

TENDER DOCUMENTS
FOR PROCUREMENT OF
“COMPLETE LEARNING MANAGEMENT SOLUTION”

February, 2022

INSTITUTE OF MANAGEMENT SCIENCES
PESHAWAR

ACRONYMS

- ODL** - Open and Distance Learning
OCRC - Online Courses Review Committee
SIS - Student Information System
SOPs - Standard Operating Procedures
QEC - Quality Enhancement Cell
ICT - Information Communication Technology

ABOUT THE PROJECT

The Institute of Management Sciences (IMSciences), Peshawar is an autonomous body established under the auspices of the Government of the Khyber Pakhtunkhwa and is the foremost management school of the Khyber Pakhtunkhwa. IMSciences offers postgraduate and undergraduate education, with its main focus on business administration, computer science, public administration and allied disciplines. The average active student strength in all programs is around 3000 with proportionate number of faculty (regular, visiting) and staff.

The Institute requires a turnkey solution for “Complete Learning Management Solution including CMS with Financial Modules”. The existing status of LMS/CMS are as below:

CURRENT STATUS OF OPEN AND DISTANCE LEARNING (ODL) DURING PANDAMIC

Standard Operating Procedures for Open and Distance Learning (ODL) at IMSciences. The Institute will follow a systematic approach during this pandemic for the conduct of online classes. Under Policy Guidelines for ODL at IMSciences, these SOPs will cover but are not limited to the following:

1. Readiness for ODL
2. Online Course Delivery
3. Assessment and Evaluation
4. Quality Assurance

1. SOPs for Readiness for ODL

SOPs for different aspects of IMSciences' overall readiness for ODL are as under:

1.1. Readiness of Resources:

- 1.1.1. The Institute shall assess its capabilities to start online classes in terms of technical, human, and financial resources.

1.1.2. All communications with regards to ODL including notices, SOPs, Policy Guidelines, and academic calendar etc. shall be displayed on the Institute's website.

1.1.3. Complaints/suggestions, if any, shall be communicated to the OCRC (Online Courses Review Committee) secretariat email.

1.2. Students' Readiness:

1.2.1. Feedback shall be collected from the currently enrolled students regarding their readiness for online classes through the online survey developed and recommended by the HEC.

1.2.2. The collected data shall be analyzed by the QEC to ascertain that the majority of the students are ready for online classes.

1.2.3. Students shall be informed about the initiation of classes through the SMS service.

1.3. Readiness of Faculty Members:

1.3.1. The faculty members shall be taken onboard regarding commencement of online classes.

1.3.2. The Policy Guidelines and these SOPs shall be circulated among faculty members.

1.3.3. Faculty members shall be trained regarding development and delivery of courses for online classes and use of ICT for this purpose.

1.4. Readiness of Curriculum:

1.4.1. In the first step, the faculty members shall develop/modify their Course Syllabi as per Policy Guidelines for ODL.

1.4.2. In the second step; the faculty members should upload their course contents in SIS through e-portal.

1.4.3. In the third step, the program coordinator shall review the course contents uploaded in the portal by the faculty members to ensure that the contents are as per required quality standards. Program coordinator shall recommend the courses to the Online Courses Review Committee (OCRC) which are as per the quality standards, otherwise, he/she shall advise the faculty member to resubmit his/her course as per quality standards.

1.4.4. In the fourth step, courses recommended by program coordinators shall be presented to the OCRC for review of the contents. OCRC shall recommend courses to the Director for certification.

1.4.5. In the final step, the Director shall certify the courses recommended by the OCRC for online delivery.

2. SOPs for Online Course Delivery:

SOPs for different aspects of online course delivery are as under:

2.1. SOPs for Platforms of Online Course Delivery:

2.1.1. SIS: The portal shall be used for getting access to students contact details and uploading course contents. Faculty will use their SIS credentials to log in. A comprehensive tutorial has been developed for guidance where all details of accessing and using portal are given.

2.1.2. Google Classroom: Faculty members shall use Google Classroom as LMS for uploading course contents, reading materials, assignments, PowerPoint slides, quizzes, and announcements for students. Moreover, it is mandatory for faculty members to add Program Coordinator concerned as co-teacher in Google Classroom.

2.1.3. Google Meet: Faculty members shall use Google Meet for delivery of live lectures. It is mandatory for faculty members to:

2.1.3.1. Add program coordinator as co-teacher in Google Meet.

2.1.3.2. Record his/her live lecture and make the recorded lectures available for his/her class so that those students who were unable to attend the live lecture may also be able to watch the lecture later.

2.2. SOPs for Online Delivery of Lab Courses of BCS & BSSE

2.2.1. As per requirements there are two lab sessions conducted weekly for the offered lab-based course, each session with a duration of 90 minutes. Students shall be added to a virtual classroom using Google Classroom where all the resources relevant to the subject are shared among the students such as the ppt slides, related books, lab manuals, video lectures and description of weekly assignments.

2.2.2. For the Electronics course usually related hardware is needed in labs. To support online distance learning sessions of Basic Electronics Lab following tools/ simulators shall be used: i. Proteus ii. NI Multisim

2.2.3. In the first 30 minutes of the lab session the concepts are explained using a live example being coded on the instructor's computer whose screen is shared with the students through Google Meet. On completion of an example task by Instructor, the code is then instantly shared through Google Classroom with the students so that they can run and get the results on their own. The instructor shall prepare task(s) related to the topic being

covered, the problem statement of the tasks shall be shared with the students in Google Classroom. In the remaining time of the Lab session, the students will implement the task on their own and if they have any difficulty or want to ask any question from the instructor they can share their code and simulation with the instructor through screen sharing on Google Meet. Instructors evaluate students' code and simulation through their lab reports. Communicating the necessary details and suggestions about the task being evaluated is simultaneously done through Google Meet.

2.2.4. The instructors for all lab related courses shall guide students about working sessions using ppt slides with related helpful diagrams, images, online live sessions and additional relevant helping material publicly available online in the form of tutorials, URLs, YouTube tutorials and recorded lectures.

2.3. Timetable for Online Live Lectures: As per the provisions of Policy Guidelines for ODL at IMSciences, the timings for the sessions to be followed as per Student Information System (SIS) schedule but may be kept flexible based on the convenience of faculty and students through mutual coordination. However, to avoid clashes of different classes it's recommended to follow the SIS class timetables.

2.4. Academic Calendar: Detailed Academic Calendar shall be shared with faculty and students from the office of the Joint Director.

3. SOPs for Assessment and Evaluation of Students' Learning Outcomes

Assignments, quizzes, presentations, projects (and others as may be communicated) are the tools used for assessment and evaluation of students' learning at IMSciences. In view of the novel situation posed by the pandemic Covid-19, the Institute will adopt a continuous assessment/examination method for the current semester.

3.1. To ensure quality in all assessments, the Institute will adopt multiple assessment modes so that the assessments include easy, moderate, and high-difficulty assignments in due weightage.

3.2. Assessment of semester work, term assessments and final projects should be verifiable, which means a teacher will have to maintain the record of viva/presentations (in the form of video recording), and/or soft/hard copies of reports/reflection papers/exam papers.

3.3. In this regard the faculty members may adopt any of the following methods, set their assessment mode and marks weightage and communicate the same to the coordinators for approval. Once approved the same can be shared with students instantly.

- Weekly assignments, Weekly quizzes, Midterm assignments, Terminal assignments/projects, Digital/Online presentation &/or viva voce, Online video presentations by students, Open-Book assignments within time limits, Class participation, Lab work (Online)

In case, a teacher intends to change his/her evaluation strategy approved by the coordinator earlier, he/she must take prior approval for the concerned coordinator.

4. SOPs for Quality Assurance:

Roles and responsibilities of different stakeholders in quality assurance are as under:

4.1. Role of Faculty Members:

4.1.1. Faculty members shall prepare and deliver his/her course in an online learning friendly manner.

4.1.2. Faculty members shall add program coordinator as co-teacher in Google Classroom and Google Meet so that the coordinator concerned can monitor course delivery as and when required.

4.1.3. Faculty members shall record his/her lecture and make them easily available to his/her students.

4.1.4. Faculty members shall keep proper record of assignments, quizzes, reading/audio/video and other resources shared with the students during course delivery in a soft folder. Such soft course folders shall be submitted to Program Coordinator by uploading to Google Drive folder created by the coordinator concerned for this purpose.

4.2. Roles and Responsibilities of Program Coordinator:

4.2.1. Program Coordinators shall ensure the quality of course contents developed and uploaded by the faculty member at SIS portal.

4.2.2. As a member of OCRC program coordinators shall attend the OCRC meetings to review and recommend courses to the Director for certification.

4.2.3. Program Coordinators as co-teachers shall monitor the delivery of live lectures, course material shared with students by the faculty members and quality of assignments and quizzes.

4.2.4. Collection of course folders in soft form from faculty members teaching in their respective programs and submit to QEC at the end of the semester.

4.3. Roles and Responsibilities of QEC:

- 4.3.1. The QEC shall conduct an online survey regarding students' readiness for online classes, quality of online education.
- 4.3.2. The QEC shall serve as secretariat of OCRC.
- 4.3.3. Collection of course folders from program coordinators at the end of the semester.
- 4.4. Roles and Responsibilities of Technical Support Team:
 - 4.4.1. To develop a system for conducting online 'surveys'.
 - 4.4.2. To train faculty members regarding effective use of ICT for ODL.
 - 4.4.3. To develop tutorials for faculty and students regarding use of ICT for ODL
 - 4.4.4. To fix different technical issues faced by faculty and students during ODL
 - 4.4.5. To provide technology related support to all when required

CURRENT STATUS OF CAMPUS MANAGEMENT SYSTEM

Previously, the IMSciences staff and faculty were overloaded with manual work for various on-campus operations. These operations range from simple classroom and teacher allocations to more complex tasks including handling and managing financial complexities. Further, due to lack of automated coordination between different sections on-campus, lot of activities are repetitively conducted which creates unnecessary burden on the ministerial staff and the management. Another aspect of this disconnected system is the excessive usage of paper which is collectively a huge overhead for the institute.

In order to rectify the above-mentioned problems and to connect various operations, a customized in-house ERP software was developed in the open source ERP framework (OpenERP V5). While the ERP modules are upgraded from OpenERP V5 to Odoo V12. But currently CMS modules are implemented in OpenERP V5 (Released Apr, 2009) which has now become obsolete or has reached the end of maintenance. This obsolete version has limitations in its framework and doesn't support next generation technology. Some of the lacking technological advancement features are (Web Interfacing, Scalability, Availability, Manageability, Security, and Development practices) which are deemed necessary for any CMS application now a days.

So, Learning Management System requires upgraded Campus Management System for full automation.

TERMS AND CONDITIONS OF TENDER

Bidders are requested to read carefully the following terms and conditions and sign the Tender Form in token of having understood and accepted the same in all respects. Any of the provision's terms can be altered, initiated, admitted or included in the terms & condition by the procurement committee, however this can only be done with prior intimation and before the opening of bids.

Tenders which are in-complete, or which do not fulfill the requirements given hereinafter may be rendered disqualified.

Qualification of the Bidders

The following bidders will be eligible to apply for this tender:

1. Bidders registered with relevant tax authorities and KP Revenue Authority.
2. An affidavit that the bidder has never been blacklisted by any Government agency or authority.
3. Bidders' must have a minimum 5 years of working experience.
4. In case the bidder is the local representative, then Authorization letter from the International Vendor is required.

Software Framework and Duration

1. Software Framework should be **Open-Source**
2. Ready to deploy software solution using standard framework with **source-code** to be deployed initially at the IMSciences premises. The software solution modules should be customized as per Institute requirements.
3. The deployment and operationalization time is six (06) months after award of contract and agreement signing.

Method of Procurement:

It will be a "Single Stage - Two Envelope" procedure

- The bid shall comprise of a single package containing two separate envelopes. Each envelope shall contain separately the financial and technical proposal.
- The envelopes shall be marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold and legible letters to avoid confusion
- Initially only the envelope marked with "TECHNICAL PROPOSAL" shall be opened at 1430 hours on the same day, in the presence of interested bidders.
- The envelope marked as "FINANCIAL PROPOSAL", will be retained by the procuring agency without being opened.

- The Technical Committee shall evaluate the technical proposal based on the parameters mentioned in the “Technical Evaluation Criteria”, without reference to the price and reject any proposal which does not conform to the specified requirements.
- The financial proposal of bids shall be opened in the presence of interested bidders or their representatives at a time, date and venue to be specified in due course of time.
- After the evaluation and approval of the technical proposal the Procurement Committee shall open the financial proposals of the technically qualified bids only. The financial proposal of bids found technically non-responsive shall be returned un-opened to the respective bidders.
- Earnest money should be enclosed in a separate sealed envelope marked clearly as “EARNEST MONEY” and submitted separately with the proposals.

Response time:

Pre-bid meeting for Purchase of “Complete Learning Management Solution” project of IMSciences will be arranged on 17-Feb-2022 at 12:00 PM in the RSB Board Room of the Institute.

The sealed bids duly marked as Bid/Proposal for “Complete Learning Management Solution” must reach the office of the **Procurement Officer**, at **IMSciences**, Plot #1-A, E-5, Phase,7, Hayatabad, Peshawar on or before 11:00 AM on 25-Feb-2022. The tender will be opened on same day at 11:30 AM in the RSB Board Room of the Institute.

Bid Price:

1. The prices quoted shall be valid for 90 days after the date of submission.
2. The prices quoted should be inclusive of all taxes, duties & service/implementation charges.
3. Taxes will be recovered as per rules and regulations of the government.

Evaluation of bids:

1. All bids should comply with the eligibility criteria and other terms and conditions mentioned here after.

Rejection of bids & dispute:

1. All bids submitted after the prescribed date & time shall not be entertained.
2. Failure in submission of the required documents will result in the rejection of bid/proposal.
3. Any bid received without earnest money, shall not be accepted.
4. IMSciences reserves the right to reject any or all bids or proposals at any time prior to the acceptance of a bid or proposal.
5. If the bidder left the project incomplete legal proceeding will be done as per law.

6. Any dispute arising during course of completion of assignment will be referred to the Director IMSciences and his decision will be final and binding upon the bidder.

Award of Tender and Payment of Bills:

1. Minimum technical qualifying is 70%.
2. Financial bids of only technically qualified bidders would be opened.
3. The contract will be awarded to the lowest financial bidder.
4. The successful bidder will sign a formal agreement with the Institute.
5. Payment of bills will only be released as per payment schedule in **Annex -II**
6. Professional Tax Certificate of KP should be provided after award of contract and before payment of bills. In case of failure, the due amount of tax would be deducted from the service provider.

Earnest Money

Earnest Money (refundable) @ 2% of the quoted price shall be submitted with the Tender in the form of Bank Draft in favor of the **Director, IMSciences** without which no bid(s) will be accepted for consideration.

Note: Technical & Financial Proposals, in sealed covers, addressed to the **Procurement Officer, IMSciences** must be sent through registered post/courier service or may be delivered in person.

I have read all the terms and conditions and agree to fully comply and abide by them. Any non-conformity on my part would result in the rejection of the bid.

Name of the Tenderer
Authorized Signatures
& Official Stamp

Name of Project Coordinator
Authorized Signatures
& Official Stamp

Institute of Management Sciences Peshawar

Checklist

Sr	Item	Page No.
1	Name of the Firm Address (Telephone, Fax & E-mail)	
2	Date of Establishment & Certificate of Establishment	
3	Sales Tax Registration No. (attach documentary evidence)	
4	KP Revenue Authority Registration No. (attach documentary evidence)	
5	National/Income Tax No. (Annual Turnover supported by Income Tax Return)	
6	Earnest Money @ 2% as Bank Draft is attached with the check list	Yes_____ No._____
7	Affidavit (that the firm has not been blacklisted by private, Govt., Semi Govt. and Autonomous Body)	
8	Contact Person Name & Designation_____	_____ Authorized Signature & Stamp

Institute of Management Sciences Peshawar

Technical Requirements

Learning Management Software (Faculty & Student Portal)

Interested bidders are required to provide technical proposal and demonstration with the following LMS features:

LMS FEATURES		
Overall Requirements	1.1	The system should provide full set of functionalities without any limitations to users with visual, hearing, and mobility impairments
	1.2	The system should be modular in design to accommodate a phased implementation. Once implemented, it should be possible to easily include new functions without requiring major reconfiguration
	1.3	The system should be able to operate using all leading browser applications such as (chrome, safari, IE ...etc.)
	1.4	The system should provide user guides and eLearning materials for the different user roles in the system (admin, faculty members, students, teaching assistants, etc.)
	1.5	The system should allow students to perform different educational activities (assignment, forums, quizzes ...etc.) and interact with them through different smart mobile devices.
	1.6	The system should allow sending reminders and announcements through emails, and SMSs to different types and groups of users.
	1.7	The system should support the creation and administration of multiple role designations for users. These roles should include at a minimum administrative, instructor, student, and guest levels, as well as other customized roles and rights
Course Administration	2.1	The system should support templates for editing course information; such as: descriptions, goals, references, topics.... etc.
	2.2	The system should include course templates and a wizard for standardized course design
	2.3	For ease of use, the system should NOT require HTML or other programming language skills to add content to a course.
	2.4	The system should be able to allow adding course syllabuses through ready-made templates and text editor
	2.5	The system should offer a cross-browser, cross-platform rich text editing interface for content creation within courses
	2.6	The system should be able to link courses to categories (a particular field of study)
	2.7	The system should be able to assign a course teacher (instructor) and teaching assistant from the list of users in the system.
	2.8	The system should allow instructor(s)/teaching assistant to build course glossary
	2.9	The system should support adaptable delivery of content that can change student's learning path based on performance
	2.10	The system should offer instructors the ability to view courses as a student without having to log-out as an instructor and re-log-in as a student or switch from one interface to another

	2.11	The system should offer instructors/admins the ability to set course language independently from the language setting of the overall system
	2.12	The system should allow the ability to change course settings, enable or disable tools, and restrict access to content based on certain criteria such as (duration, date, progress, ... etc.)
	2.13	The system should allow instructors archive the entire course or specific parts of a course
	2.14	The system should be able to notify concerned users of new course items such as new content added, available published assignments, new discussion board posts ... etc.
	2.15	The system should be able to allow instructors align goals/learning objectives to course content
	2.16	The system should be able to allow instructors add FAQ page for the most common questions of the course
	2.17	The system should be able to display information about available storage capacity to add resources to a course, and the current usage percentage
	2.18	The system should offer tools to view student progress through course content.
	2.19	The system should include dashboard for instructors in order to provide overall view of course data related to student performance
	2.20	The system should allow instructors to copy/transfer course items (content, activities, assignments, quizzes, questions, discussion forums, ... etc.) between courses.
	2.21	The system should allow resetting courses e.g. deleting all students' interactions, responses and activities in a course
	2.22	The system should offer the ability to delete course(s) to administrators
	2.23	The system should allow users to evaluate the entire course in addition to course items such as (materials, activities, ... etc.)
Communication and Collaboration	3.1	The system should provide collaborative tools for course content and group projects such as:
	3.2	Instant messaging (chat)
	3.3	Class and project groups
	3.4	Calendars
	3.5	Discussion forums
	3.6	Blogs
	3.7	Wikis
	3.8	Task lists
	3.9	Email
	3.10	The system should allow smooth, synchronous text interaction through chat module
	3.11	The system should support URLs, similes, embedded HTML, images,... etc. within chat sessions
	3.12	The system should be able to log chat sessions for later viewing,
	3.13	The system should offer discussion forums with different types within a course such as course news forum, course topic forum, etc.
	3.14	Discussions can be viewed nested, flat or threaded, oldest or newest first.
	3.15	Discussion forums can be subscribed to by users so that updates can be forwarded via email

	3.16	Discussion forums thread can be rated
	3.17	The system should allow Instructors enable discussion forum's and enable thread grading within the forum
	3.18	The system should provide dedicated file and content storage areas for individual users, courses, and any other constituent groups
Assessment and Evaluation	4.1	The system should allow students to submit/upload assignment as single or multiple files in various file formats
	4.2	The system should provide the ability to have assignments date stamped
	4.3	The system should provide the ability so that late assignment can be allowed/disallowed
	4.4	The system should provide the ability to show lateness of submissions
	4.5	The system should allow instructor(s) to grade assignments and provide feedback to each student
	4.6	The system should allow assignment grading on single page
	4.7	The system should allow teacher(s) to provide feedback to student submission
	4.9	The system should provide the ability to allow re-submissions of assignments
	4.10	The system should allow instructors to monitor student progress in submitting projects/assignments
	4.11	The system should allow instructors to define database of questions as question banks for use and re-use in different quizzes
	4.12	The system should provide the ability to store questions in categories for easy access
	4.13	The system should provide the ability for quizzes to be graded automatically, and also the ability to be re-graded if questions are modified
	4.14	The system should provide the ability for "limited time window" quizzes outside of which they are not available
	4.15	The system should provide the ability for quizzes to be attempted multiple times by instructor's choice
	4.16	The system should provide the ability for quiz questions and quiz answers to be shuffled (randomized)
	4.17	The system should provide the ability for questions to contain HTML and images
	4.18	The system should provide the ability to set the number of tries to a quiz
	4.19	The system should provide the ability for quizzes to be self-Assessment
	4.20	<p>Question types:</p> <ul style="list-style-type: none"> ● Multiple response ● Multiple choice with single answer ● Multiple choice with multiple answers ● True/False ● Fill in the blank ● Matching ● Drag and drop ● Ranking ● Numerical answer ● Short answer ● Essay with instructor notification ● Rich format with HTML and graphics
4.21	<p>Learner feedback formats</p> <ul style="list-style-type: none"> ● No feedback 	

		<ul style="list-style-type: none"> ● Instructor’s selected feedback ● Immediate feedback with correct answer ● Right or wrong but no correct answer ● Summary at end of quiz ● Automatic grade at end of quiz ● Ability to re-grade ● Right or wrong with hints ● Several tries/attempts allowed ● Evaluation of essay and open-ended questions
	4.22	The system should offer Gradebook tool within its offering that can be accessed from central page
	4.23	The system should offer the capability for administrators to conceal students’ information in order to grade activities anonymously
	4.24	The system should offer the ability to preserve and track graded activities history and grade changes
	4.25	All graded activities within a course such as assessment, assignments, etc., should be automatically added to course Gradebook
	4.26	Gradebook should offer Instructors the capability to grade course activities inline
	4.27	Gradebook should offer Instructors the ability to communicate with students directly regarding a specific graded activity
	4.28	Gradebook should offer instructors the ability to add personal notes and remarks for students’ submission in different graded activities
	4.29	Gradebook should offer the ability to provide progress reports for student(s) and generally for a course
	4.30	Gradebook should offer students the ability to view their own grades and progress securely
	4.31	The system should provide the ability to assign weights to automatically-graded questions, including extra credit, partial credit, and negative credit
	4.32	The system should provide quiz submission reports
	4.33	Integration with plagiarism detection service such as Turnitin etc.
Reporting	5.1	The system should be able to provide reports on all user roles (students, teachers, teaching assistants, etc.) of their use of the system and in certain duration
	5.2	The system should be able to provide student progress reports in course(s)
	5.3	The system should be able to track Student(s) visits to course activities and resources
	5.4	The system should be able to keep track of history of login(s) for user(s)
	5.5	The system should be able to keep track of the history of activities/navigation performed by user(s)
	5.6	The system should be able to provide detailed reports on exams, quizzes, assignments and student(s) grades.
	5.7	The system should be able to extract statistical reporting and analytics on student(s) grades from Gradebook
	5.8	The system should provide an early warning reporting for students at risk who are falling behind the expected course progress
	5.9	The system should provide seamless capability of extracting reports to Excel, text files, etc.

	5.10	The system should be able to provide the ability to define and develop custom reports
	5.11	The system should be able to provide student e-portfolio that includes all the student(s) work in courses and learning programs including their performance data
	5.12	The system should provide detailing reporting of the progress and percentage of lectures delivery for all instructors course-wise within a certain department
Virtual Classroom	6.1	The system should be able to integrate with videoconferencing applications such as (Microsoft Teams, Google Meet and Zoom)
	6.2	The system should Enable faculty members/instructors to create and schedule live online lecture(s) and determine its time and date
	6.3	The system should provide means such as e-mail, notification messages, etc. to inform concerned student(s) of their assigned live lecture(s) assigned to them, and to include it in their calendar
	6.4	The system should allow faculty members/instructors to upload live lecture materials ahead start of its scheduled time
	6.5	The system should provide list and display students attending live lecture
	6.6	The system should allow participants to have profiles to list all their relevant information
	6.7	The system should allow faculty members/instructors to check and review student's information during live lecture by clicking student's name
Usability	7.1	The system shall provide a simple, intuitive and easy-to-use user interface which is web based and accessible on mobile platforms in addition to a complete native mobile application dedicated for iOS, Android and windows OS
	7.2	The system should have support for content in different languages for all types of object and models
	7.3	The system should incorporate tool help features (e.g., mouse roll-over, help bubbles, tool tips etc.)
	7.4	The system should have advanced reporting features to produce rich format reports with information collected from various data sources
	7.5	The system should provide configurable and flexible privacy management features to allow masking of certain information based on predefined criteria (e.g. masking identities when performing reporting)
Security	8.1	The implemented systems shall support user identity, roles and permissions management as part of a Role Based Access Controls capability
	8.2	The implemented systems shall provide the capability to create user specific administration accounts
	8.3	The implemented systems shall support different authentication schemes (e.g. local, Active Directory, LDAP, browser forms, digital certificates, tokens, challenge/ response)
	8.4	The implemented systems shall provide tight security controls with the ability to configure and modify security controls (e.g. minimum password requirements, account lockout, etc.)
	8.5	Where applicable, the implemented systems shall support non-repudiation controls. These include a mechanism to provide evidence that a transaction has been sent and received by the appropriate systems and users

	8.6	The implemented systems shall have the ability to easily deactivate a user account when a user is terminated, suspended or on vacation. User account deactivation shall be automatically cascaded across all the systems / components where the user have access rights
	8.7	The implemented solution shall have the ability to automatically terminate users sessions if the session is not active for a predefined time interval
	8.8	The implemented solution will provide access to audit logs
	8.9	Proposed solution will have the capability to maintain, generate and audit trail of user log-in activities and actions

LMS and CMS Administrative Modules

Interested bidders are required to provide technical proposal and demonstration with the following modules:

Modules	Features
1. LMS/CMS Organization Structure & Policies	<ul style="list-style-type: none"> a. Facility to maintain multiple campuses and affiliated institutes, addresses, contact information, higher management profile, etc. b. Facility to define student information such as name, contact number, email address, mailing address, academic records and other details. c. Facility to define different fee structures. d. Facility to define quota rules. e. 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. f. Facility to define scholarship programs, donors and criteria for awarding scholarships. g. Facility to setup faculties, their departments. h. Facility to define affiliated institutes and their departments. i. Facility to setup admin staff such as VC, Deans, Chairpersons, Directors, Dy. Directors, Registrar, Dy. Registrar, lab in charge, superintendents, etc. j. Allow to differentiate between academic and nonacademic Organizational units k. Facility to maintain bank accounts for fee collection. l. Facility to maintain Semester and Annual Academic Programs and their details such as number of years, number of semesters, regular and summer semester, maximum credits hours, degree duration, batches with the following information: <ul style="list-style-type: none"> i. Batch Code and Name. ii. Years to pass iii. Maximum Credit Hours to Pass. iv. Number of Core Credit Hours to Pass. v. Number of Major/Minor Credit Hours. vi. Date of Admission.

	<ul style="list-style-type: none"> vii. Registration Number Template if any. viii. Passing Marks of a Course. ix. Batch Timings (Morning or Evening etc.). x. Number of Probations. xi. Probation starts CGPA and ends CGPA. xii. Any Specialization is offered. xiii. Any Thesis/Project is offered. m. Any other setup required for the processing of LMS/CMS related transactions. n. Ability to maintain different versions of the organizational unit over time based on date with ability to turn “on” or “off” the organization unit. o. Define academic program, specialization, sub specialization courses to be offered, degrees to be offered and pre-requisite requirements. p. Define minimum/maximum credit hours for each degree program. q. Define Core/ Elective courses in each degree program r. Define multiple formulas for grading schemes and their associated values. s. The solution must be able to support grading scheme settings as per programme t. The solution must be able to set/announce dates for course start/end, course add/drop, exams, result declaration, convocation etc. u. The solution should manage the users according to role and permission to access can be controlled by campus, faculty, department, section and unit wise etc. for editing and viewing data. v. Provision to withdraw students from programme/courses as per institute rules w. Allow to define calendar for each campus x. Allow to define office rooms and relevant details. y. Provide ability to define course transfer credit rules. z. Define multiple criteria for probation/suspension based on CGPA or another basis. aa. Define assessment types for each course like quizzes, assignments, mid-term, end-term, class participation etc. bb. Define maximum enrollment at the program and section level. cc. Terms in a year should be categorized such as Fall, spring, semester trimester etc. dd. Produce a bulletin report of course catalog, with detailed information including descriptive text, prerequisites, co-requisites, and programme requirements. ee. The report can be obtained in hard copy and/or its results may be displayed in the open access area of the Student Self Service component. that details the defined academic catalog for a given academic year. ff. Restrict a course to only those students within a specific class gg. program, campus, degree and/or institute, etc. hh. Assign different titles and descriptions to the same course. ii. BANK API: Ability assist Banks for processing with Application fee collections by providing a real time interface to inquire invoice details or post collected amount directly to the System. jj. Solution to maintain a log of system generated email and SMS notifications that should be available to administrators
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	<p>kk. Ability to verify CNIC and extract/ record corresponding personal information from NADRA System</p> <p>ll. Ability to connect with the Online Payment System through Bank(s) for all types of payments across the solution</p>
<p>2. LMS/ CMS Operational Reports</p>	<p>a. Solution must export all implemented/configured RULES & POLICIES regarding all components across the solution.</p> <p>b. Generate a report having list of students with their academic information and personal profile details.</p> <p>c. Ability to generate fee bill for Admissions Application.</p> <p>d. Generate a report for summary of students admitted by admission announcement.</p> <p>e. Ability to generate PDFs of Entry Test Slips having applicant details, test schedule and venue of the test</p> <p>f. Ability to print test scores of applicants. Post it on notice board or social media website or can be used for internal evaluation in excel.</p> <p>g. Ability to print interview form and detail for an individual applicant which can be presented in front of interview panel or internal processing.</p> <p>h. Generate a list of applicants appearing for interview with details like venue, dates and time.</p> <p>i. Provision to print the detailed financial summary at department, program and term level. Show details like total receivable, total received, total outstanding for overall institute and then for each department, program and individual student.</p> <p>j. Ability to print the collection summary total amount at department level.</p> <p>k. Generate Student Registration Card</p> <p>l. Generate Student-wise report of enrollment summary having registered courses and credit hours etc</p> <p>m. Generate Student-wise report for Enrollments and Financial summary</p> <p>n. Ability to generate an academics report to list the grades for a student in a single term</p> <p>o. Generate the report for count of students across Campuses, Schools, affiliated institutes and Departments</p> <p>p. Ability to generate the class/day-wise report of attendance summary</p> <p>q. Generate the Grade Reports for a particular student. Show marks, grades and GPA, CGPA</p> <p>r. Ability to generate the Class-wise Student Grades Report</p> <p>s. Generate the provisional and final Transcript as per Actual timeline of courses completion by students</p> <p>t. Generate the provisional and final Transcript as per required and expected timeline of courses completion by students</p> <p>u. Access to a read replica of the database in a secure manner for customized on-demand reporting.</p> <p>v. Provide ability to export Campus/program/department wise academic programs data with details in Excel.</p> <p>w. Provide ability to export Campus/program/department wise Core/Elective/Minor/UR courses data with details in Excel.</p> <p>x. Provision of a report: Batch wise List of students - Left during semester</p> <p>y. Provision of a report: Batch wise List of students Semester freezing</p>

	<p>z. Provision of a report: Batch wise list of students – Dropped various subjects</p> <p>aa. Provision of a report: Batch wise List of Students – Scholarship Awardees</p> <p>bb. Provision of a report: Letter format - Shortage of Attendance</p> <p>cc. Individual reports for repeat courses, Makeup course retests and I-grades may be made available in LMS/CMS</p> <p>dd. Batch-wise list of students who appeared in exams in a particular semester.</p> <p>ee. Batch-wise list of students, who are withdrawn, suspended and deferred in a particular semester.</p> <p>ff. Batch-wise summary of grades awarded by a faculty member is required. Course code, course name, credit hours, teacher name, batch and grades summary needs to be exported.</p> <p>gg. Student-wise summary of grades improved by the student is required. Student Reg No, Name, Degree, Batch, Course code, course name, credit hours, semester, Old Grade, New Grade and CGPA need to be exported.</p> <p>hh. Batch-wise list of students who earned F and D in a semester is required. It can be made more generic as list of students who earned any grade in a semester.</p> <p>ii. Student’s personal info and contact info may be displayed and downloaded in a tabular form for administrative tasks.</p> <p>jj. Provision of a report: Semester wise students financials</p> <p>kk. Provision of a report: Semester wise students with outstanding dues</p> <p>ll. Provision of a report: Term wise students having Installments</p> <p>mm. Provision of a report: Program & Department wise students financials</p> <p>nn. Provision of a report: Program & Department wise students with outstanding dues</p>
<p>3.Self-Subscribed Admission Module</p>	<p>a. The module starts at the stage when a student applies for the admission and ends when the student is selected in a program.</p> <p>b. 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.</p> <p>c. Facility to verify applicants’ data based on criteria defined in the system.</p> <p>d. 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.</p> <p>e. The solution must provide ability to assess entry eligibility and calculate merit scores and relative rankings for all applicants belonging to a similar program (e.g. All BS programs) together.</p> <p>f. System must provision ability to compute multiple eligibilities in parallel while listing merit position in serial. (the highest merit score applicant will have the highest merit position (1) and so on.)</p> <p>g. The system should provide a consolidated administrative view of all of the applicants, their eligibility status, merit score, position and scale based on program (preference) applied.</p> <p>h. Solution must allow administrators to override eligibility and merit of the individual applicants by having explicit choice to make a decision to override system processed results based on defined rules. A user can choose to change the applicant's eligibility status from "Eligible" to "Not Eligible" and vice-versa.</p>

	<ul style="list-style-type: none"> i. Ability to define discipline/program wise seats for selection j. Ability to provide updated information on seats for a program such as Total Seats, Available Seats, Confirmed Seats and Offered Seats etc. k. Ability for an authorized user to increase/decrease the seats for a program. l. Facility to publish merit list and send alert to successful candidates for interview and pay admission fee and submit their credentials online. m. Facility to tag the students who qualifies the interview and document verification process. n. Facility to generate notification to the successful candidates to deposit fee as per the schedule. o. Provision to apply for other facilities offered by the university such as transport, hostel, etc. p. Facility to cancel, suspend student admission based on the rule defined in the system such as low GPA, misconduct, non-payment of dues etc. q. Facility to conduct and maintain Hafiz-e-Quran/Disable test/interview records. r. Facility to re-admit a student whose admission has been cancelled due to non- payment, absence or any other administrative issues. s. Entry test option available for CBT or importing result from the other source. t. Ability to define and manage admission control dates for programs, or combination of program and majors or program and combination of program offering variants such as full time/part-time or evening or morning sessions against which applications are invited. u. Solution must allow creation and management of unlimited number of cohorts with distinct start and end dates and allow tagging of it with each program. v. Ability to control timelines for receiving applications online. These controls should be flexible to enough to support higher levels such as Campus deadlines or as low as a program application deadline. w. Solution must provide ability to manage Admission Applications process for both local and International Applicants with maintenance of different polices such as reservation of seats, currency and application fee rate differences and different program entry criteria. x. System must provide an Online web portal where applicants can sign up, sign in and create and manage admissions applications. y. System should allow applicants to register for online Applicant Portal via either Phone Number or Email Address or both and CNIC. z. Solution must allow Applicants to submit multiple applications against different programs using Online Web Portal. aa. Online Web Portal must automatically control the creation and submission of application as per the setup timelines defined at institute, campus, career, program (or group of programs) or combination of these entities. bb. Online Web portal should allow Applicants to save draft of applications as many times as desired before submitting the application formally. cc. The solution must allow prospects to fill required information and submit application supporting document online including such as transcript, certification etc. dd. The solution must capture the undertaking about the truthfulness and accuracy of the information provided from Applicants via Applicant Portal.
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	<p>ee. System must ensure the format correctness or completeness of the applications received via Online Web Portal before submission process. The completeness can either be in the form of mandatory sections/fields or in the form of required number and type of supporting documents.</p> <p>ff. Solution should support automatic trigger of either SMS or Email or both notifications to the relevant "Admissions Team" at various stages of the Online Web Portal Process such as signing up of new applicants, Submission of new applications, or data updates in Submitted applications etc.</p> <p>gg. Ability to allow Applicants a restricted editing of submitted online applications to upload their final result transcript that is sometimes awaited from the awarding Institution(s).</p> <p>hh. Ability to allow Applicants to upload the supporting documents even after submission such as but not limited to, missing documents or application fee payment receipts etc.</p> <p>ii. Applicant should be able to download and print filled admission application form, fee challan, roll number slip and the offer letter from the portal.</p> <p>jj. Enable students to check their admission decision status and outstanding admissions documents through self-service component.</p> <p>kk. There must be an interface for administration and academic department to manage student admission processes online.</p> <p>ll. Solution must have an ability to provide intake wise users data security to manage and process admission application based on combination of campus, career, discipline, programs etc. Each user must be able to create & view only as much applications data and process them as per the issued data security.</p> <p>mm. System must provide administrators with controls to restrict or provide access to different admissions features such as only some users must have provision to such as generating offer letters, sending communications to applicants, entering the application fee payments or viewing supporting documents etc.</p> <p>nn. Maintain an unlimited number of applications for a particular individual to any academic level, with distinct admission decisions for each application.</p> <p>oo. Provide a one page 'quick entry' page for staff to get a record created immediately in the system for an applicant.</p> <p>pp. Provide mechanism to help ensure admissions data is not altered on the system if when test scores are subsequently loaded.</p> <p>qq. Solution should provide ability to setup various application fee lines each having their own fee rates and applicability rules in form of combination of primary application data elements such as Campus, Career, Program / group of programs, local and international, self-finance or regular or any other application types.</p> <p>rr. Ability to customize application invoice template for enlisting the assessed fee based on defined rules along with the due date, payment conditions and payment details including bank details and other payment mode related information.</p> <p>ss. Ability to share/download Application fee invoice for Admissions Finance Team.</p>
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	<p>tt. Solution must provide ability to generate Application Fee payment receipt when payment is entered against application fee invoice. The receipt format must be customizable to personalize the header/footer as per the institute's configurations.</p> <p>uu. System must assist in differentiating the paid and not yet paid applications so that further processing can only start on the paid applications.</p> <p>vv. System must have ability to write off the outstanding and overaged application fee invoices and make them as in-eligible.</p> <p>ww. Ability to send reminders to applicants to request missing supporting documents via SMS or email or both.</p> <p>xx. Solution should provide ability to schedule applicant interviews, assign interview marks and weightage as an Admission Criteria</p> <p>yy. Ability to reserve administrative sections or administrative fields to store "For Office Use" information with the Submitted Admission Application.</p> <p>zz. Solution must support creation and management of Admission Entrance Test Schedules</p> <p>aaa. Solution must provide ability to generate Admit slip for applicants to inform them of admissions test details. Admit slip should be visible on online portal and sent as an email. This will allow Applicants to present admit slip at the venue of admission test as his identity.</p> <p>bbb. Ability to track entry Test Attendance.</p> <p>ccc. Ability to print test scores of applicants. These test scores can be posted on notice board, social media website or can be used for internal evaluation in excel.</p> <p>ddd. Ability to schedule interviews for applicants and sending them interview invites and Ability to print interview form and detail for an individual applicant. It will be used to present in front of interview panel or internal processing.</p> <p>eee. System should provide list of applicants that are appearing for interview with details like venue, dates and time.</p> <p>fff. Ability to categorize program or group of programs based on automated rules such as undergraduate admissions processing via eligibility rules, merit formulas, selection list or following a combination of eligibility/merit rule and subjective assessment for some like post-graduate programs or following a completely subjective evaluation and decision mode like for admitting to short-programs/certifications.</p> <p>ggg. The system should provide a consolidated administrative view of all of the applicants, their eligibility status, merit score, position and scale based on program (preference) applied.</p> <p>hhh. Must provide an entry eligibility and merit ranking details report.</p> <p>iii. Ability to provide updated information on seats for a program such as Total Seats, Available Seats, Confirmed Seats and Offered Seats etc.</p> <p>jjj. Ability for an authorized user to increase/decrease the seats for a program.</p> <p>kkk. Solution must have ability to automatically allocate seats to the candidates in batch, based on their merit ranking and program preference order.</p>
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III. Ability to generate offer letter in bulk as per the configured template that can vary based on the selected program
 mmm. Ability to convert applicants with admission status 'admission offer accepted' to Students in a batch whilst copying all relevant policies and information in student profile
 nnn. Ability to build and generate custom and on demand reports for end-to-end admissions process.
 ooo. Ability to provide a downloadable extract of all or criteria-based admission application data received for a year.
 ppp. Provide out-of-the-box analytics to monitor applications data received such information on applicant biographical and demographical details, education background, fee status and programs applied etc.
 qqq. There must be an interface for administration and academic department to manage student admission processes online.
 rrr. System must be able to display program wise different list of applicants i.e. Submitted Applications, In-Progress Applications, Rejected Applications, Cancelled/ Withdraw Applications etc.
 sss. Complete installation of all sub-components pertaining to Recruitments & Admissions as per manufacturer's guidelines. Configuration of all sub-components for an optimum and efficient output of the solution, meeting the objectives and requirements. Testing and commissioning of the complete setup as per the requirements and satisfaction of the Institute.
 ttt. Inquiry Follow-ups & Bulk SMS and Mailing
 uuu. Online application form filling and submission with offline record and scan document availability.
 vvv. 24 x 7 Availability of application forms
 www. Password protected Pre-Registration process
 xxx. Special Configurable Treatment for Reserve class students and staff (Handicap Students)
 yyy. Student inquiry Management with online inquiry form (Integrated with Website)
 zzz. Online payment gateway integration including Bank Challan System
 aaaa. Configurable Start Date, End Date and Fees Details
 bbbb. Online Payment Processing
 cccc. Configurable Payment Option for Cheque, DD and Online Transfers
 dddd. Real time update on application payment details and statement for reconciliation.
 eeee. Stepwise Online application status and confirmation via interface, SMS, and email
 ffff. Dynamic Merit List Generation for all departments/programs.
 gggg. Publishing Merit list of short-listed candidates integrated with (website)
 hhhh. Offline inquiry Form for Staff to record inquiries and the students may get offline hard copy feedback or online feedback.
 iii. Student Registration and Record Management
 jjjj. Migration and Admission Cancellation.
 kkkk. Student ID card generation and email ID generation.
 llll. Maintenance of student central personal file by enabling provost, chief proctor, concerned
 mmmm. HoD/, exam section, dept coordinator, AO office etc record their concern data in the student file

	<p>nnnn. Generation of reports related to student total strength program wise, campus wise, department wise, domicile based.</p> <p>oooo. Online credit transfer form to be accessible to member for decision making and approval from the competent authorities.</p> <p>Admission Sub-Modules</p> <p>a. Transport management sub module includes students registration, vehicle name, route details, transportation fees etc. which is created easiness to maintain details about transportation data also Transport fee collection is quite easy of the predefined structure.</p> <p>b. Hostel management sub module ensures comprehensive control over the entire hostel work flow. This includes complete management of student's registration, hostel financial management, room allocation and assignment and more. Disciplinary log facility helps the management in authorized control over the hostel activities.</p>
<p>4.Enrollment/Registration Module</p>	<p>a. The module starts at the stage when a student gets admission in a program and ends when the student is enrolled in a program.</p> <p>b. Facility for the student to select courses offered in a semester through the system upon new admission.</p> <p>c. Facility to select courses for new semester by the students.</p> <p>d. 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.</p> <p>e. Facility to review enrollment list/ course selection chose by the students.</p> <p>f. Facility to assign LMS/CMS Registration number for record tracking.</p> <p>g. Facility to maintain study schemes in which students have been enrolled.</p> <p>h. 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.</p> <p>i. Facility to freeze semester or course and generation of alerts to all the concerned departments.</p> <p>j. Facility to setup batch/ session to be attached with each student.</p> <p>k. Facility to close enrollment of student at the completion of study programs.</p> <p>l. The solution must be able to support setting of study intake and academic semester with subject auto enrolment.</p> <p>m. Activate a student in a new Term and Session in order to progress him to the next Academic Level in order to allow new Course Enrollments.</p> <p>n. Ability that affiliated institutes shall access the registration page online and enter their student's data for registration. With a deadline</p> <p>o. Ability of the system to accept the data and generate an auto acknowledgment email to the institute</p> <p>p. Ability of the system to check the affiliated institutes students for eligibility and generate a list of total number of students registered/enrolled and make a computer-based fee slip for institute for submission.</p> <p>q. Provide ability to hold or block registration if any discrepancy</p> <p>r. Individually enroll Students in one or multiple Class or Section.</p>

	<p>s. Update/delete Course information (Course Name, Course Category, Course Catalog Number) for an individual Student's enrollment in that course.</p> <p>t. Drop Enrollments for students who have not made tuition fee payment.</p> <p>u. Provide ability to automatically notify students prior to drop from courses due to nonpayment of tuition.</p> <p>v. To allow a student to enroll in available Classes at his/her ease via Self Service.</p> <p>w. Ability to allow admin to toggle Self Service Enrollments for a courses</p> <p>x. Allow a student to be able to view Courses which are open for enrollment in the selected semester</p> <p>y. Student should be able to view Course details while browsing courses for enrollment – Credit Hours, Instructors, Enrollment Requirements etc.</p> <p>z. Allow a student to do enrollments in more than one Term or Session, if the enrollment period is open</p> <p>aa. Ability for students to print their schedules, view their account information.</p> <p>bb. Provide ability to establish limits on the number of credit hours a student can register for during the term, by program.</p> <p>cc. Whenever a student repeats a course, it is tagged as "Repeating" in the system.</p> <p>dd. Ability to create per credit, flat rate, and plateau charge rules for fee assessment based on any of the following student information: student type, student attribute, residency, grading mode, instructional method, schedule type, admission term, degree, program, institute, level, major class, and other related fields.</p> <p>ee. System Generated Student Registration Card.</p> <p>ff. Student-wise report of Enrollment summary.</p> <p>gg. Student-wise Registration Report for Enrollments and Financial summary.</p> <p>hh. Report for summary of Enrollments across Courses.</p>
<p>5. Timetable, Class-Scheduler, Work-Load & QEC Module</p>	<p>Timetable, Class-Scheduler, Work-Load</p> <p>a. 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.</p> <p>b. Facility to define number of rooms and their usage (classrooms, labs, etc.)</p> <p>c. Facility to assign faculty members to the subject/ course</p> <p>d. Facility to define calendar such as shifts (morning, afternoon, night etc.), working days (Monday, Tuesday, etc.) and class duration (1 hour, 2 hours, etc.)</p> <p>e. Facility to define common subject combination into a single class.</p> <p>f. Facility to define lecturer day preference (Monday, Tuesday, etc.), lecturer time preference (Morning, afternoon, night etc.)</p> <p>g. Facility to support cancelation, replacement and relocation of classes.</p> <p>h. Based on the above parameters, the system should auto generate timetable with clash checking for classrooms, faculty members and students.</p> <p>i. Facility to generate various reports based on timetable.</p> <p>j. Facility to assign workload to faculty.</p> <p>k. Facility to assign additional workload (if any).</p> <p>l. Facility to generate actual work load and extra workload.</p>

	<p>QEC MODULE</p> <ul style="list-style-type: none"> a. Facility to define custom surveys such as teacher’s evaluation, course evaluation, etc. as required by the HEC or any other bodies. b. Facility to define rating scales, score and weightage of questions. c. Facility to host survey online and invite audience to participate through email / SMS. d. Facility to produce analysis of survey data through Business Intelligence (BI) tools. e. Facility to specify time for collecting feedback and subsequent reminders. f. Facility to export data of the collected feedback in CSV/Excel/ or any other format. g. Facility to generate status of pending and completed feedback. h. Make it available on a separate page on same university website and title it QEC i. Please provide some space on this page to upload HEC policies and events related to QEC j. Make student online portal available on page to upload forms by QEC k. Courses related data in form of timetable may be updated by relevant department along teacher and course name l. Students roll number, names etc should display to QEC office already entered by Admission Section m. provision of report generation may be provided to QEC n. provide permissions and rights to QEC to manage and access this page
<p>6.Student Financial Module</p>	<ul style="list-style-type: none"> a. Facility to generate online fee challans for the following cases: <ul style="list-style-type: none"> a. Entry test fee b. Admission of new program c. Semester fee challan d. Course fee, diploma, certificate fee, etc. e. Other fee such as transcript fee, degree fee, semester fee, etc. b. Each challan will have multiple head of accounts i.e. security fee, admission fee, course fee, Student cards fee etc. c. Facility to handle the following scenarios: <ul style="list-style-type: none"> a. Part payments and instalments b. Adjustment of advances c. Scholarship d. Waivers e. Penalties on late payment f. Refund of fee d. 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. e. Facility to record bank/ cash receipt f. Provision to enter adjustments to rectify errors g. Provision to create bank reconciliations h. Facility to handle final settlement of students through the system i. Facility to generate projected fee estimates of any program enrolled with reference to any particular student.

	<p>j. Facility to generate challan based on different category such as batch, individual student, semester wise, program wise, etc.</p> <p>k. Facility to maintain history of semester wise fee charged to the student.</p> <p>l. Integration with General Ledger (a module of ERP software) to post financial effects of different receipts in the form of journal voucher.</p>
<p>7. Examination Module</p>	<p>a. Facility to propose tentative semester wise date sheet by Controller of Examinations/ Head of Departments/ Affiliated institutes focal person.</p> <p>b. Facility to categorized course marking schemes as external and internal basis as per approved criteria</p> <p>c. Setup the assessment structure, give each assessment due weightage, max marks, minimum passing percentage, assessment date, re-sit provision etc.</p> <p>d. Setup of a Grading Scale to determine the marks threshold in which specific grade will be given i.e. 90- 100 = A, 80-8= B+, 70 to 7= B etc.</p> <p>e. Setup of a Grading Model i.e. Bell Curve Relative Grading, Absolute Grading etc.</p> <p>f. An excel-view for the Gradebook in which all Students can be graded together.</p> <p>g. Facility to publish final date sheet on university website as well as on student portal after getting approvals.</p> <p>h. Facility to schedule exam and resources such as seating capacity, supervisory staff, etc.</p> <p>i. 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</p> <p>j. Facility for the faculty to upload scores of mid-terms, final-term, quizzes, assignments, etc.</p> <p>k. Facility to generate/verify and approve award lists and attendance sheets at different levels (HOD, etc.) compiled by different faculties. The award list contains the results of mid and final terms exam and sessional tests marks(assignment /presentation /quizzes) obtained by the students.</p> <p>l. Online hosting of final results and transcript so that the student can view or print result from student web portal.</p> <p>m. Facility to constitute committee of external examiner, supervisor and other member to examine/evaluate the Research/thesis/ project submitted by students and to conduct viva voce examinations.</p> <p>n. Facility to attach each batch of students with the committee, supervisors, etc.</p> <p>o. Provide an online access to supervisor/ exam section to record result of thesis and viva to prepare award list (results).</p> <p>p. Facility to handle students migrated to and from other institutes.</p> <p>q. Facility to handle course equivalency of migrated students.</p> <p>r. Support/Flexibility for change in university semester by laws.</p> <p>s. Registration, Enrollment, roll number and result support for private and affiliated institutes students.</p> <p>t. Provision of internal and external marking as per criteria defined in the university rules and regulations</p> <p>u. University faculty and affiliated institutes focal person can update Course and Course Component maximum marks if given privilege</p> <p>v. Ability that affiliated institutes focal person enter the students result (internal), while external entry will be made by examinations section.</p>

	<p>w. To manage Course repeat attempts for Student via Student Grade Roster</p> <p>x. Unfair Mean Cases module</p> <p>y. Facility to keep record of Repeat Semester, Repeat Courses, Incomplete grade courses, freezing semester</p> <p>z. Facility to keep record probations, promotion etc</p> <p>aa. Facility to keep record of the duration of degree programs</p> <p>bb. Grade/class-wise reports for students</p> <p>cc. Provision for affiliated institutes to login onto the system to check their student's academic status and also have the provision for the affiliated institutes to print their examination roll number slips.</p> <p>dd. Online verification module for degree/certificates. e.g; (HEC PQR website)</p> <p>ee. System must maintain log / history of any marks changed by any user in any assessment.</p> <p>ff. Locking of Gradebook for an Instructor once Submitted.</p> <p>gg. Grace Marks & Condonation: Define grace rules parameters such as ... the max total grace marks, max grace applicable in a subject, are grace marks to be counted in subject marks...etc.,</p> <p>hh. Examination Pattern: Define flexible Exam pattern by defining no of class test, terminal examinations, final examination & their weightage in final result. User can define Subject-wise exam pattern also. Multiple flexible Exam patterns can be defined and any one pattern can be assigned to a course.</p> <p>ii. Internal marks / External Marks (Passing both external and internal Marks as per rules)</p> <p>jj. Locking system for Internal marks made by affiliated institutes, (institute authorized personal can make entry for internal marks - not editable) – anomaly (if any) arises will communicate to anomaly committee.</p> <p>kk. Examinations: Multiple Examination per session such as – Spring 2013 exam, Fall 2013, Fall 2013 Repeat, Spring 2013 Special Chance, etc.</p> <p>ll. Faculty: such as Computer Science, Social Sciences, and Management Sciences.</p>
<p>8.Degree/ Transcript Module</p>	<p>a. Maintain student application status for issuance of required certificate or degree, etc.</p> <p>b. Maintain stock and movement of blank copies of transcripts, provisional certificates, degrees and distinction certificates</p> <p>c. Maintain issued Transcript, Provisional Certificate, Degree and Distinction Certificate along their numbers records of a student</p> <p>d. Integration with Student Financial Module to ensure that students' outstanding dues have been cleared and fee for degree/ transcript has been paid.</p> <p>e. Facility to maintain history of issuance of certificate to the student i.e. original, duplicate, etc.</p> <p>f. Facility to keep record duplicate, revised, cancelled transcripts and degrees.</p> <p>g. Facility to keep record of used and unused degrees, transcripts etc</p> <p>h. Facility to keep record of the used and unused answer books, continuation sheets.</p> <p>i. Facility to keep record of the funds received from Finance and adjustment of fund thereafter.</p>

	<p>j. Facility to keep record of the funds utilization (both contingent and secrecy)</p> <p>k. Facility to keep record of verification of degrees/transcripts/DMCs</p> <p>l. Convocation: facility to keep record of the gold medals per each degree program per batch/session</p>
9. ATTENDANCE MODULE	<p>a. System should maintain the attendance of students and faculty members of each class.</p> <p>b. Facility to rectify data fetched by the attendance machine by the authorized personnel.</p> <p>c. Facility to integrate with the Timetable & Class Scheduler module to record class- wise attendance of teachers and students.</p> <p>d. 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.).</p> <p>e. Attendance module should be integrated with the electronic machine such as biometric or Radio-Frequency Identification (RFID) machine.</p> <p>f. Class/students/day/week/month-wise Attendance report</p> <p>g. Setup the excellent, average and bad attendance thresholds with color coding.</p> <p>h. View Class-wise Student attendance health and overall Present, Absent, Leave, Tardy counts.</p> <p>i. View Class-wise Student attendance health and overall Class attendance statistics.</p>
10. Scholarship Management Module	<p>a. Facility to define different scholarship programs offered by different bodies i.e. HEC, USAID, PM Program, Faculty Development Program, Overseas Scholarship, etc.</p> <p>b. Facility to define criteria for shortlisting of applicants for each scholarship program.</p> <p>c. Facility to record and process request raised by the donors i.e. HEC for the advertisement of scholarship slots for submission of scholarship applications.</p> <p>d. Facility to host online application form on the Institute website to collect application from the applicants who wish to avail scholarship.</p> <p>e. Facility to attach supporting documents with the application form.</p> <p>f. Facility to view the application in tabular form and assign scores based on the credential provided by the applicant.</p> <p>g. Facility to shortlist the applicants based on the scores and rules defined by the University.</p> <p>h. Provision to plan interview sessions with the applicants who qualify for next round of interview and send call letter to the student for interview.</p> <p>i. Facility to enter score of applicants during the interview session.</p> <p>j. Provision to prepare merit list and waiting list of shortlisted applicants.</p> <p>k. Provision to record award of scholarship for qualified applicants.</p> <p>l. 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</p> <p>m. Facility to record the receipt against invoice through Cash Management module discussed above.</p>

	<p>n. 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.</p> <p>o. Facility to generate the scholarship grants utilization report from the accounting system.</p> <p>p. Facility to enter closing of scholarship award upon successful completion of the program by the student.</p>
<p>11.Financial Management System</p>	<p>12 .1 GENERAL LEDGER</p> <p>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:</p> <ul style="list-style-type: none"> a. The General Ledger should support cash basis/ double entry system. b. 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. c. Facility of maintaining multiple years of data jointly allowing previous and current year's data to be accessed simultaneously. d. 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. e. Providing multi-level cost center structure to record transactions with reference to different segments like department, campuses, etc. to produce segment wise analysis. f. Calendar with user-defined financial periods according to reporting requirement. g. Facility to define standard vouchers with customized printing options. h. Facility of standard transaction narration on single keystroke for each voucher type. i. Full screen-editing facility while entering data. j. Provision to define month end vouchers as 'reversible' at the opening of subsequent financial period. k. Providing options whether to maintain automatic numbering of all documents or user entered document number. l. Powerful password protection for all activities. m. Facility to lock entered data to protect against any changes. n. Provision for standard/ recurring vouchers. o. Flexible user defined on-screen inquiries to analyze the entered vouchers with different logical operator and filters. p. 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. q. Period-end and year-end processing and generation of year-end voucher for closing balances of accounts.

	<p>11.2 CASH MANAGEMENT MODULE</p> <p>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 include preparation of bank reconciliation, maintenance of multi-currencies, computation of forex gain/ loss etc. The proposed module will have the following salient features:</p> <ol style="list-style-type: none"> a. Facility to setup banks, bank accounts, cash accounts, imprest accounts, etc. b. Facility to prepare payment voucher on the basis of supplier invoice. c. Handling of supplier payment by incorporating withholding tax according to the nature of services and amount limit. d. Facility to link payment with available budget. e. Facility to prepare and maintain cash receipts f. Facility of advance payments from customers and adjust this at the stage of issuing invoices. g. Providing a reporting line 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. h. Provision to prepare bank reconciliation to evaluate exact cash position at different banks of the IMSciences. i. Facility to compute forex gain/ loss upon receipt of customer dues and payment of outstanding amounts. j. Facility to print cash, bank books, ledgers, etc. for given range of dates. <p>11.3 BUDGET MODULE</p> <p>The Budget module is designed to allocate the financial budgets at group or detail account code level, in accordance with the requirements. The system will also maintain track of budget revisions during a financial year. The proposed module will have the following salient features:</p> <ol style="list-style-type: none"> a. Facility to enter annual budgets for different heads of account and campuses with a breakup of financial periods defined by the user. b. Facility to define multiple budgets such as HEC budgets as well as recurring budgets. c. Facility to allocate budget figures with reference to business segment i.e., cost center, department, campuses, etc. d. Facility to copy previous year’s budgeting values or get new allocation using a factor of previous data to minimize the data input efforts. e. Facility to revise the budget before completion of the year. f. Facility to print report for each head of account comparing the actual amount therein with the budgeted figure and the last year’s figure. g. Facility to view consolidated budget covering all the departments and campuses. h. Facility to import budget data from the spreadsheets. i. 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
<p>12. Human Resource</p>	<p>13.1 Employee Module</p> <ol style="list-style-type: none"> a. Facility to enter employee personal information b. Facility to enter academic record c. Facility to enter date of joining or leaving

<p>Management System</p>	<ul style="list-style-type: none"> d. Facility to enter details of employee family e. Facility to record medical history f. Facility to enter multiple addresses g. Facility to enter status of annual leaves <p>13.2 Job Profile, Recruitment & Selection</p> <ul style="list-style-type: none"> a. Facility to create areas of operations such as Academic, Administration, Accounts, Provost, and HR etc. b. Create uniform Job titles to be used in whole organization such as VC/Director, Dean, Registrar, Chairman, Director, Superintendent etc., c. Facility to define government grade structure and pay scale to accommodate salary d. Create Job positions such as VC, Chairman, Director, Superintendent etc., e. Facility to define job description by attach duties, responsibilities, skill, qualifications with the Job position f. Define Job Evaluation Factors (Age, Qualification, Experience) g. Resources planning to define all the sanctioned posts in each department h. Facility to view status of sanctioned positions such as vacant position, positions to be vacant, etc. i. Facility to generate request for the hiring of a position. j. Facility to publish adverts of vacancies on the website k. Facility to define hiring criteria. l. Facility to create and upload CVs using candidates own login id, password. m. 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: <ul style="list-style-type: none"> I. Skills requirements II. Educational requirements III. Experience requirements IV. CV text search for uploaded CVs n. Facility to shortlist the selected candidates and send them call letters for interviews from the system. o. Facility to define different stages for selection such as selection board, syndicate, registrar, etc. p. Facility to schedule interviews/ assessment of the candidates. q. Facility to conduct tests/ assessments/ interview sheets r. Facility to generate offer letter to the selected candidate <p>13.3 Appraisals/ Performance Management</p> <ul style="list-style-type: none"> a. Facility to configure performance evaluation form for different grades/job titles b. Facility to conducted monthly/quarterly/Annual Evaluation process c. Facility to record details of performance evaluation of the concerned HOD. d. Designing appraisal form (Competency, KPIs, Objectives, weightage, comments) e. Facilitate to create KPIs templates for different job positions
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- f. Facility to organise single and multi staged evaluation (Manager, HOD, Director)
- g. Facility to define various stages of review, recommendations and approvals
- h. Schedule reviews and intimate stakeholders such as assesses, assessors
- i. Perform assessments based on the assessment workflow configured earlier.
- j. Recommend (review and amend system generated) compensations
- k. Review and finalize compensations
- l. Department/Employee/Job title wise appraisal analysis
- m. Prior contract expiry notifications
- n. Facility to generate new contracts
- o. Different reports (Details will be provided)

13.4 Payroll System

Payroll system should have a facility to set up employees' master file and the salary structure for each employee in terms of monthly allowances and deductions. The system should maintain the location-wise/department-wise employee cost thereby enabling the 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 loan module, which will maintain a track of various loans given to the employees by the Institute and will automatically make loan deductions according to the loan terms set in the system. All loans will be treated as interest free loans.

The payroll system should maintain track of leave record of each employee, in terms of leaves availed and leaves outstanding, and will automatically calculate the deductions for 'leave without pay'. The module wise features of the system are as described below:

Basic Salary Sub-Module

- a. Employees should be identified by unique numbers allotted to the mand the system maintains the personal information of each employee, like employee's name, father's name, address, department, designation, location, date of joining and confirmation, date of leaving (for employees who have left), grade, National Tax Number and National Identity Card Number, eligibility for General Provident Fund, etc.
- b. Facility to define government basic pay scales for each grade to compute allowances, annual increase.
- c. Facility to revise basic pay scales as and when required.
- d. All allowances offered to the employees and deductions made from their salaries are user defined in the system.
- e. Allowances and contributions should be computed automatically based on formulas defined by the users as per policy.
- f. The effect of any changes in the allowances is immediately passed on to tax module and the system computes the tax automatically.
- g. Non-salary benefits offered to the employees should also be maintained by the system.

- h. 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.
- i. Provision to split an employee's net salary for remittance to multiple banks.
- j. Printing of Pay-slips
- k. The Basic Salary module should be integrated with Workload module to compute and make payments of the extra work load (academic and administrative)
- l. The following reports should be produced from the system:
 - i. Employee's personal details
 - ii. List of employees: Department / location /designation wise
 - iii. List of employees joined and left during the month.
 - iv. Department-wise and grade-wise strength
 - v. Monthly payroll sheet by employee/department/location
 - vi. Departmental summary of the salary paid
 - vii. Annual payroll sheet: detailed and summarized
 - viii. List of employees paid by bank and cash
 - ix. Contributions made by the institute on behalf of its eligible employees.

Loan Management Sub-Module

- a. This module should keep a track of loans disbursed to employees, their recovery in installments and the balance amount payable.
- b. Loans of various kinds should be maintained, such as car loan, house loan, loan against PF, revolving funds, etc.
- c. Facility to setup different types of loans having different installment plans.
- d. Both interest based and interest-free loans should be maintained.
- e. 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.
- f. The system should have provision for lump sum payment.
- g. Monthly and annual loan register

Leave Management Sub-Module

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

Income Tax Sub-Module

Income Tax module should compute tax liabilities based on the latest tax rules and produce the following report:

- a. Income tax computation
- b. Monthly/ quarterly income tax return
- c. Salary certificate printing as per government requirement
- d. Income Tax Statement u/s 50 (1)
- e. Income Tax Statement 139
- f. Facility to produce tax report in a format prescribed for e-filing by the FBR

Load Management/ Overtime Sub-Module

- a. The module should keep record of extra load on daily basis and make payments on monthly basis through the pay-slip.
- b. The number of hours worked as overtime per day can be recorded through attendance module.
- c. Facility to define rules for the work load of maximum chargeable hours for academic and administrative staff.
- d. Facility to define different Admin load and honoraria for Dean, Chairman, Semester coordinator, Director, Warden, Assistant Warden, Proctor, Campus Coordinator, Provost, Chief proctor etc.
- e. 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.
- f. The system automatically calculates the amount payable by calculating each faculty's daily rates.
- g. Facility to generate remuneration bill based on workload and class attendance.

General Provident Fund Sub-Module

- a. The module should compute the amount of provident fund to be deducted for employees who are members of the fund.
- b. 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.
- c. The system checks those loans taken against provident fund do not exceed the accrued value of GPF for that employee.
- d. Printing of GPF ledgers for each member employee.
- e. Monthly/ Annual reports of contributions by the members and the Institute are also printed.
- f. The users can also get report from the system for the monthly allocation to be done for Provident Fund.
- g. Facility to disburse the profit amongst the members of the fund in accordance with their contributions as announced by the Khyber Pakhtunkhwa Government.
- h. This module should be integrated with the GL system and GPF funds accounting system to book the financial effects.

	<p>Final Settlement Sub-Module</p> <ul style="list-style-type: none"> a. This module should compute the terminal benefits for the employee who leaves the organization based on the following parameters: b. Computation of leaves encashment c. Computation of notice pay (either side) d. Deduction of balance loan amount recoverable e. Deduction of tax recoverable form the employee f. Computation of salary for the days worked during the leaving month.
<p>13. Data Migration from existing system</p>	<p>Data should be migrated from existing system for all the above modules</p> <ul style="list-style-type: none"> 1. CMS Configuration <ul style="list-style-type: none"> • Subject Records: Name, Credit hours, Course codes, Content etc. • All Programs & Programs offered • Program Specialization Records • Semester and Session Records • Records of Offered Courses: Teacher, Session, Semester, Credit and non-credit courses, Core, Elective. • Semester Fee Structures 2. Student Records <ul style="list-style-type: none"> • Student Profile • Student Semester/Subjects Records • Semester/Hostel/Transport Fee Receivables • Scholarship Adjustment & Payables 3. Examination Module <ul style="list-style-type: none"> • Student Subject Marks including exam type detailing (Monthlies, Terms) • Student Exam records of course/semester GP, Percentage, Grade, Remarks • Final Notifications Records 4. Quality Enhancement Cell (QEC) <ul style="list-style-type: none"> • Evaluation record for every offered courses 5. Human Resource & Payroll <ul style="list-style-type: none"> • Employees Profiles • Employee Contracts 6. Financial Management <ul style="list-style-type: none"> • Partners, Donors & their respective accounts (students as partners) • Opening Entries (for all COA Heads and Partners) • Fixed Assets and Inventory Records <p>Note: IMSciences Technical Team will provide data from existing system in the suggested format.</p>

Institute of Management Sciences Peshawar Financial Proposal

Name of the Firm: _____

Address _____

Project Deliverables/Modules	Price (Rs.) including all Taxes	Payment Schedule
<u>Complete Learning Management Solution with Source Code</u> Note: 1. Initial requirements queries of the existing system and new modules will be provided by the ERP team 2. Before each module deployment the vendor team will visit the relevant stakeholders for detail requirements gathering and gap analysis which should be approved from the relevant stakeholders for each module. Note: Price should include customization/operationalization charges and paid software licenses if used any for three years for the working of the software as per Institute requirements & users involved	Rs.	50% on initial deployment 50% on completion of customization & operationalization
<u>Data migration of existing system into new system</u> Note: IMSciences Technical Team will provide data from existing system in the suggested format to be migrated by the vendor team	Rs.	100% on completion
<u>Train the Trainer and User Acceptance Testing</u> Train the Trainer (Master Trainer), the vendor team will train the IMSciences ERP team and they will train the end users. However, for final User Acceptance Testing (UAT) the vendor team will visit for approval. Note: ERP Technical Staff will be provided with required User Manuals and Technical Documents for each module	Rs.	50% on Trainings of the Master Trainer 50% on completion of User Acceptance Testing (UAT)
<u>Zoom Education 20 licenses for 3 Years</u> Its connectivity with specific user on runtime i.e. mapping to 100+ faculty	Rs.	100% on License Purchase
Total Cost	Rs.	

Name & Designation_____
Authorized Signature & Stamp

Institute of Management Sciences Peshawar Evaluation Criteria

The proposals will be evaluated as per following criteria:

Total Marks = 100	Total Marks/ Max	Page Nos
Clause		
1. Organization Profile & Portfolio		
a. Registration & Location		
i. Year of Establishment (3 Marks for each year above minimum requirement)	9	
b. Financial Capability (Annual performance & Financial strength)		
Provide annual audited financial statements for the last 3 Financial Years	12	
b. Projects Experience		
i. LMS/CMS implementation in HEC recognized Higher Education Institutes (5 Marks for each implementation i.e. Completed or On-Going) Note: 1. Completion Certificates must be attached for completed projects having minimum cost Rs. 4 Million and must be currently in the operational status. 2. Work Orders must be attached for the on-going projects having minimum cost Rs. 4 Million.	30	
2. Proposed Implementation Solution		
i. Implementation Road Map 5-Marks and Methodology for Data Migration 5-Marks	10	
ii. Core Technical Team for the project (Attach CV's) <ul style="list-style-type: none"> • Project Manager (Minimum Experience 8 Years) - 3 Marks • Framework Functional Team Lead (Minimum Experience 5 Years) - 3 Marks • HEI's Domain Expert (Minimum Experience 3 Years) - 3 Marks 	9	
iii. Complete Learning Management Solution <ul style="list-style-type: none"> • Technical proposal for required features - 10 Marks <p style="margin-left: 40px;">Note: Technical proposal should contain screen shots of ready to deploy software solution which will be demonstrated.</p> <ul style="list-style-type: none"> • Demonstration of the required features – 20 Marks 	30	
Total marks = 100	100	

Note:

- i. Minimum qualifying score is 70.