



शासकीय तंत्रनिकेतन, औरंगाबाद.  
GOVERNMENT POLYTECHNIC, AURANGABAD  
(An Autonomous Institute of Govt. of Maharashtra)  
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No. GPA/QUOT/EXAM CELL/2018/765  
DATE: - 10/10/2018

To,

Web Circular,  
Govt. Polytechnic,  
Aurangabad.

**Sub:- Enquiry for quoting rates per student per term for hiring the services for examination management system for government polytechnic Aurangabad**

Sealed quotations are invited for the supply of services as under on or before 19/10/2018 by 4.00 p.m. subject to the following conditions.

1. Write on the envelope "Quotation for Supply of Software(SRS) for Examination Management System (EMS)" for Examination to Examination Cell due on 19/10/2018 by 4.00 pm"
2. Rates quoted should be Ex Govt. Polytechnic, Aurangabad.
3. Rates quoted should be exclusive of all the duties and taxes applicable.(Mention basic price & Admissible taxes separately)
4. Detailed system required specification (SRS)of Examination Management System(EMS) for Government Polytechnic Aurangabad are provided in specification column of table given as below.
5. Detailed system required specification (SRS)of Examination Management System(EMS) you intend to supply/provide services should be provided.
6. Commencement of Services should take place within 08 days from the date of issue of order
7. Incomplete quotation will be rejected.
8. Right to reject any or all the quotation without assigning any reason are reserved with the undersigned.
9. Quotation validity should be mentioned on quotations.

Sr. No	Name of the Item	Specifications	Rates to be quoted per student (Regular & Backlog) per term for hiring services for EMS.
1.	<b>Services for Examination Management System (EMS)</b>	<p><b>System Requirement Specifications (SRS) of Examination Management System (EMS) to be implemented in Examination Cell of Government Polytechnic, Aurangabad.</b></p> <p>General Requirement:</p> <p>A. Entire Examination management shall be fully cloud based and shall be managed and maintained by the vendor at his cost.</p> <p>B. Vendor shall design the software as per the modules given below and customized it as per institute requirement.</p> <p>C. Agreement from the vendor is for one academic term/semester activity. After satisfactory performance and completion of work assigned at the end first term/semester it may be extended further for next successive five terms. The institute shall have the rights to terminate the agreement in case the vendor fails to provide satisfactory performance at the end of first term/semester.</p> <p>D. After satisfactory completion of EMS maintenance agreement of three years (six semesters/terms) the source code shall be the property of Institute. In case of termination of agreement due to breach of security / confidentiality or non satisfactory performance before completion of three years, It shall be binding on the part of vendor to handover prevailing source code at that instant to institute.</p> <p>E. Intellectual Property rights (IPR) of examination management <del>system software shall be the property of both namely Institute and vendor.</del></p> <p>After completion of three years whether agreement is renewed or not, institute cannot sale or distribute this software to any other organization.</p> <p>F. Data Confidentiality and data Integrity must be ensured by the vendor</p> <p>G. Periodic data backup shall be the sole responsibility of vendor. If required data may be backed up on disaster recovery server or local server as per backup schedule mutually decided.</p> <p>H. Entire system shall have adequate security measures for safety and</p>	

protection of examination data(marks) from unauthorized access.

I. System shall be based on open source like PHP and MYSQL with appropriate reporting tools.

J. EMS shall be Paperless for Exam related activity and data/ masters/ marks curriculum shall be available online to users based on their roles and responsibility.

K. Vendor shall provide support, services and training to identified faculty/ staff of institute at institute during implementation phase and online support shall be given after implementation.

L. The institute shall select and provide all third party tools like payment integration's and SMS provider. Vendor shall have to integrate tools on softwares.

M. In case of emergence of any kind of disputes in agreement, the jurisdiction of arbitration /resolving the matters shall be restricted to Aurangabad jurisdiction.

Module wise requirement: System shall be comprised of following modules

1. User Management and Portfolio/Roles Management System
2. Curriculum Management System
3. Admission Management System
4. Course Registration Management Systems
5. Exam Registration management Systems
6. Fees Management System
7. Paper setter /Moderator/internal/External Management systems
8. Departmental load and PR/OR/TW Marks Entry System
9. Detention Management System
10. LAC Management System
11. Switch Over Management Systems
12. Examination Theory Time table Management systems
13. Result Processing System/Result Analysis/Global Marking Management system
14. Reassessment/Photocopy/Verification Management system
15. Theory Examination Management system
16. Copy Case management Systems.
17. Online examination Management for courses like Management/Physics/ Chemistry and similar courses as proposed by department from time to time
18. Automatic Computations of CO and PO of individual courses as per NBA guidelines.
19. Alumni Management system.

Details specification of each module expected is as follows

**Module 1. User/Staff Management and Portfolio Management System**

- Each user/stakeholder of examination system like principal, COE, HOD, staff, student, alumni, Examination incharge, LAC Incharge etc

shall have their own username and password.

- Exam Data/ marks, pre-exam and post-exam documents shall be made available in respective login.
- Password set reset policy as per hierarchy of users.
- Higher level user shall assign the portfolio/related work to concerned lower level user; accordingly user can access the assigned portfolio activity.
- Assignment and removal of Portfolio at Institute level or Department level from respective login.

#### **Module 2 :Curriculum Management System**

- CDC cell shall create curriculum and related masters. CDC incharge shall be authorized to make any changes in curriculum master in the system.
- New/ old curriculum scheme shall be added or updated
- .Course group shall be created
- course details shall be added
- .Program wise scheme , Program wise sample path and course wise pdf file shall be liked to course and uploaded by CDC cell
- Dept. shall offer the course in Even or Odd term.
- Create course Group wise, Course wise
- Change of course to Even/Odd

**Data Migration: Convert data from previous software to MYSQL**

- All old and existing data of each student shall be converted to MYSQL as per the format needed for examination system henceforth.
- All the previous curriculum data shall be converted to new database server MySQL
- Required Data shall be mapped as per fields to new fields.
- Data shall be synchronize as per curriculum
- .All the courses shall be inserted by tagging the curriculum of each course.
- Courses group shall be updated from concern department.

#### **Module 3 :Admission Management System and marking of Exemption and Backlog**

- Admission data of new admitted student shall be imported from Excel file/ MDB file provided by state level diploma admission authority along with all fields with provision for Photo and signature.
- Once data uploaded Student or Registration in charge can update the student information data required for different reports.
- Provision to add Institute level data separately
- Registration in charge shall update the admission criteria.
- On the basis of admission criteria student shall get backlog or exemption.

- Admission level activity, backlog, exemption marking shall be completed at department level.
- After confirmation of student information form Department COE shall generate bulk wise enrollment no.
- Individual enrollment generation after COE shall be at department level
- At the time of confirmation student shall get exemption and backlog courses accordingly. Every student shall get backlog and exemption on this basis of their qualifying Exam.

#### **Module 4 :Course Registration Management Systems**

- Course registration shall be done from student panel. Student can see those course which is offered by Department and student eligible for that courses.
- After fill up the form student shall take the printout and submitted to registration in charge. Registration in charge do necessary changes and confirm the registration.
- System shall do cross check of maximum no. of courses selected and course selection eligibility based on prerequisite and credits.
- Student shall Register For new courses offered by Department and shall allow to edit courses till teachers approved the courses, Print Registered courses
- Faculty shall get Registration List, Confirm Course Registration, Print Registration Report
- Exam Cell shall view Course Registration Summary, Course Registration Deficiency Students, Program Wise Course Registration Report

#### **Module 5 : Exam Registration Management Systems**

- On the basis of current registration and backlog courses regular and failure students exam form shall be automatically submitted.
- Provision to re-register the candidates
- Backlog student submit the exam form from their panel with prescribed fees.
- Exam Registration Form from student panel
- Exam Enrollment Report
- Exam Enrollment Summary Report
- Exam Registration Report

#### **Allow Student To Exam Enrollment**

- Print Exam Hall Ticket
- Print Exam Hall Ticket ( Single )

#### **Module 6 :Online Fees Management System**

- Student shall pay the admission fees, exam fees and reassessment fees from their panel online.
- System shall automatically calculate late fees, fees to be paid etc.
- Student shall pay the fees online with Debit card, Credit Card and Net banking using payment gateway

- Entire record of fees payments shall be made available to student section and reconciliation of the same in case of discrepancy

#### **Module 7 : Paper setter /Moderator/internal/External Management systems**

- System shall make course wise expertise data bank which shall be used as internal, external, moderator etc.
- system shall make the database of examiner with their expertise
- System shall maintain the inventory of question papers
- System shall Create New Internal / External with bank account details
- Assign paper setter, Moderator course wise as per requirement
- Reports like course wise paper setter/ moderator, Availability(count) of papers, External/ Internal Paper setters course wise shall be available
- Provision to generate paper setter orders.

#### **Module 8: Departmental Practical time Table System and PR/OR Marks Entry System**

- On the basis of course registration data department shall create their practical time table from HOD panel
- Respective faculties shall add the progressive marks, Term work marks, and oral marks from faculty login.
- Following security features shall be implemented in marks entry system at department level
  - Provision of Complex login password for each examiner
  - Provision of Capcha
  - Provision of OTP for login for any operation related to marksheet
- Provision for Inventory management of marksheet at department level
- Provision for honorarium of external and Internal Examiners wise report

#### **Module 9 :Detention Management System**

- Faculty shall add the Eno. and reason of detained student which shall be approved by HOD from HOD login
- Provision to add detention from faculty login
- Confirmation of detention of all courses faculty wise.
- Detention Approval from HOD panel
- Course Detention Confirmation Approval By HOD
- Principal final Approval from Principal panel
- Final Detention Report programme wise

#### **Module :10 LAC Management System:**

- All operation of LAC shall be highly secured.
- Provision to receive bundle wise answer book. Answer book bundle may define as the answer books of same programme same course bundles together.

- Answer books must be received, opened, delivered and received from examiner, moderator, similarly assigned, filled and confirmed by examiner and quality control officer by bundle wise only.
- Application shall be designed with double entry marks system. Examiner/Moderator and quality control officer, both shall enter the same course marks of a give bundle at different times from their respective login with OTP. System shall compare marks and flag error if difference in respective marks. After correction if no error in comparison process, the mark sheet shall be automatically confirmed.
- LAC incharge shall have complete inventory of filled , unfilled mark sheets with status of mark sheets such as allocated unallocated, filled, not filled, Examiner confirmed, Examiner not confirmed, QC confirmed, QC not confirmed, Final confirmed
- Provision to create/ edit/update examiners
- Assignment of mark sheet to examiners in LAC incharge login,
- Forwarding of mark sheet from QC to examiner or from examiner to QC Mark sheet shall be filled first by QC only.
- Provision for Inventory management of mark sheet at LAC level
- Following security features shall be implemented in marks entry system at department level
  - Provision of Complex login password for each examiner
  - Provision of Capcha
  - Provision of OTP for login for any operation related to mark sheet
- Provision for honorarium of Examiners/moderators wise report based on crieteria

#### **Module 11 : Switch Over Management Systems**

- Provision for old scheme students to switch over to new current scheme as per CDC circular of equivalence courses published time to time.
- Change of scheme, change of course, change of institute shall be properly taken care by registering appropriate courses as applicable at entry point/ switching stage
- Provision to Show Passed Courses History, Show Award Courses History, Show Failed Courses History, Switch over To New Curriculum, Report showing the details of such candidate. Confirmation and operation at department level.

#### **Module 12: Time table Management systems**

- On the basis of exam registration regular and failure student system shall prepare theory examination time table.
- System shall have facility to manually enter courses and date which shall be cross checked by different rules.
- System shall generate Exam seating arrangement, day wise seating chart and other reports.
- Time table shall be available as read only to all users as program wise, Course wise and day wise.
- Provision to resolve overlap computerized/manually for any courses in time table

### **Module 13: Result Processing System/Result Analysis/Global Marking Management system**

- Result shall be processed as per rules and regulation of examination cell published time to time. Processed result shall be per the prevailing practices of result declaration.
- System shall have menu driven interface for various activities of result processing like
  - Pre-result statistics
  - Marking copy cases
  - Marking global marks
  - Result held reserve
- System shall generate the gazette and statement of mark sheet program wise, enrollment wise.
- System shall support special term result processing.
- All the result shall be printed on laser printer.
- Award mark sheet shall be generate if student complete the given credits.
- Exam Cell shall display result Sheet in respective login of students as per schedule
- System shall print Equivalence certificate, Migration certificate, provisional certificate, Diploma certificate, Final Award certificate. Transfer certificate, Bonafide certificate, Student register.

#### **Pre-result statistics/ Result Analysis/Global Marking**

- System shall have a provision to prepare pre-result statistics report course wise with given conditions for allocation of global marks.
- On the basis of result different analysis report shall be generated.

### **Module 14: Reassessment/Photocopy/Verification Management system**

- On the basis of result student can apply online for marks verification, photocopy and rechecking.
- This data shall be made available in LAC login for subsequent activity.
- Student shall fill the forms of photocopy, print photo Copy, reassessment form or Verification form from his login and respective forms shall be confirmed only after payment of due fees online.
- There shall be a provision of three member committee for verification and filling of marks of candidates whose result are changed in verification, photocopy, reassessment process.
- Verification, photocopy, reassessment process shall be carried out online as per the schedule declared by examination cell.
- Exam Cell shall declare result based on the report received from LAC of re assessment work
- Update result on college online software
- Provision to reschedule examination in case of failure during examination due to any reason such as power, network, computer hang



from instant where failure has occurred.

#### **Module 15 : Theory Examination Management System**

- All examination management work shall be handles through Examination Officer Incharge
- All theory mark sheets shall be made available in Examination officer In charge login based on the concept of answer book bundle.
- On the basis of Examination time table following reports shall be made available to examination officer Incharge for smooth conduct of examination
  - Programme wise, candidate wise Seating chart
  - Course wise, candidate wise seating chart
  - Course wise, candidate wise, hall/room wise attendance Sheet
  - Seating Arrange Report Room wise
  - Day wise question paper Inventory Report
  - BATCH SLIP Report
  - Exam Timetable Load Report

#### **Module16: Copy Case management Systems**

- This module shall maintain copy case history of candidates in the system
- This module works on the basis of punishment. System.
- It shall restrict the registration or examination as per punishment given to the student.
- Examination in charge shall mark CP on attendance entry.
- After confirmation exam cell shall add the punishment in the system.
- Required copy cases reports shall be generated through this module.

#### **Module 17: Online examination Management for courses like Management/Physics/ Chemistry and similar courses as proposed by department from time to time**

- Browser based Examination system
- Examination shall be conducted programmewise/course wise
- Random question selection
- Examination based on multiple choice question system
- Result shall be made available immediately after examination.
- Student's activity recorded in the form of log
- Online attendance marking system.
- Marking of online Exam Course
- Creation of course units
- Assigning moderator (course unit wise).
- Upload question bank from moderator panel
- Assigning exam officer for online exam course wise
- Creation of batches course wise for online exam

		<ul style="list-style-type: none"> <li>• start Online Exam on student panel</li> <li>• Stored activity in the form of logs of student solved paper</li> <li>• Generate result sheet</li> </ul> <p><b>Module 18: Automatic Computations of CO and PO of individual courses as per NBA guidelines.</b></p> <ul style="list-style-type: none"> <li>• System shall calculate attainment of PO(programme outcomes) and CO (course outcomes) as per NBA norms.</li> </ul> <p><b>Module 19: ALUMNI Management System</b></p> <ul style="list-style-type: none"> <li>• Module shall consist of Candidate information as available in student login till completion of diploma education</li> <li>• It shall automatically put candidates in alumni status after passing diploma</li> <li>• System shall Maintenance record of Aluminis details</li> <li>• Module shall be made available to the candidate in his login during education and also after passed out.</li> <li>• Provision for update the candidate related information like contact number etc.</li> <li>• Three shall be a separate provision for maintenance of record after passed out such as his latest five jobs which include like job designation, nature of work, joining and relieving date</li> <li>• Other information such as willingness from candidate to contribution for institute in different areas</li> <li>• Some other useful information like Employed or not , need help of TPO cell or not, etc</li> </ul>	
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Please mention any other charges and taxes separately in the sealed quotation.

Contact Examination Cell within working hours of the institute for other details discussion & queries regarding specifications, requirement of said services, etc.

  
**Principal**

Govt. Polytechnic, Aurangabad