record payable liabilities. The system should also be integrated with the General Ledger system to book accounting effects, resulting from the entry of supplier invoice, debit/credit notes etc. The system should

provide a facility to make payments against the payable liabilities and make necessary deductions.

The main features of the system are as follows:

- Facility to enter bill/ invoice containing demand reference, supplier reference, payment and tax deductions.
- Payments to Visiting Faculty
- Payments to daily wages employees
- Payments of overtime/ late sitting allowance
- Payment of any other additional allowance
- Facility for the Purchase department to validate and approve invoices.
- Maintain history of foreign currency rates used for the purchase of imported items.
- Facility to define approval cycles to authorize payments initiating from different authorities such as VC, Chairman, Pre-audit, etc.

4.1 General Reporting

- Details of outstanding bills/ list of payments to be made during each week
- List of payments due in the next xx number of days and the related cash outflow requirements
- Aging analysis for a given set of days
- Printing of supplier ledger and balances

5. Cash Management Module

The Cash Management module is designed to analyze the future inflow and outflow of cash generated from the accounts receivables, payable, etc. This module also includes preparation of bank reconciliation, maintenance of multi-currencies, computation of forex gain/ loss etc. The salient features of proposed module are as under but not limited to the following:

- Facility to setup banks, bank accounts, cash accounts, impress accounts, etc.
- Facility to prepare payment voucher on the basis of supplier invoice.
- Handling of supplier payment by incorporating withholding tax according to the nature of services and amount limit.
- Facility to link payment with available budget.
- Facility to prepare and maintain cash receipts
- Facility of advance payments from customers and adjust this at the stage of issuing invoices.
- Providing a reporting lines for evaluating future cash inflow and outflow, thereby gives a base for future fund management in terms of investment, debt service, pay off liabilities, etc.
- Provision to prepare bank reconciliation to evaluate exact cash position at different banks of the RWU.
- Facility to print cash, bank books, ledgers, etc. for given range of dates.

6. Fixed Assets Module

Fixed assets system maintains complete record of all assets owned by the RWU and records the movement of these assets from one department to the other and from one location toother. The system also calculates year-end depreciation and determines the written down value (WDV), at the time of disposal to calculate the gain/ loss on disposal of assets. The salient features of the Fixed Assets system are given below but not limited to the following:

- Multi-location assets maintenance
- Department-wise assets management
- Disposal of assets using various modes of asset disposal.
- Provision to write-off assets
- Transfer of asset to other locations/ departments.
- Integration with the General Ledger system

6.1 Depreciation

- Maintaining different methods of depreciation calculation like straight line, reducing balance etc.
- Depreciation methods setup at group level as well as at individual level
- Prepares monthly and annual depreciation schedules.

6.2 Reports

- Fixed assets register
- Depreciation schedule
- List of assets location-wise, department-wise

7. Human Resource Management System

The salient features of the system should include but not limited to the following:

7.1 Employee Module

- Facility to enter employee personal information
- Facility to enter status of employee i.e. Contract, Daily Wages, Visiting Faculty, Tenure Track Faculty, IPFP Fellow, Project Employee etc.
- Facility to enter academic record
- Facility to enter date of joining or leaving
- Facility to enter details of employee family
- Facility to enter multiple addresses

7.2 Payroll System

Payroll system should have a facility to set up employees' master file and the salary structure for each employee in terms of monthly allowances and deductions. The system should maintain the location wise/ department wise employee cost thereby enabling the managementto analyze the payroll cost contribution with reference to each department/ business unit. The effect of these transactions should be transferred to General Ledger system electronically.

The system should also provide a loan module, which will maintain a track of various loans given to the employees by the RWU and will automatically make loan deductions according to the loan terms set in the system. All loans will be treated as interest free loans.

The payroll system should maintain track of leave record of each employee, in terms ofleaves availed and leaves outstanding, and will automatically calculate the deductions for 'leave without pay'. The module wise features of the system are as described below but not limited to the following:

7.2.1 Basic Salary Module

- Employees should be identified by unique numbers allotted to them and the system maintains the personal information of each employee, like employee's name, father's name, address, department, designation, location, date of joining and confirmation, date of relieving (for employees who have left), grade, National Tax Number and National Identity Card Number, eligibility for EOBI, Social Security, General Provident Fund, etc.
- Facility to define government basic pay scales for each grade to compute allowances, annual increase.
- Facility to revise basic pay scales as and when required.
- All allowances offered to the employees and deductions made from their salaries are user- defined in the system.
- Allowances and contributions should be computed automatically based on formulas de- fined by the users as per the RWU policy.
- The effect of any changes in the allowances is immediately passed on to tax module and the system computes the tax automatically.
- Non-salary benefits offered to the employees should also be maintained by the system.
- The effect of the number of days not worked during the month is passed on the net amount of salary payable to that employee once these have been entered.
- Printing of Pay-slips with provision to email to the concerned employee
- The following reports should be produced from the system:
    - Employee's personal details & status i.e. Regular, Contract, Daily Wages, IFPF, Tenure Track, Visiting Faculty etc.
    - List of employees: Department / location /designation wise
    - List of employees joined and left during the month.
    - Department-wise and grade-wise strength
    - Monthly payroll sheet by employee/department/location
    - Departmental summary of the salary paid
    - Annual payroll sheet: detailed and summarized

7.2.2 Loan Management Module

- This module should keep a track of loans disbursed to employees, their recovery in installments and the balance amount payable.
- Loans of various kinds should be maintained, such as car loan, house loan, loan against PF, revolving funds, etc.
- Facility to setup different types of loans having different installment plans.
- Both interest based and interest-free loans should be maintained.

- Once the installment per month has been decided, the system keeps deducting the same amount regularly in the subsequent months until the total loan has been recovered or the installment amount has been changed.
- The system should have provision for lump sum payment.
- Monthly and annual loan register

7.2.3 Leave Management

- Maintenance of employees' leaves in terms of leaves allowed, leaves availed and leaves outstanding.
- The actual dates when the leaves were availed can also be maintained.
- The effect of days not worked in the month (leaves without pay etc.) is reflected on the salary of that employee.
- Monthly and annual leaves register can also be produced.
- Leaves encashment is also calculated once the en-cashable leaves have been identified.

7.2.4 General Provident Fund Module

- The module should compute the amount of provident fund to be deducted for employees who are members of the fund.
- Both employees and employer's contributions are maintained for each member employee as per the percentage decided. The accrued provident fund for each member is also maintained.
- The system checks those loans taken against provident fund do not exceed the accrued value of GPF for that employee.
- Printing of GPF ledgers for each member employee.
- Monthly/ Annual reports of contributions by the members and the RWU are also printed.
- This module should be integrated with the GL system and GPF funds accounting system to book the financial effects.

7.2.5 Benevolent Fund Module

- The module should compute the amount of benevolent fund to be deducted for employees who are members of the fund.
- The system checks that grant taken against benevolent fund do not exceed the limits set- out for different categories by the university.
- Printing of benevolent fund ledgers for each member employee.
- Monthly/ annual reports of contributions by the members and the RWU can also be printed.
- The users can also get report from the system for the monthly allocation to be done for benevolent fund.
- This module should be integrated with the GL system and benevolent funds ac-counting system to book the financial effects.

7.2.6 Employee Medical Facility Module

- The module should compute the amount of benevolent fund to be deducted for employees who are members of the fund.

7.2.7 Pension/ Gratuity Fund Module

- The module should be able to check the eligibility of employees for grant of

pension.

- The module should compute the amount for pension fund to be added in the fund on monthly basis.
- The module should be capable of classification of different kind of pensions i.e. compensation pension, invalid pension, superannuation pension, retiring pension, retiring on medical grounds etc.
- The module should be capable of calculating the gratuity and pension benefits and family pension (in case of in service death or pensioner's death).
- The module should be capable of calculating the commutation on the basis of total service period.
- The module should be capable of capitalized value of pension on the basis of previous service rendered by the employee in any other institution.
- The module should be capable of calculating the full pension after completion of required period of commutated pension.
- The module should be capable of calculating monthly pension, increases and payment of monthly pension.
- Printing of statement for each pensioner(s).
- The module should be capable of calculating the monthly pension contribution to be deposited by the university in the pension fund.
- Monthly/ Annual reports of contributions by the university in PDF or MS Word format with printing facility.
- This module should be capable of calculating the total pensioners, their financial impact, expected pensioners in the coming FY and the fund position of the pension fund.

7.3   Estate Office Management System

Estate Office management system should have a facility to set up house hiring/allotment types, ceilings, buildings master file and owners information against each employee in terms of colony house allotment/house hired and rental agreements. The salient features are as under but not limited to the following:

- Facility to manage house allotment committee for the period.
- Facility to announce/notify the vacant houses in residential colonies of the University so that faculty, officers and employees can apply through their portal in relevant categories with in due dates
- The system should maintain the seniority list as per university house allotment rules.
- The system should maintain the university colonies houses allotment department/ designations/grades wise employee/allotted data thereby enabling the management to analyze the cost contribution with reference to maintenance.
- The system should maintain the employee and owners of house hired with agreement de- tails department/designations/grades wise thereby enabling the management to analyze the total payments made with reference to house hiring.
- Any other requirements from Estate Office of the University

8.   Student Financial Module

The salient features of the module should include but not limited to the following:

- Facility to generate online fee Challan for the following cases:
  - Entry test fee
  - Admission of new program
  - Semester fee Challan
  - Course fee, diploma, certificate fee, etc.
  - Other fee such as transcript fee, degree fee, semester fee, Drop semester fee, additional/repeat/non-credit courses fee, Hostel Fee, Transport Charges etc.
- Each Challan will have multiple head of accounts i.e. security fee, admission fee, course fee, Student cards fee etc.
- Facility to handle the following scenarios:
  - Part payments and installments
  - Adjustment of advances
  - Scholarship
  - Single/multiple Waivers
  - Penalties on late fee payment/ UDC etc.
  - Fines i.e. late enrollment, late fee, thesis late submission, UDC etc.
  - Refund of fee full/partial (cancel admission etc.) as per university rules
  - Refund of securities
- Facility to upload bank scroll in machine readable format based on Challan ID of a student or electronic data interchange service giving Challan wise collection of fees deposited by the students in the bank.
- Integrated with the Scholarship Management Module
- Facility to record bank/ cash receipt for scholarships with nature of scholarship i.e. IFPF, Indigenous, Ehsas, Bait-ul-Mal etc.
- Provision to enter adjustments to rectify errors
- Provision to create bank reconciliations (manual through bank scroll/host to host integration)
- Facility to handle final settlement of students through the system
- Facility to generate projected fee estimates of any program enrolled with reference to   any particular student.
- Facility to generate Challan based on different category such as batch, individual student, semester wise, program wise, etc.
- Facility to cancel Challan of individual/batch students for any selected semester
- Facility to maintain history of semester wise fee charged to the student.
- Integration with General Ledger (a module of ERP software) to post financial effects of different receipts in the form of journal voucher.
- Facility to revise student fee Challan (waiver, scholarship, penalty etc.)
- Facility to enter student fee payments for Adjustment of student Challan form by staff
- Facility to enable student Challan forms on student portal with deadlines setup.

9. Procurement/Purchase

Implementation of purchase module with custom requirements of Purchase and Store office of the University. The salient features of the modules are as under but not limited to the following:

- Master data management such as Products type, GMD (General Material Description), Measurement Units and Suppliers/ Vendors etc.
- Purchase Committee management for the period.
- Vendor Management
- Requisition/Request for purchase items management initiated by departments/section of the modules.
- Approvals of requests
- Tender Management as per PPRA Rules.
- Launch purchase tenders, integrate vendor's answers in the process and compare propositions.
- Requests for Quotations management
- Tender Award/Purchase Orders Management
- Managing Invoicing/Vendor Bills
- Products management
- Any other requirements

10. Inventory

Inventory management system should have a facility to set up the central store in connection with Procurement/Purchase module, so that purchased items can easily be transferred to requesting department/section of the university with issuance transactions implementation.

The salient features are as under but not limited to the following:
- Purchased Products transferring from Purchase central store to requesting department/ section of the university.
- Departmental/Section purchase management (petty cash, imprest account, donation or project funding)
- Stock Register management
- Issuance of products (consumables/assets) to university office/employee
- Dead Stock Register Management
- Shifting of Products from dead stock register to University central store for Auction
- Stock audits management
- All relevant Reports (department/ section/ employee wise)
- Any other requirements from relevant departmental and central stores of the University.

11. Maintenance Management

Maintenance management system should have a facility to set up the Central Workshop and Project Directorate in connection with Procurement/Purchase and Inventory module, so that relevant requisite work orders/complaints can be fulfilled from

available inventory with issuance transactions implementation or direct purchase of goods. The salient features are as under but not limited to the following:

- Relevant committees management for the period
- Manufacturing/Repairs Estimates management
- Manufacturing/Repairs Approvals management
- Manage bill of materials
- Manufacturing/Repair management planning
- Management of Requisitions/Requests by office/employee of the university
- Work Order management
- Finished Product management
- Shifting/Issuance of finished products to requisite department/section/employee of the university.
- All relevant Reports
- Any other requirements from central workshop/project directorate of the University.

Internal office communication system/ E-Office capable with Block chain

- Inter Office Note (ION)
- Document(s) management
- Minute Sheets / Cash Management
- Meeting Scheduling
- Circulars
- Minute of Meetings
- Dashboards