SHAHEED BENAZIR BHUTTO UNIVERSITY (SBBU) SHERINGAL DIR UPPER KHYBER PUKHTUNKHWA

ACQUISITION & IMPLEMENTATION OF CAMPUS MANAGEMENT SYSTEM (CMS) AND ENTERPRISE RESOURCE PLANNING (ERP)

Invitation for Request for Proposal (RFP)

Procurement Ref: No	SBBU/Adv/23-_____
Date of Opening	08/March/2023 (02:00 P.M)
Venue	Committee Room, Shaheed Benazir Bhutto University, Sheringal Dir Upper

Project Major Procedures / Data Sheet

Bid Selection Method	The method of selection is: Quality and Cost Based Selection (QCBS). RFP can be downloaded from: https://www.Sbbu.edu.pk/
Bid Security	The bidder /firms are required to deposit 2% bid security in the shape of deposit at call of their quoted prices.
Deliverables	- Project Charter, Project Schedule, Work Breakdown Structure(WBS) - Fortnightly Progress& inception Reports - Gap Analysis Report, Data Migration Plan - Installation of CMS& ERP at SBBU - Training material - Training and User Acceptance Testing (UAT) at SBBU - Data migration and customization (if any) and development of Management Information System (MIS)reports 6-months parallel run at SBBU and other campuses and sites - Source code & related training and technical documentation. - Three year maintenance period.
Contact Person	For queries/ clarifications, if any please contact: Mr. Sikandar Khan, Computer Programmer Email: Programmer@sbbu.edu.pk CC to: Riaz.ahmad@sbbu.edu.pk & ddf@sbbu.edu.pk
Language	Proposals should be submitted in English language
Currency	All prices should be quoted in Pak Rupees
Estimated Time	The estimated number of professional staff, months required for the assignment to be proposed by the bidder.
Taxes	The price should include all applicable taxes.
Proposal Validity	Proposals must remain valid for 90 days after the submission date
Bidder must submit	Two (02) copies of technical (One Original technical and one Photocopies) and 01 copy of financial proposal. A printable and searchable PDF copy in a USB flash drive of technical proposal.

	Technical and financial proposals should be submitted in separate envelops and USB must be a part of the technical proposal. Technical and financial proposal shall be further packed in a sealed envelope. Bid security shall be placed in financial proposal and a certificate that deposit at call is placed in financial proposal shall be placed in technical proposal.
Proposal Submission Address	**Office of the Treasurer** Shaheed Benazir Bhutto University, Sheringal Dir Upper, Khyber Pakhtunkhwa
Submission Date & Time	On or before **08/March/2023 (01:00 P.M)**

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Shaheed Benazir Bhutto University, Sheringal Dir Upper

Annexure – Bidding Forms

1 Project Overview

Shaheed Benazir Bhutto University, Sheringal Dir (Upper) is soliciting proposals from PROPOSER to acquire integrated Campus Management System (CMS) and Enterprise Resource Planning (ERP) solution based on open source platform for the automation of student academic life cycle (from Admission till alumni) and business processes of SBBU as per high level scope of work. However, requirements/scope of work may be enhanced during the requirement analysis/gathering phase of the project:

2 Project Objectives and Background

2.1 Assignment Objectives

The objective of this assignment is to identify and select a software development/ IT vendor firm with proven experience in developing and implementing CMS and ERP based on open source plat form. The PROPOSER will provide off-the-shelf solution which can be deployed and implemented in a shortest span of time. The PROPOSER will perform an analysis of the SBBU's current environment, business processes and organizational strategy prior to the deployment of the software.

The high-level objectives of acquiring a new CMS and ERP solution are as follows:

- Achieving paperless working environment;
- Improve service level and coordination among departments, sections etc.;
- Reduction of approval time through automation of work flow, case management and approval cycle;
- Empowering faculty members, students and other staff to accomplish work at their own;
- Integration with the banks to streamline accounting process;
- A self-sustainable and cost-effective solution;
- Meeting SBBU's needs for the next 30 years;
- Efficient student life cycle management;
- Automation of manual processes;
- Strong IT infrastructure to support new solutions.

2.2 Assignment Background

Currently SBBU is using its own examination software, based on C++, SQL Server and MS Crystal Reports. Both business and technology needs have changed dramatically over the period of time. Therefore, the University desires to acquire a robust, state of the art and preferable open source solution to automate its student life cycle.

3 Terms of Reference (TOR)

Shaheed Benazir Bhutto University, Sheringal Dir (Upper) intends to have off-the-shelf, web based and scalable Campus Management System (CMS) and ERP based on open source plat form at Data Centre of its Main and Wari Campus. Users of Main Campus will access these centralized web based services through intranet platform, however; remote side users of sub campuses will access these services through Pakistan Education and Research Network (PERN) which is a high speed network of

Higher Education Commission (HEC) of Pakistan and is being used for inter-site connectivity.

The main components and deliverables of the assignment are as follows:

- Conduct Gap Analysis for system/modules
- Develop software as per the SBBU requirements
- Installation and deployment of software
- Training and UAT of the software
- Implementation and live run of software
- Technical support services up to 03years

3.1   In Scope Locations

Following is the list of in-scope locations:
1. Main Campus at Sheringal Dir Upper
2. Sub Campus in Wari Dir Upper
3. Affiliated colleges (Distt: Dir Upper, Chitral Lower and Upper)
4. Private candidates/Distance learning candidates

3.2   In-Scope Modules

This section describes the implementation of the systems and modules covered in this assignment.

Sr. No	System Name	Criticality Level (High/ Medium/ Low)
1.	Campus Management System (CMS)	High
2.	User Management System	High
3.	Hostel Management System	High
4.	Workflow & Data Archiving System	High
5.	Financial Management System	High
6.	Human Resource Management System	High
7.	Payroll System	High
8.	Procurement System	High
9.	Inventory System	High
10.	Cloud Resources	High
11.	Business Intelligence (Bi) System	Medium

The functional and other requirements are the integral part of this TOR and discussed in detail in Section4.

4   Functional & Other Requirements

4.1   Campus Management System (CMS)

4.1.1   Campuses, Affiliated colleges & Faculty Master file Data

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

- Facility to maintain multiple campuses and affiliated colleges, addresses, contact information, higher management profile etc.
- Facility to define student information such as name, registration number, contact

number, email address, mailing address, academic records and other details.
- 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, Dy. Directors, Registrar, Dy. Registrar, lab in-charge, superintendents, etc.
- Facility to maintain/ reconcile the University bank accounts for receipts and payments.
- Facility to maintain Semester and Annual Academic Programs and their details such as number of years, number of semesters, regular, winter and summer semesters, 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 3rdyear, BA/ BSc 4thyear
  - 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.

4.1.2 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 admission and ends when the student is selected in a program.
- 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 gender, 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 students who qualifies the interview and document verification process.

- Facility to generate notification (sms alerts/ emails) to the successful candidates to deposit fee as per the schedule.
- Provision to apply for other facilities offered by the university such as transport, hostels 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.

4.1.3   Enrollment Module

- 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 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 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 he/she has been enrolled to old study scheme.
- Facility to freeze semester or course and generation of alerts to all the concerned departments.
- Facility to setup batch/ session to be attached with each student.
- Facility to close enrollment of student at the completion of study programs.

4.1.4   Timetable, Class Scheduler Module & Work load

- 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 (class rooms, 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 (Morning, afternoon, night etc.)
- 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 work load and extra workload
- Facility to support cancellation, replacement and relocation of classes.
- Facility to support auto generated notifications (sms alert/ emails) about the reschedule of

events and Venus

4.1.5   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 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.

4.1.6   Meetings Module

- Facility to define list of meeting venues
- Facility to create meetings with date and time
- Facility to send email/alerts to members of the meeting
- Facility to schedule meeting by voting like doodle
- Facility to assign venue to meeting
- Facility to generate real-time report of the on-going meetings

4.1.7   Student Financial Module

- Facility to generate online fee challans 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, utilities, fines 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 instalments
  - Adjustment of advances
  - Scholarship
  - Waivers
  - Penalties on late payment
  - Refund of fee
- 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.
- Facility to record bank/ cash receipt
- Provision to enter adjustments to rectify errors
- Provision to create bank reconciliations
- 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 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.

4.1.8   Student Discipline and Conduct Module

- Facility to maintain record of student conduct and discipline.
- 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.

4.1.9   Examination Module

- Facility to propose tentative semester wise date sheet by Controller of Examinations.
- Facility to publish final date sheet on the 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 scheme 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 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 bylaws.
- Registration, Enrollment, roll number and result support for private and affiliated Colleges

4.1.10   Outcome Based Education:

Outcome-Based Education (OBE) is an educational evaluation system that bases each part of an educational system around goals (outcomes). By the end of the educational experience, each student should have achieved the goals/outcomes. The proposed system should support the following functions and features:

- Facility to define Program Educational Objectives (PEOs), Program Learning Outcomes (PLOs) and Course Learning Outcomes (CLOs) for numerous batches

of programs.
* Facility to append and update PEOs, PLOs and CLOs for single and collective courses within threshold limits.
* Facility to submit the OBE results for single and multiple courses.
* Facility to define KPIs for batches
* Facility in Grade-book to show CLO and PLO Scores
* Facility to generate numerous reports as per SBBU, PEC and NCEAC requirements.

4.1.11 Curriculum Module

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

* Facility to add department wise course code and name with number of credit hours and course type (regular, non-credit, etc.)
* Facility to configure batch scheme of study with course code, course credit hour, passing marks, course type (regular, non-credit, etc.), optional or core course.
* Facility to attach teachers with courses offered in the semester of the specific batch.
* Facility to enter course syllabus/ outlines along with recommended books.
* Facility to enter course composition such as theory, lab, project, assignments, quizzes, etc.

4.1.12 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.

4.1.13 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 biometric 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.).

4.1.14 Teachers' Portal / Learning Management System(LMS)

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 monitor its status.

4.1.15 Students' Portal / Learning Management System(LMS)

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
  o Email/ contact number/ mailing address
  o View academic calendar
  o Register in a program
  o Register for an exam
  - View program/ subjects registered
  - 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 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.

4.1.16 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 post grad 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

4.1.17   Feedback/ Survey 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 sub sequent 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.

4.1.18   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 Centre, 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 SBBU's 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.

4.1.19   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 SBBU website to collect application from the applicants who wish to avail/apply for the 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.

4.1.20 University ID card Work bench 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

4.1.21 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's 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

4.2 User Management System

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

- Facility to maintain user profiles.
- Facility to process requests for granting/ revoking access rights.

- Facility to manage access rights at the following levels:
  o Modules
  o Menu
  o Setups
  o Transactions
  o Reports
  o Data
  o Button
- Facility to maintain multi role base access i.e. need to know basis like edit, entry, view, entry & view, edit & view etc.
- Facility to define user groups to define roles and access rights. Once a user is assigned to a particular group all the access rights given to group can be assigned to the particular user.
- Facility to control access by campus wise, faculty wise, department wise, section wise, etc.
- Facility to log users along with their activities with date and timestamp.
- Facility to generate logins in batch mode, where multiple logins can be generated for multiple students at once.
- Facility to allow user to change passwords
- Facility to define policies related to password strength, password change.
- Facility to grant/ revoke/ modify access rights.
- Facility to maintain audit log of all activities performed by a user.

4.3   Enterprise Resource Planning

4.3.1   Hostel Management System

ThesystemwillbeusedbytheProvostandwillsupportactivitiesthatassiststudentfor   seat allotment process specific to all applicants. The salient features of the module should include but not limited to the following:

- Facility to create setups of male/ female hostel blocks, floors, rooms and their description with type, capacity and detail of other item in a room, room charges, details of supervisory staff of hostel and mess such as Warden, Assist. Warden, Head Bearer, Bearer, etc.
- Facility for the students to apply online for hostel and other services.
- Facility to define merit criteria for hostel allotment.
- Facility to generate hostel Merit list
- Facility to configure room allocation rules and automatically allot rooms to students based on room size, type and capacity.
- Facility to maintain the room status whether it is occupied or vacant.
- Facility to manage the reallocation of room to student with semester wise and maintains attachment detail of the same.
- Facility to maintain the details of fee paid by the students.
- Facility to impose penalties and fines on students based on disciplinary issues

- Facility to manage the student clearance with respect to vacant date and submission of other related item of the room.
- Facility to maintain the information of visitors with respect of student and room.
- Facility to manage and control hostel assets efficiently and track hostel consumables and durables by location, value, date and allot codes using RFID or barcode scanners.
- Facility to maintain details of meals and accounts of each student.
- Facility to create week wise menu.

- Facility to automatically calculate mess charges, track mess expenditures and other transactions.
- Facility to monitor monthly expense of mess, kitchen stock, etc.
- Facility to generate monthly mess bill of each student.
- Facility to record attendance through check-in and check-out times of students at entry and exit points of the hostel and mess by swipe cards and electronic barrier gates (i.e. tripod, flap, etc.)
- Facility to track missing students in the hostel and notify parents by email/messaging.
- Facility to integrate with complaint management module to lodge any complaints.
- Facility to generate reports of hostel for hostel officials such as hostel wise, floor wise occupied and vacant rooms list, students list availing mess services, non-payers list, etc.

4.3.2 Food and market Management module

The salient features of the system should include but not limited to the following
- Facility to define rentable assets and maintain its record
- Facility to call Tender/Bids for rentable facility within campus premises.
- Facility to maintain Check on food menu and prices.
- Facility to maintain record of rent collection
- Facility to maintain record of penalties imposed on violation.

4.3.3 Workflow & Data Archiving System

4.3.3.1 File Tracking and Work flow System

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

- Facility to define organizational structure, campuses, departments, sections, etc.
- Facility to define various roles and designations such as VC, Dean, Director, Chairman, Registrar, etc.
- Facility to assign users with their corresponding designations.
- Facility to define approval hierarchy for different types of transactions.
- Facility to define different stages for different types of transactions.
- Facility to map workflow stages with the transactions recorded in the core systems.
- Facility to define approval limits.
- Facility to define service level (time) for each role for the completion of each task assigned to him.
- Facility to raise demand to initiate process where the user is allowed to enter data like date, file number, concerned person/organization, remarks, noting, processing stages, etc.
- Facility to attach scanned documents with each stage/ process and should be stored in archiving system.
- Facility to send and receive any communication among the users engage in the process with read receipt.
- Facility to store document reference of transactions recorded in the core systems With the stages defined for each case/ demand. Alternatively, the user will select the demand reference while creating transaction in the core system.
- Facility to define additional charge in case of the non-availability of primary responsible person.
- Facility to see any action item marked to him for any further action. The user

is also able to perform the following actions:
  - o Add notes
  - o Prepare Drafts
  - o Recommendations, etc.
- Facilitytogeneratealertsincasethetasksisnotcompletedintheduecourseoftime.
- Auto closure of case/demand upon completion of last stage.
- Facility to monitor the status of each case/demand raised by the requesting person.
- Facility to integrate with the mobile application of the university.

4.3.3.2 Document Imaging & Archiving System

Document Imaging and Archiving system will be integrated with the File Tracking and Workflow system to capture and store the documents with reference to various stages of each case/ demand.
- Facility to scan images along with tags such as document case/ demand number, subject, date & time, keyword, etc.
- Facility to attach other documents such as PDF, Word, Excel Sheets, etc.
- Facility of auto-indexing to facilitate search.
- Facility to retrieve documents based on different search tags define in the system.
- Facility to scan documents using Optical Character Recognition (OCR) technology, so that search can be performed on the text.

4.3.4 Financial Management System

The Financial Management System (FMS) should be implemented for the following functional areas:
- Main Campus Accounting
- Satellite Campuses
- GP Fund Accounting
- Benevolent Fund Accounting
- Group Insurance Accounting
- Lab Testing Fund Accounting
- Consultancy Fund Accounting
- Pension Fund Accounting
- Any other entities operating independently

4.3.4.1 General Ledger

The General Ledger system (GL) will be fully integrated with all other modules having financial effects such as Payables, Receivables, Human Resources Management System (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 the following salient features:
- 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

Project to Improve Financial Reporting and Auditing (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 SBBU.
- Facility to define standard vouchers with customized printing options.
- Facility of standard transaction narration on single keystroke for each voucher type.
- Full screen-editing facility while entering data.
- Provision to define month end vouchers as 'reversible' at the opening of subsequent financial period.
- Providing options whether to maintain automatic numbering of all documents or user entered document number.
- Powerful password protection for all activities.
- 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.
- Automatic calculation of excess/ shortage of funds at year-end (temporary or permanent) and update of user defined profit account with corresponding printing of Journal Voucher.
- Period-end and year-end processing and generation of year-end voucher for closing balances of accounts.

General Reporting

- Option to print the voucher as soon as its entry has been completed.
- 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.

Financial Reports

- Month wise income and expense report, with budget comparatives.
- Comparison of data of different periods
- Facility to design user-defined report formats through the report writer including balance sheet, profit/ loss statement, income / expense statement.
- Facility to set up cash flow statement through the report writer
- Cost center definition enabling cost-center wise reporting.

4.3.4.2 Budget Module

The Budget module is designed to allocate the financial budgets at group or detail account code level, in accordance with the SBBU'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 revise the budget before completion of the year.
- Facility to print report for each head of account comparing the actual amount therein with the budgeted figure and the last year's figure.
- Facility to view consolidated budget covering all the departments and campuses.
- Facility to import budget data from the spreadsheets.
- Facility to compare budgets from periods of different years for a head of account and their actual for different reports including profit and loss statement, balance sheets, cost center-reports and other user-defined reports.

4.3.4.3 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, where only control accounts will be maintained for trade debtors. At the end of every day/ or every month the control account in the General Ledger will be updated based on the detailed transactions in the accounts receivable. 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 returns, bad debts, replacements etc.
- Facility to incorporate adjustment notes

Reports

Details of outstanding invoices printing of customer ledger/ customer statement Customer balances report ageing analysis of receivables Tax reporting

4.3.4.4 Accounts Payable

The Accounts Payable module should be linked with the inventory system to validate all the purchases. 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.
- Facility to enter supplier invoice along with other costs breakups to account for purchases and accounts payable.
- Facility for the Purchase department to validate and approve invoices on the computer.
- Maintaining track of local and foreign purchases.

- 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.

General Reporting

Details of outstanding bills/ list of payments to be made during each weekly list of payments due in the next number of days and the related cash outflow requirements Aging analysis for a given set of days printing of supplier ledger and balances Sales tax report

4.3.4.5 Cash Management Module

The Cash Management module is designed to analyze the future inflow and outflow of cash generated from the accounts receivables, payables, etc. This module also includes preparation of bank reconciliation, maintenance of multi-currencies, computation of forex gain/ loss etc. The proposed module will have the following salient features:

- 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 SBBU.
- Facility to compute forex gain/ loss upon receipt of customer dues and payment of outstanding amounts.
- Facility to print cash, bank books, ledgers, etc. for given range of dates.

Tax Reporting

- Tax payment receipt(challan)
- Monthly statement
- Annual statement
- Supplier Certificates(46)

4.3.4.6 Fixed Assets Module

Fixed assets system maintains complete record of all assets owned by the SBBU and records the movement of these assets from one department to the other and from one location to other. 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:

- Maintain comprehensive database of assets using multi-level asset codes for analyzing group and detail level information.
- Multi-location assets maintenance

- Department-wise assets management
- Disposal of assets using various modes of asset disposal.
- Provision to write-off assets
- Provisionfordifferenttypeofadjustmentsi.e.revaluation,re-classification etc.
- Transfer of asset to the relocations/departments.
- Breakup for assets costs either acquired locally or imported
- Maintains the history of previous years schedules
- Fixed assets register for individual items
- Edit lists and MIS reports
- Integration with the General Ledger system

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
- Provision to define depreciation policies regarding acquisitions and disposals
- Prepares monthly and annual depreciation schedules.
- Cost center-wise depreciation allocation
- Initial and normal depreciation rate (if different). Initial depreciation values are for the first year of newly acquired assets
- Number of shift days (if applicable) at group level
- Provision for calculating shift based depreciation.

Reports

Fixed assets register
Depreciation schedule – financial and tax List of assets location-wise, department-wise List of transfers/ disposals/ additions
List of revalued assets/ re-classified assets/ written-off assets

4.3.4.7 Contingency Fund Module

This module should maintain contingency fund account of each department, recording of contingencies and reimbursement of contingency fund. The salient features of the module should include but not limited to the following:

- Facility to record the receipt of cheque / cash in the Contingency Fund module.
- Facility to enter the contingency details in the register.
- Facility to create demand to replenish the fund by submitting details to the concerned department.
- Facility to generate report related to contingencies.

4.3.4.8 Investment Portfolio Module

The Investment Portfolio module should be integrated with the Financial Management System (FMS) to automate the complete cycle of making investment i.e. term deposit (TDRs) in financial institutions, profit calculation on investments, accounting, maturity and renewal of investments. This module should have the following features:

- Facility to record financial investment i.e. TDR, COD, Mutual fund, etc. in different banks containing investment amount, maturity date, profit rate, profit terms and other parameters.
- Facility to compute profit, and post the corresponding accounting voucher in the

Accounting System for fund management

- Facility to distribute profit amount between the members on the formula devised by the management.
- Facility to record maturity and renewal of investment.
- Facility to terminate the investment.
- Facility to record any financial charges, taxes levied on the investment and posting of these effects in the accounting system.

4.3.5 Procurement System

The Procurement system will be used to maintain all activities related to purchase monitoring and execution, starting from the entry of the requisition, getting quotations from the market and preparing purchase orders to communicate with suppliers. The proposed system will be integrated with the Inventory system as required to maintain supply chain. The system will also be integrated with the Payable system to share purchase order data for the preparation of supplier invoice. The main features of the system are as follows:

- Facility to maintain supplier database containing name, address, credit period, credit limit and their origin like foreign and local etc.
- Facility to enter requisition by each concerned department.
- Requisition generated by various departments would be accessible to Purchase Department for requesting quotation or calling tender for the procurement of goods and services depending upon the value of goods or services.
- Facility to generate MIS reports related to purchase transactions.

Tendering
- Facility to enter various stages of tender such as development of RFP, publishing, opening, awarding, etc.
- Facility to handle single stage and two stages tendering process as per PPRA and KPPRA rules.
- Facility to record bidders applied for providing goods or services
- Facility to short list bidders based on their initial Expression of Interest (EOI) submission
- Facility to handle different selection methods such as Quality and Cost Based Selection (QCBS), least cost, etc.
- Facility to record tender fee with respect to each bidder
- Facility to evaluate each bid and record scores of the bidders
- Facility to award contract to the successful bidder

Procurement of Low Value Items (other than tendering)
- Provision to enter quotations received from suppliers.
- Facility to generate comparative statement based on the quotations received from supplier.
- Facility to generate purchase/ supply orders against quotation received from suppliers.
- Integration with the Inventory system to maintain the status of goods received and outstanding quantities against each purchase order.

4.3.6 Inventory System

The Inventory system is designed to manage movements of stock i.e. receipts of materials from supplier, issuance of materials to the user departments, materials

returns, etc. The system will maintain built-in controls related to stock management like re-order level, lead- time, re-order quantity, etc. The Inventory system will be integrated with the Purchase system, such that all the Goods Received Notes will be linked with Purchase Order to evaluate quantity ordered, quantity received and partial status of purchase orders. Efficient management of stocks by maintaining stock monitoring parameters like minimum and maximum levels, re-order quantity and lead time.

- The total cost of an item can be maintained as a break up of various cost heads, for instance purchase price, freight, custom duty, etc.
- Valuation of stock based on weighted average cost.
- Preventingshortfallbymaintainingaminimumlevelforallitemsinstock.
- Multiplestockadjustmentsandreportsontheirquantitativeandfinancialeffects
- Producing financial / quantitative reports of the stocks procured, issued and in hand
- Different characteristics can be defined for different groups of items. This is in addition to the levels of codes maintained in the system.
- Facility to maintain multiple warehouses. Each warehouse can have its own Goods Receiving Notes, Material Issues, Sales Invoices and other transactions.
- Facility to enter quantitative information separately by Stores staff and financial valuation separately by the Finance department for each Goods Received Note (GRN).
- Facility to define item types such as capital goods, consumable items, etc. Upon entering the GRN, the system should update the acquisition in the Fixed Assets system.
- Materials valuation linked with the prices in PO/ supplier invoice/ payment voucher.
- Quality Control (QC) inspection and facility to maintain stock as useable, damaged/ expired
- Providing them an agreement with consumption pattern of stock items
- Provision to maintain separate buying units and issuing units and their conversion
- Material Issue and Material Return Note to manage stock movement between store and departments.
- Stock transfer note to move stock between various warehouses.
- Stock adjustment note for different type of errors like excess/short stock
- Facility to return damage stock to the supplier and automatic generations of debit note to supplier ledger balances.
- Cost center-wise storage and issuance of stock.
- Facility to generate MIS reports related to inventory transactions.

4.3.7 Human Resource Management System

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

4.3.7.1 Employee Module

Facility to enter employee personal information

- Facility to enter academic record
- Facility to enter date of joining or leaving
- Facility to enter details of employee family
- Facility to record medical history
- Facility to enter multiple addresses

- Facility to enter status of annual leaves

4.3.7.2 Job Profile

- Facility to create areas of operations such as Academic, Administration, Accounts, Provost, and HR etc.
- Create uniform Job titles to be used in whole organization such as VC, Dean, Registrar, Chairman, Director, Superintendent etc.,
- Facilitytodefinegovernmentgradestructureandpayscaletoaccommodatesalary
- Create Job positions such as VC, Chairman, Director, Superintendent etc.,
- Facility to define job description by attach duties, responsibilities, skill, qualifications with the Job position
- Define Job Evaluation Factors (Age, Qualification, Experience)

4.3.7.3 Recruitment and Selection

- Resources planning to define all the sanctioned posts in each department
- Facility to view status of sanctioned positions such as vacant position, positions to be vacant, etc.
- Facility to generate request for the hiring of a position.
- Facility to publish advertisement of vacancies on the website
- Facility to define hiring criteria.
- Facility to create and upload CVs using candidates own login id, password.
- Facility to search best candidate from the CV database based on the criteria defined in the system and custom filters. Search of suitable personnel from the database of resumes based on:
  o Skills requirements
  o Educational requirements
  o Experience requirements
  o CV text search for uploaded CVs
- Facility to shortlist the selected candidates and send them call letters for interviews from the system.
- Facility to define different stages for selection such as selection board, syndicate, registrar, etc.
- Facility to schedule interviews/assessment of the candidates.
- Facility to conduct tests/assessments/interview sheets
- Facility to generate offer letter to the selected candidate

4.3.7.4 Training and Skills Development

- Facility to raise training request based on training needs identification during the appraisals, recruitment, department's specific needs, etc.
- Facility to prepare course calendar
- Facility to enroll employees based on:
  o Courses already attended by person
  o Prerequisites/skills required for course
- Facility to mark course completion by:
  o Performing post training evaluations
  o Entering training costs

4.3.7.5 Appraisals/ Performance Management

- Facility to configure performance evaluation form for different grades
- Facility to record details of performance evaluation of the concerned HOD.

- Facility to define various stages of review, recommendations and approvals
- Schedule reviews and intimate stake holders such as assesses, assessors
- Perform assessments based on the assessment work flow configured earlier.
- Recommend(review and amend system generated)compensations
- Review and finalize compensations
- Facilitytogeneratepromotionletterandupdatethegradesandpayscales.

4.3.7.6 Employee Self Service(ESS)Module

This module should be designed to serves as an employee interface to the HR department. This module should have the following features:
- Online access to:
  - Pay slips
  - Outstanding Loans
  - Outstanding Leaves
  - SBBU procedures and policies
- Interfaces to file leave applications, loan applications and approvals should also be possible
- Provisions for notice board, employee feedback, newsletters and connecting other internal modules, where required.

4.3.7.7 Correspondence Management

- ReducetheburdenofHRdepartmentbysendingautointimationsfromvarious processes such as job interview schedules, employee review schedule, compensation intimations, etc.
- Facility to define letter/email templates such as warning letter, appreciation letter, offer letter, employment contract, etc.
- Facility to attach SBBU's templates being used for the correspondence process
- Facility to add system bookmarks (such as employee name, designation, salary, etc.) in the template
- Facility to generate emails/letters and send to recipients

4.3.7.8 Housing and Accommodation Module

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

- Facility to maintain record of all housing units owned by SBBU, such as location, category, covered area, number of rooms, number of washrooms, other amenities, etc.
- Facility to register request for the allocation of house/hostel rooms.
- Facility to create a waiting list of all those who applied and case has been approved for accommodations based on the rules defined in the system.
- Facility to allocate accommodation to the applicants containing applicant name, tenure, terms and conditions, etc.
- Facility to de-allocate accommodation upon the retirement or the will of the occupants.

4.3.8   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 there by enabling the management to 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 track of various loans given to the employees by the SBBU and will automatically make loan deductions according to the loan terms set in the system. All loans will be treated as interest free loans.

Thepayrollsystemshouldmaintaintrackofleaverecordofeachemployee,interms of leaves availed and leaves outstanding, and will automatically calculate the deductions for 'leavewithoutpay'.Themodulewisefeaturesofthesystemareasdescribedbelow:

4.3.8.1 Basic Salary Module

- Employeesshouldbeidentifiedbyuniquenumbersallottedtothemandthesystem maintainsthepersonalinformationofeachemployee,likeemployee'sname,father's name, address, department, designation, location, date of joining and confirmation, date of leaving (for employees who have left), grade, National Tax Number and National Identity Card Number, eligibility for Employees' Old-Age Benefits Institution (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 defined by the users as per the SBBU 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.
- Provision to split an employee's net salary for remittance to multiple banks.
- Printing of Pay-slips
- The Basic Salary module should be integrated with Workload module to compute and make payments of the extra work load (academic and administrative)
- The following reports should be produced from the system:
  - o Employee's personal details
  - o List of employees: Department/location/designation wise
  - o List of employees joined and left during the month.
  - o Department-wise and grade-wise strength
  - o Monthly payroll sheet by employee/department/location
  - o Departmental summary of the salary paid
  - o Annual pay roll sheet: detailed and summarized
  - o List of employees paid by bank and cash
  - o EOBI, ESSI, education CESS and Group Insurance reports (monthly and annual) for the contributions made by the SBBU on behalf of its eligible employees.

4.3.8.2 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.
- Facilitytosetupdifferenttypesofloanshavingdifferentinstallmentplans.
- 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

4.3.8.3 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.
- Leavesencashmentisalsocalculatedoncethecashableleaveshavebeenidentified.

4.3.8.4 Income Tax Module

Income Tax module should compute tax liabilities based on the latest tax rules and produce the following report:
- Income tax computation
- Monthly/quarterly income tax return
- Salary certificate printing as per government requirements.
- Income Tax Statement u/s 50(1)
- Income Tax Statement 139
- Facility toproducetaxreportinaformatprescribedfore-filingbytheFBR

4.3.8.5 Load Management/ Overtime Module

- The module should keep record of extra load on daily basis and make payments on monthly basis through the pay-slip.
- The number of hours worked as overtime per day can be recorded through attendance module.
- Facility to define rules for the work load of maximum chargeable hours for academic and administrative staff.
- Facility to define different Admin load and honoraria for Dean, Chairman, Semester coordinator, Director, Warden, Assistant Warden, Proctor, Campus Coordinator, Provost, Chief proctor etc.
- Facility to prepare week wise course/ teacher assignment giving teacher name& designation, course name, credit hours (theory & lab), FYP, admin load, total load, regular load, weekly extra load, total semester extra load, approved hourly rate, estimated cost.
- The system automatically calculates the amount payable by calculating each faculty's daily rates.
- Facilitytogenerateremunerationbillonthebasisofworkloadandclassattendance.

4.3.8.6 Bonus Module

- Bonus module should work out the annual bonus based on detailed working of average basic salary and the bonus rate. Bonus should be calculated on the basis

of the criteria defined by the user, which may be parameters such as:

o Bonus rate
o Category of employees
o Designation
o Department
o Period of service of the employees
o The allowances that would form the basis of computation of bonus
o Provision to pay more than one bonus per year
o Provision to define formula for calculations of bonus amount based on configured allowances and specified rates.

4.3.8.7 General Provident Fund Module

- Themoduleshouldcomputetheamountofprovidentfundtobedeductedfromemployeeswhoaremembersofthefund.
- 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 that 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 SBBU are also printed.
- The users can also get report from the system for the monthly allocation to be done for Provident Fund.
- Facility to disburse the profit amongst the members of the fund in accordance with their contributions as announced by the Khyber Pakhtunkhwa Government.
- This module should be integrated with the GL system and GPF funds accounting system to book the financial effects.

4.3.8.8 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 SBBU can also be printed.
- The users can also get report from the system for the monthly allocation to bed one for the benevolent fund.
- Facility to disburse the profit amongst the members of the fund in accordance with their contributions as announced by the Khyber Pakhtunkhwa Government.
- This module should be integrated with the GL system and benevolent funds accounting system to book the financial effects.

4.3.8.9 Pension Module

- The system should provide facility to calculate pension based on formula as per government directives.
- Provision to enter opening balances and define contribution of employee and employer on the basis of basic pay and other allowances.
- Facility to record nomination forms submitted by the retired employee.

- Facility to disburse pension through payment system by making cheques.
- Facility to suspend pension or transfer the rights to the legal heirs as per the formula.

4.3.8.10 Final Settlement Module

- This module should compute the terminal benefits for the employee who leaves the organization based on the following parameters:
- Computation of leaves encashment
- Computation of notice pay (either side)
- Deduction of balance loan amount recoverable
- Deduction of tax recoverable form the employee
- Computation of salary for the days worked during the leaving month.

4.3.9 Business Intelligence (BI)System

4.3.9.1 Data Warehousing

- Facility of data warehousing and data cubes based on internal database as well as external databases.

4.3.9.2 Business Intelligence (BI)Tools

- Facility to create Key Performance Indicators (KPIs) for comparing benchmark values verses actual outcomes.
- Facility to view dashboards for each functional area for the line management and top management such as VC, Dean, Chairman, Registrar, Director Finance, Provost etc. to monitor the performance.
- Facility to filter information based on criteria such as campuses, departments, sections, functional areas, etc.
- Facility to drilldown to navigate from dashboard to supporting reports.
- Facility to generate graphical and statistical reports such as charts, gauge, etc.
- Facility to generate alerts and view tickers in case of any exceptions in achieving KPIs.
- Facility to view dashboard on mobiles, tablets, etc. for Android and IOS.

4.3.9.3 Adhoc / Custom Reporting

- Facility for the user to create custom report by their own, based on the data cubes developed in the data warehouse.
- Facility to drag and drop data fields to create a report.

4.3.10 Integration with Third Party Solution

The Integration tool will have the following facilities:

- Online updating of financial effects from CMS and other modules
- Provide APIs to develop routine to exchange data between ERP and other systems
- Data export and import facility in a prescribed format
- Maintain audit trail of data and related reports

4.3.11 General Requirements

4.3.11.1 Common Function Requirements

Following requirements are common to all system/ modules and should include but not limited to the following:

- Software should provide a detail audit trail of all the activities and should be equipped with the query analyzer to view any exceptions.

- All reports can be exported in different formats such as PDF, MS Excel Format, Comma Separated Values (CSV),etc.
- Software should provide import data facility through MS Excel, CSV and other machine readable formats.
- System should maintain electronic signatures of all the users and record with each transactions.

4.3.11.2   Non-Function Requirements

System Architecture

- Software should be preferably developed in open source technologies.
- 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.
- All the mobile apps/ dashboards should be compatible with Android and IOS platforms.
- System should have single sign-in to access any system/module.
- System should have unified architecture such that any entity student, employee, department, vendor, cost center, 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.
- The software should have a capacity to handle server requests/ web traffic of around 50,000 student and around 10,000 employees/ faculty members.

System Security

- Systems should have secure communication with SSL (https) or any other equivalent security mechanism.
- All the sensitive information such as student grades, exam data, should be stored in encrypted form in the database.

Data Migration

- o Vendor should submit data migration plan to move existing data from the currently implemented examination software etc. to the newly acquired system. The data mainly include the students', exam results and any other information maintained in the software.
- o The vendor should execute the migration plan once approved by the SBBU.
- o The vendor should verify the migrated data with the assistance of the SBBU staff.

Source Code & Updates

- The vendor should hand-over the source code with documentation of all the systems/ module developed exclusively for the SBBU.
- The vendor should also provide the development tools, technologies, APIs, etc. for future enhancements by the SBBU.
- 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 SBBU. The SBBU shall have complete rights to modify and sell the software to other organizations.

Service Levels

- The vendor should specify the service levels for:
  - o Fixation of critical and non-critical bugs and errors
  - o Response to any queries
  - o Time required for maintenance and upgrades
- The vendor should provide 03 years free 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.

Availability

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

Training Manuals

- Vendor should provide online help and user manuals covering each and every option for all the systems and modules discussed above.
- Vendor should provide installation manual.
- Vendor should provide technical documents such as data dictionary, schema, system architecture, DFDs, class diagrams and other necessary documentation for the customization of software.
- All the manuals discussed above should be updated time to time by the vendor.

Trainings

- The vendor should impart training to the SBBU's project team and the end-users by taking the following initiatives:
  - o Creation of test environment of the deployed software i.e. Conference Room Pilot (CRP) for software acceptance testing and on-going training.
  - o Provision of hands-on training to the end-users to allow them to test key processes.
  - o Train the trainer of the SBBU for their capacity building.
  - o Train and empower the technical team so that they can add new modules, enhance and customize the existing software according to their needs.

Deployment Model

- The vendor should quote on premises and cloud based solution.

4.3.11.3   General Requirements and Information for Proposal Submission

For a PROPOSER to be considered, SBBU must receive two (2) copies (one original and one photocopy) of the technical proposal & one copy of financial proposal by 01:00 P.M, dated 08/03/2023.

Treasurer, Shaheed Benazir Bhutto University, Sheringal, Dir (U), Khyber Pakhtunkhwa Pakistan.

Please also send one printable and searchable PDF copy of technical proposal in a flash drive. All proposals must be clearly marked separately for both technical and financial proposals:

Technical / Financial Proposal "Acquisition & Implementation of CMS and ERP"

SealedTechnicalandFinancialproposalsshouldbesubmittedintwoseparateenvelops placed and sealed in one big envelope (as per single stage – two envelops bidding procedure).

There is no expressed or implied obligation for the SBBU to reimburse responding PROPOSER for any expenses incurred in preparing proposals in response to this request.

SBBU reserves the right to retain all proposals submitted, and to use any ideas in a proposal regardless of whether that proposal is selected. Submission of a proposal indicates acceptance by the PROPOSER of the conditions contained in this request for proposal, unless clearly and specifically noted in the proposal submitted and confirmed in the contract between SBBU and the PROPOSER selected.

SBBU shall not bear any cost related to the preparation of proposal as well as any subsequent cost such as pre bid meeting visit cost, etc. incurred by the PROPOSER.

4.3.12 Project Contacts

The SBBU invites you to submit a proposal in accordance with the terms, conditions, and specifications contained in this document. Please submit the proposals by 8th of March, 2023 till 01:00 P.M sharply.

Questions about the project may be directed to:
Shaheed Benazir Bhutto University, Sheringal, Dir (U),

Mr. Sikandar Khan, Computer Programmer Email: Programmer@sbbu.edu.pk

CC to: Riaz.ahmad@sbbu.edu.pk & ddf@sbbu.edu.pk

The PROPOSER is responsible for ensuring that the email was successfully received. Questions and requests for clarification and/or additional information should be directed via email to the contact above. Any change in response to questions/clarifications will be re-advertised as an addendum to this RFP and communicated to the bidder through email.

4.3.13 Project Schedule & Deliverables

The following is a tentative time schedule and deliverables related to the requested ERP and CMS acquisition and implementation project:

Activity	Date
RFP release	
Pre-bid meeting (optional)	
Proposals Due (by 01:00 pm)	**08/03/2023**
Presentations by shortlisted firms	**Will be notified if needed.**
Contract awarded, work begins	**(provided that the final evaluation has been approved by the competent authority by this date)**
Submits Inception Report, Project Charter, Project Schedule and WBS	**Within two weeks after awarding contract**

Fortnightly Progress Reports giving target achieved against planned, targets slipped, causes and recommendations and next targets.	**Fortnightly (before close of business of each fortnight)**
Submits Gap Analysis Report, Data Migration Plan	**To be provided the vendor**
Installation of ERP and CMS software at SBBU and handing over of training material	**To be provided by the vendor**
Completion of training and UAT at SBBU	**To be provided by the vendor**
Data migration, Customization and development of MIS reports	**To be provided by the vendor**
Completion of 2-months parallel run at SBBU and other campuses/Affiliated colleges to verify the accuracy of new system.	**To be provided by the vendor**
Handing over of source code & related technical documentation as discussed above	**To be provided by the vendor**
Close out and handing over and taking over of project	**To be provided by the vendor**

Note: The PROPOSER should submit the proposed project schedule giving the deliverables as mentioned above.

4.3.14 Eligibility Criteria for the Firm Applying

This Invitation for Bids is open to ISO certified firms/suppliers registered with Income Tax and Sales Tax Departments, who are on Active Taxpayer List of FBR, Government of Pakistan for supply and provisioning of such services. All the bidders are also required to be registered with Khyber Pakhtunkhwa Revenue Authority (KPRA) and Pakistan Software export Board.

Government-owned enterprises in the Purchaser's country may participate only if they are legally and financially autonomous, if they operate under commercial law, and if they are not a dependent agency of the Purchaser.

Firms can apply through joint ventures (JVs), but each firm shall independently meet the basic requirements as mentioned in para one section number 4.3.14. The bid and in case of a successful bidder, the form of contract agreement shall be signed all the partners so as to be legally binding on all partners. No amendments/modifications what so ever in the JV agreement shall be agreed to between the JV partners without prior written consent of the purchaser.

Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices i.e. firm should not be blacklisted.

The bidder should have strong understanding of CMS and ERP and extensive experience with academic institutions of at least medium size universities of Public Sector in Pakistan.

The bidder should have completed at least three successful implementations of CMS software in open source platform in public sector universities of at least similar nature and size.

4.3.15 Proposal Requirements

The Proposal should include the minimum information requested below in the order listed. Emphasis should be on completeness and clarity of content. Please do not include sales and marketing brochures. Additional information, if provided, should be separately identified in the proposal.

4.3.15.1 Section One – Transmittal Letter

A cover letter (Annex-1, to be furnished with **technical proposal** and Annex-2, to be furnished with **financial proposal**) signed by an official authorized to solicit business and enter into contracts for the PROPOSER. The cover letter should introduce your firm and summarize general qualifications, including the firm's legal entity name, address, email address, phone number of contact person, and short synopsis of the proposal and credentials to deliver the services sought under the RFP.

4.3.15.2 Section Two – Experience and Qualifications

a) The PROPOSER should describe the company's profile giving details of legal status, services and products offer, number of offices, overall staff strength and other details highlighting the company's profile along with Annex – IV ((LETTERHEAD OF SUPPLIER/TENDERER/MANUFACTURER) BIDDER QUALIFICATION STATEMENT). A description summarizing the PROPOSER's experience over the past seven years in performing similar services as listed in this RFP to large academic clients. Please include the year, key scope objective(s), and CMS (along with the list of modules) that your firm implemented, include the names of the project manager, team members and their roles.

b) A statement identifying the names of key personnel that will be assigned to this project, including their titles, length of relevant experience (name of projects executed in education institutions and task performed), qualifications and proof of certifications for the products and services being offered (attach resumes). Please include the PROPOSER's ability to adequately and consistently staff the project with the same team.

c) The PROPOSER will depute qualified staff in this project, mainly comprising of Project Manager, Functional Consultants, Developers, Business Analyst, QA Analyst, Database Administrators, Technical Writer, etc.

d) The firm's ability to complete the work specified in this RFP and produces the required products in a timely fashion and the ability to present any necessary reports and recommendations to University. This section should contain the description of at least one three successfully completed project in the last seven years, including the name of public sector educational institution for which work was performed, general description of the scope of work, budget, name and contact information of agency representative responsible for the project.

e) Evaluation of the bids will be conducted in the following Two stages:-

Technical Stage-1(A): <u>**Preliminary Examination**</u>

S.No	Description of requirement	Responsive	Non-Responsive
1	Proof of Registration (Certificate of Incorporation)		

2	Proof of successful deployment of CMS system based on open source Platform in Public Sector Universities		
3	Proof of registration with Khyber Pakhtunkhwa Revenue Authority (KPRA) and PSEB.		
4	Proof that the PORPOSER is original owner of the software or authorized dealer Annex–IX (installation/commissioning/training undertaking by original equipment/software manufacturer)		
5	Proof of the firm not black-listed (on Stamp paper)		
6	Annual Audited reports of last three financial years		
7	Proof of being active tax payer		
8	Authorization letter/ certificate from the principal to market their products along with partnership status (Annex-X(original software manufacturer's authorization form)).		
9	Client's Reference(s) of similar work experience as mentioned in (Annex-V (reference list of similar nature completed projects)).		
10	CVs of key personnel (**along with the certificates**)		
11	Letter of bid (Bid Form) as per Annex-I (letter of bid (letter of intention) (To be furnished with technical proposal)).		
12	Bidder Qualification statement as per Annex- IV (LETTERHEAD OF SUPPLIER/TENDERER/MANUFACTU RER) BIDDER QUALIFICATION STATEMENT)		

Note: SBBU may ask clarification/additional documents other than mentioned above till the opening of Financial Proposal. The preliminary examination will be conducted on a Responsive or non- responsive basis. Only bids which have been rated "responsive" in the preliminary examination of bids shall be considered for further evaluation.

TechnicalStage-1(B):   Technical Marking

In second stage of technical marking will be done as per section "**selection criteria".**
The Technical marking will be conducted on a pass or fail basis. Only bids which have been rated "pass" in the technical marking of bids shall be considered for further evaluation.

FinancialStage-2:   Financial/Final Evaluation

- Letter of Bid (Bid Form) as per Annex-II (LETTER OF BID (LETTEROF INTENTION) (To be furnished with financial proposal))
- Price Break down schedule as per Annex-III (PRICEBREAKDOWN

SCHEDULE)

4.3.15.3 Section Three – Outline Strategies and Options

Outline methodology, planning, design and execution strategies that will result in the analysis, design, implementation and training of CMS and ERP that are practical to the University. Include a detailed plan for the services to be provided, along with deliverables to be provided at each step, with a corresponding timeline, including meetings with University officials. The work plan should be consistent with the scope of work presented above, however, the PROPOSER may suggest changes where appropriate.

4.3.15.4 Section Four – References

Provide at least one (1) reference from client from within the past Seven (7) years, preferably of an institute similar/higher in nature and size to SBBU. Include the entity name and website URL, title, email address and telephone number for a contact person from each reference as well as scope of work and project start/end dates (Annex – V (reference list of similar nature completed projects)).

4.3.15.5 Section Five – Estimated Project Timeline and Pricing

The PROPOSER should provide module wise break-up of timelines and prices as mentioned in the section "In-Scope Modules".

a) Provide an estimated module wise project timeline required to implement the CMS and ERP solution as discussed in the scope of work. Project budgets should include:

- A project schedule for each activity, milestone, and deliverable, and
- Project budget defined, at minimum, as follows:
    - Task with a collective total by milestone and deliverable;
    - Project responsibilities and estimated amount of time expected for each task, expressed in person-hours;
    - Hourly rates for all project team members;
    - Costs for any other expenses such as printing, travel and attendance at meetings, etc.

b) Provide pricing estimates that include:

- Total Software Cost, with module wise cost break-up as per Annex – III(PRICE BREAKDOWNSCHEDULE)
- Per user license cost for professional user, limited user, student user
- Study, implementation and training cost
- Annual maintenance cost.
- Cloud Cost for at least five Years.
- Charge-out rates of project proposed staff

c) The PROPOSER shall present a specific "not to exceed" fixed fee, including associated administrative fees (i.e., printing costs, attendance at meetings, travel, boarding and lodging). Each phase of work should have an itemized budget including labor costs and expenses for each piece of work.

d) The PROPOSER shall provide the payment schedule in accordance with the delivery schedule (Section 4.23), however the payment schedule will be finalized by the client.

4.3.16 Available Budget/Contract

SBBU wishes to negotiate a fixed price contract with a "not to exceed" total based on a clearly defined scope of work. Selected prospective consultant shall be required to participate in negotiations with University officials and execute a contract for professional services.

SBBU reserves the rights to reject all or any proposal as per PPRA rules.

All proposal responses must be received by or before 01:00 P.M on 08/03/2023 for a PROPOSER to be considered.

4.3.17 Bid Security

The bidder /firms are required to attach a call deposit @ 2% of the quoted price in financial proposal.

4.3.18 Performance Guarantee

Thesupplierwhosequotationisacceptedwillberequiredtosubmitaperformancebond of first class scheduled bank guarantee (Annex – VII (PERFORMANCE BOND (FORM))) as a professional liability issued by the first class recognized bank, the amount of which will be not less than ten percent (10%) of the total contract amount to guarantee faithful performance and completion of the Agreement. If the Contractor fails for any reason to execute the Agreement, the said bond will be forfeited by the University. The performance bond shall remain in effect till the satisfactory completion of the project from the date of issuance.

The Bid Security submitted by the bidder at the time of submitting its bid shall be returned to the Bidder upon submission of Performance Guarantee.

Failure to provide a Performance Guarantee by the Bidder is a sufficient ground for annulment of the award and forfeiture of Bid Security. In such event the Procuring

Agency may award the contract to the next lowest evaluated bidder or call for new bid.

4.3.19 Selection Criteria

A two stage procedure is utilized in evaluating the proposals, with evaluation of the technical proposal being completed prior to any price proposal being opened and compared. Only those financial proposals of the proposers will be considered for opening that scores 70% marks in Technical Documents Evaluation. Before opening of financial proposals the qualified vendors will be called for Presentations Session.

The technical proposal which comprises of Technical Documents and Presentation shall be evaluated on the basis of its responsiveness to the Term of Reference (TOR)/Scope of Work. In the Final Stage, the financial proposals of all the qualified contractors will be compared. The overall weight-age factor applied to Technical & Financial scoring will be asunder:

Sr. No.	Criteria	Weightage
1	Technical Proposal	
1.1	Technical Documents	50%

| 1.2 | Presentation (Proposed Work Plan, Approach and Live Demo) | 20% |
| 2 | Financial Proposal | 30% |

The selection process shall be based on the received bids. The process may include discussion and clarification through any means as notified. Criteria for evaluation Technical Documents Marks (TDM) and Presentation Marks (PM) shall include:

Factors	Max. Marks
CMS implementations in open source Platform in the public sector Universities of Pakistan (05 marks for each project implementation, up to maximum 20 marks)	30
ERP Implementation in public sector Universities (2 marks for each project up to maximum of 10 marks)	10
Official Partner of the proposed open source platform	10
Proposed Work Plan and Time Line (For three months = 10 marks, for six months = 5 marks)	10
List of Personnel, their Qualification and Experience (Two marks for each person)	10
Completeness of PROPOSAL REQUIREMENTS mentioned in section "Proposal Requirement"	15
Number of Years the firm has been in consultancy practice in Pakistan (2.5 marks per year of Experience in related projects)	15

4.3.20 Final Evaluation

The final evaluation will be based on the respective weightage assigned to Technical Criteria and Financial Criteria and the marks attained.
$$TTM = TDM * 0.5 + PM * 0.2$$
TFM = 1st lowest * 30/Z (where Z is the value of 1st lowest, 2nd lowest, 3rd lowest etc.)
$$GTM = TTM + TFM$$
Where:

TTM= Total Technical Marks	TDM = Technical Document Marks	PM = Presentation Marks
TFM= Total Financial Marks	GTM= Grand Total Marks	

5   Contract Terms &Conditions

5.1 Inspections and Tests

The Purchaser or its representative shall have the right to inspect and/or to test the Software to confirm their conformity to the Contract specifications at no extra cost to the Purchaser.

The inspections and tests may be conducted on the premises of the Supplier (Developer) and/or at the final destination. If conducted on the premises of the Supplier, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.

5.2 Delivery

Delivery of the Goods/Services shall be made by the Supplier according to project deliverable and set deadline made by SHAHEED BENAZIR BHUTTO UNIVERSITY, SHERINGAL DIR (U) after award of the contract.

5.3 Warranty

Limited Media Warranty. The Developer warrants that, for a period of **03** years following delivery of the Software, the media upon which the Software is delivered will be free from defects in materials and workmanship under normal use.

The Developer's sole obligation in this regard will be to provide the purchaser with a performingcopyoftheSoftwarewithoutcoststothepurchaserwithinareasonabletime (within one month) following the purchaser written notice to the Developer of the defect.

Limited Support Warranty. For a period of three (03) years following the deployment of the Software, the Developer shall perform its maintenance and support services consistent with generally accepted industry standards, but only if the Software is installed and operated in accordance with the Developer's documentation and other instructions.

Limited Performance Warranty. The Developer warrants that, for a period of three (03) years starting on the date of deployment of the Software, the Software will perform substantially in accordance with the functional specifications set forth in the documentation, but only if the Software is installed and operated in accordance with the Developer's documentation and other instructions.

If the Supplier, having been notified, fails to remedy the defect(s) within the specified period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

5.4 Payment

The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by documents submitted.

5.5 Delays in the Supplier's Performance

Delivery of the Goods and performance of Services (modules/software/training/documentation etc.) shall be made by the Supplier in accordance with the time schedule prescribed by the Purchaser.

If at any time during performance of the Contract, the Supplier encounters conditions impeding timely delivery of the Goods and performance of Services (modules/software/training/documentation etc.), the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s).As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract.

A delay by the Supplier in the performance of its delivery (implementation and deployment) obligations shall render the Supplier liable to the imposition of liquidated damages, unless an extension of time is agreed upon without the

application of liquidated damages.

5.6 Liquidated Damages

If the Supplier fails to deliver any or all of the Goods or to perform the Services (modules/software/training/documentation etc.) within the period(s) specified in the Contract, the Purchaser shall, without prejudice to it so the remedies under the Contract, deduct from the Contract Price, as liquidated damages, 0.5% of the total amount of the Contract per week, up to a maximum of 10% of the total amount of contract. Once the maximum is reached, the Purchaser may consider termination of the Contract.

5.7 Termination for Default

The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:

(a)   If the Supplier fails to deliver any or all of the Goods or Services (modules/software/training/documentation etc.) within the period(s) specified in the Contract, or within any extension thereof granted by the Purchaser; or

(b)   If the Supplier fails to perform any other obligation(s) under the Contract.

(c)   If the Supplier, in the judgment of the Purchaser, has engaged incorrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this clause:

"Corrupt practice" means the offering, giving, receiving, or soliciting of anythingofvaluetoinfluencetheactionofapublicofficialintheprocurementprocess or in contract execution.

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

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

5.8 Force Majeure

The Supplier shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

For purposes of this clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not fore see able. Such events may include, but are not restricted to, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the

Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

5.9 Termination for Insolvency

The Purchaser may at any time terminate the Contract by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such terminationwillnotprejudiceoraffectanyrightofactionorremedywhichhasaccrued or will accrue thereafter to the Purchaser.

5.10 Termination for Convenience

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

The Goods or Services (modules/software/training/documentation etc.) that are complete and ready for shipment with in fifteen (15) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods and services (modules/software/training/documentation etc.), the Purchaser may elect:

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

5.11 Settlement of Disputes

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

If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

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

Arbitration proceedings shall be conducted in accordance with the rules.

Notwithstanding any reference to arbitration herein,

a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
b. the Purchaser shall pay the Supplier any dues.

5.12 Limitation of Liability

Except in cases of criminal negligence or willful misconduct, and in the case of infringement,

a. the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser and

b. the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective goods.

Annexure – Bidding Forms

LETTER OF BID (LETTER OFINTENTION)

(To be furnished with technical proposal)

Annexure – I

LETTER OF BID (LETTER OFINTENTION)

(To be furnished with financial proposal)

Date:_____ Procurement Ref.No:_____

To:

The Director Finance
Shaheed Benazir Bhutto University Sheringal Dir (U)

Dear Sir,

Having examined the bidding documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply, install, train and commission the Software in conformity with the said bidding documents.

We undertake, if our Bid is accepted, to deliver the services/goods within days from date of award of contract.

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

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive. We certify/confirm that we comply with the eligibility requirements as per bidding documents.

Dated this_____day of_____2023

_____   _____

[Signature]   *[in the capacity of]*

Duly authorized to sign Bid for and on behalf of_____

Annexure – II

LETTER OF BID (LETTER OF INTENTION)

(To be furnished with financial proposal)

Date:_____ Procurement Ref.No: _____

To:

The Director Finance
Shaheed Benazir Bhutto University
Sheringal Dir (U)

Dear Sir,

Having examined the bidding documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply, install, train and commission the Software in conformity with the said bidding documents for the sum of _____ *[total bid amount in words and figures]* or such other sums as may be ascertained in accordance with the Price Break-down schedule attached here with and made part of this Bid.

We undertake, if our Bid is accepted, to deliver the services/goods within days from date of award of contract.

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

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contractbetweenus.Weunderstandthatyouarenotboundtoacceptthelowestorany bid you mayreceive.

We certify/confirm that we comply with the eligibility requirements as per bidding documents.

Dated this_____day of_____2023

[Signature]   *[in the capacity of]*_____

Annexure – III

PRICE BREAKDOWN SCHEDULE

1	2	3	4	5	6	7
Sr. No.	Module Description	Country of origin	No. of Licenses	Unit Price (PKR)	Total price (PKR)	Yearly Cost Impact
1	Campus Management System					
2	User Management System					
3	ERP					
4	Business Intelligence (BI) System					
5	Enterprise application Accounting					
6	Enterprise application Invoicing					
7	Enterprise application Purchase					
8	Enterprise application Inventory					
9	Enterprise application Events					
10	Enterprise application Website					
11	Enterprise application Project					
12	Enterprise application Documents					
13	Enterprise application Time off					
14	Enterprise application Studio					
15	Development Cost					
16	Implementation Cost					
17	Training Cost					
18	03 Years Support Cost					
19	05 Year Cloud Cost					
	Grand Total =					

Please note that the list given above does not include the licenses for faculty, students and staff (limited professional users), as these will be the part of a package offered by the vendors (please see section 1.1 for student, faculty and staff strength).We offer to supply, install and commission the abovementioned service(s)/goods(s), in accordance with the terms and

conditions stated in your Request for Quotations referenced above.

The validity period of our quotation is: _____ days from the time and date of the submission deadline.

We confirm that the prices quoted above are fixed and firm for the duration of the validity period and will not be subject to revision or variation.

Quotation Authorized By:

Signature: _____   Name: _____

Position: _____   Date: _____

(DD/MM/YY)

Authorized for and on behalf of:

Company: _____

Address: _____

OFFICE SEAL

Annexure - IV

(LETTER HEAD OF SUPPLIER/TENDERER/MANUFACTURER) BIDDER QUALIFICATION STATEMENT

Name and Address of Tenderer/Bidder

A.   Name of Supplier/Tenderer
B.   Address of Head Office
C.   No. of Employees/Engineers
D.   Date Established and/or Registered
E.   Project In-charge Name
F.   Section/Department/Division
G.   Contact No:
H.   Email address:
I.   Telephone No:
J.   Mobile No:
K.   National Income Tax no:

We hereby certify to the best of our knowledge that the foregoing statement are true and correctandallavailableinformationanddatahavebeensuppliedandthatweagreetoshow documentary proof thereon upon your request.

Date _____

Name & Address of the Tenderer _____

_____

_____
(Signature)

_____
(In the Capacity of)

Annexure – V

REFERENCE LIST OF SIMILAR NATURE COMPLETED PROJECTS

Name of Purchaser /Institution	Purchase order No. &date	Contact Person/ Contact No./ Email/ Website	Modules Implemented	Value of order	Date of completion

Note: Please attach the supporting documents such as PO, Completion Certificates, etc.

Annexure - VI

CONTRACT FORM

THIS AGREEMENT made the_____day of_____2023 between Shaheed Benazir Bhutto University Sheringal Dir (U) (hereinafter called "the Purchaser") of the one part and *[name of Supplier]* (hereinafter called "the Supplier") of the other part:

WHEREAS the Purchaser invited bids for certain goods and ancillary services, viz., procurement of Software's and has accepted a bid by the Supplier for the supply, installation, commissioning and training of those goods and services in the sum of *[contract price in words and figures]* (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

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

2.   The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:

(a)   the Price Schedule submitted by the Bidder;

(b)   the Technical Specifications;

(c)   the General Conditions of Contract;

(d)   the Purchaser's Notification of Award.

(e)   Bidding Documents.

3.   In consideration of the payments to be made by the Purchaser to the Supplier as hereinaftermentioned,theSupplierherebycovenantswiththePurchasertoprovidethe goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract

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

INWITNESS where of the parties here to have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by_____the_ (for the Purchaser)

Signed, sealed, delivered by_____the_ (for the Supplier)

Annexure - VII

PERFORMANCE BOND (FORM)

To

The Director Finance
Shaheed Benazir Bhutto University
Sheringal Dir (U)
.

WHERES **(Name of Supplier)** (hereinafter called "The Supplier") has undertaken, in pursuance of Agreement dated_____to supply, install, train and Commission Software.

AND WHERE AS, it has been stipulated by you in the said Agreement that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified there in as security for compliance with the Supplier's performance obligations in accordance with the Agreement.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of (Amount of the Guarantee in Words and Figures)and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under agreement without cavil or argument, any sum or sums within the limits of (Amount of Guarantee) as afore said, without your needing to prove or to show grounds or reasons for your demand or the sum specified there in.

This guarantee is valid until the (Day) day of (Month), (Year).

Signature and Seal of the Guarantor

_____

_____

Date_____   Address   _____

Annexure - VIII

INSTALLATION/COMMISSIONING/TRAINING UNDERTAKINGBY ORIGINAL EQUIPMENT/SOFTWARE MANUFACTURER

We **(Name of Original Software Manufacturer or Authorized Dealer)**, a manufacturer/ authorized dealer duly organized under the law of **(Name of Country)** and having its principal place of business at **(Address of Original Software Manufacturer or Authorized Dealer)** here by undertake that we are exclusively responsible for the successful Installation, Commissioning, and Training for the equipment/software offered by us/ our local agent for your Invitation for Bids Reference Number _____dated_____.

If for any reason, such as travel restrictions imposed by our government etc., we are unable to send our engineers/supervisors to perform the installation, commissioning, and training for our equipment/software at the Purchaser's designated premises, then we are exclusively responsible for all the costs inclusive of all associated expenses for seven (7) daysdetailedtrainingofatleasttwo(2) technicalpersonnelofthePurchaseratourpremises at **(Original Software Manufacturer or Authorized Dealer premises Address)** for each lot secured as per the Purchaser bidding documents.

Any and all costs associated with successful installation, commissioning, and training has been included in our aforementioned quotation.

Date _____

Name & Address of the Original Software Manufacturer or Authorized Dealer

_____

_____

(Signature)

Note: This letter should be on the letterhead of the Original Software Manufacturer or Authorized Dealer and should be signed by a duly person.

Annexure - IX

<u>ORIGINAL SOFTWARE MANUFACTURER'S AUTHORIZATION FORM</u>

To:
　The Director Finance
　Shaheed Benazir Bhutto University Sheringal Dir (U)

　WHEREAS *[＿＿＿＿＿＿＿name of the Original Software Manufacturer or Authorized Dealer] who* are established and reputable manufacturers of *[＿＿＿＿＿＿ name and/or description of the services/goods]* having factories at*[＿＿＿＿＿＿＿＿＿＿＿address of factory]* do hereby authorize *[name and address of Agent]* to submit a bid, and subsequently negotiate with you against Invitation for Bids R e f e r e n c e No.＿＿＿＿＿＿＿＿＿For the above services/ goods developed/ manufactured by us.

　We hereby extend our full guarantee and warranty as per General Conditions of Contract (1 year warranty) for the services/goods offered for supply by the above firm against this Invitation for Bids.

　　　　────────────────────────────

　　[Signature for and on behalf of Original Software Manufacturer or Authorized Dealer]

Note: This letter of authority should be on the letter head of the Original Software Manufacturer or Authorized Dealer and should be signed by a person competent and having the power of attorney to bind the Original Software Manufacturer or Authorized Dealer.

END OF DOCUMENT