



CBCS & EXAMINATION FINANCE MANAGEMENT SYSTEM

PONDICHERRY UNIVERSITY
R.V. Nagar, Kalapet, Puducherry – 605 014

TENDER NOTICE

Date: 12.04.2017

Sealed tenders are invited from reputed firms/organizations for a project to design, develop and implement a web-based system for the **Choice Based Credit System (CBCS) and Examination Finance Management System (EFMS)** for Pondicherry University according to the requirements given in the scope of the work under **Two Bid** system (Technical & Price Bid).

Tenderers are asked to submit their bids in separate covers for Technical Bid and Price Bid. The Technical Bid should contain required EMD amount. Both the covers (Technical & Price Bid) should be kept in the main cover, addressed to **“The Controller of Examinations, Pondicherry University, R.V. Nagar, Kalapet, Puducherry – 605014”** superscribing as **“Tender for Choice Based Credit System (CBCS) and Examination Finance Management Software(EFMS), Pondicherry University”**.

Name of Work	CBCS & Examination Finance Management System
Last Date and Time of Submission of bid (Technical & Financial bid)	27.04.2017 by 3.00 pm
Date & Time of Opening of Technical Bid	27.04.2017 at 3.30 pm
Date and Time of Opening of Financial Bid	Only shortlisted bidders will be intimated, after the Technical Bid evaluation.
Venue for submission and opening of Bid	Examination Wing, Pondicherry University, Kalapet, Puducherry 605 014
Performance Guarantee	10 % of the project cost shall be furnished by the successful bidder at the time of signing of the agreement
Address for Communication	The Controller of Examinations, Pondicherry University, Puducherry 605 014.
Email & Telephone Number	ce@pondiuni.edu.in & 0413- 2654204 & 2654912

Controller of Examinations (i/c)



Technical Specifications for Design, Development and Implementation of Choice Based Credit System (CBCS) and Examination Finance Management Software (EFMS)

1.0 Scope of Work

The scope of the work for the proposed **Choice Based Credit System (CBCS) and Examination Finance Management Software (EFMS)** at Pondicherry University comprises of following points which will help the interested vendors to understand the requirements of the University. The detailed scope is divided into followings points:

- A) Project Scope
- B) CBCS & EFMS
- C) User Types
- D) Technology
- E) Project Deliverables

A) PROJECT SCOPE

The scope of the project is to **design, develop and implement a web-based system** (portal) for the Controller of Examinations Wing in the Pondicherry University which is responsible for the conduct of examinations for the Under Graduate (UG - Bachelors' level) degree programmes in Arts, Sciences & Commerce disciplines being conducted in the Affiliated Colleges of the University under **CBCS** and **EFMS**. The vendor will undertake the project for ***System Study, Design, Development, Testing & Implementation, Training & Commissioning and post-commissioning support for the application and database thus implemented***. The vendor should also provide the backup of web application source code, web application database, and technological support such as deployment, hosting, training and maintenance.



B) CBCS & EFMS

Choice Based Credit System (CBCS) is aimed at enhancing the quality of teaching/learning process. The University proposes to introduce this system in its affiliated colleges from the academic year 2017-18 beginning June 2017. There are about 21 affiliated colleges (**See Annexure I**) offering 59 number of different UG programmes in Arts, Science & Commerce disciplines (**See Annexure II**). Contact ce@pondiuni.edu.in for UG CBCS guidelines.

Under this system, a student admitted into a UG degree programme in an affiliated college of the University, at the beginning of each semester has to

- Choose from a set of Core and Elective (if any) courses (subjects) offered by the particular Department in the current semester for study and register under the faculty allotted by the department/institution
- Register for a minimum and not exceeding a maximum no. of credits as prescribed by the University during a semester/and for the completion of the programme
- During the semester the attendance and internal assessment of the student in a particular subject is monitored by the faculty
- Eligible students are allowed to appear for End Semester Exams on payment of prescribed Exam Fees
- Hall Ticket For Exam to be generated
- End Semester Marks obtained by the students to be added with Internal Assessment Marks obtained, results to be generated and published, Grade Sheet, other reports, etc. to be generated
- Any other requirements as specified by the University

Examination Finance Management Module (EFMS)

- The requirements of the Examination Wing Finance Section towards issue of Advance to various University Departments, Affiliated Colleges and settlement. Payment of remuneration, TA/DA, postage, logistics, etc. and for Question Paper setting & printing charge.



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- Maintenance of stock registers for equipments, furniture and Exam Answer Scripts.
- Payment for Answer Scripts Valuation
- Practical Examinations
- Any other activity
- to be included as part of the proposed software for CBCS implementation. Details of requirements can be obtained from the Controller of Exams.
- This module is to be an Integral Part of the CBCS Software.

B1.1 ADMINISTRATIVE FUNCTIONS (*Other Mandatory requirements stipulated by the University under CBCS guidelines to be met*)

B1.1.1 Institution Management

- Institution Management would allow the super admin to add, update and delete the details of the affiliated institutions under the University.
- Profile of the Institution could be added / updated / modified.
- Can add details of the courses with the strength allowed to offer by the each institution
- Can add details of the various courses offering by the each institution.
- Allowed to Hold / delete the institution completely

B1.1.2. Programme Management

- Programme Management would allow the super admin to add, update / modify and delete the programmes and the details of such programmes.
- Can update / modify / delete the various courses offering under such programme.

B1.1.3. Course Management

A Course is referred to as 'subject' and is a component of a given programme of study. All the courses need to have the sameweightage in terms of credits allotted to them. Every programme of study has core courses, elective courses, and foundation courses. A course may be designed to cover lecture / tutorials / laboratory work / field work / outreach activities / project work / vocational training / viva / seminars / term papers / assignments / presentations / self-study or a combination of some of these.



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Core Course is a mandatory course to be studied compulsorily by a student as core requirements of a program of study. They are also called Discipline Specific Courses (DSC).

Elective Course is a course chosen from a pool of papers offered time to time. These elective courses can be Generic Elective (GE) / Discipline Specific Elective (DSE) / Open Elective (OE).

Foundation Course is of two kinds, namely, compulsory foundation and elective foundation. Compulsory foundation courses designed for knowledge enhancement are mandatory for all disciplines. They are called Ability Enhancement Compulsory Course (AECC). Elective foundation course are value-based courses that are optional. They are called Skill Enhancement Courses (SEC).

Credit is equated with one period of teaching for theory or two periods for laboratory / practical course work per week in a semester (16 weeks)

- Course Management would allow the super admin to add, update / modify and delete the Courses under any programme and the details of such courses.
- Can update / modify / delete the various courses containing by such programmes as per the curriculum for any particular programme.
- Can update / modify the details of the total number of credits and the minimum number of credits required to complete the course.
- Can specify the foundation course, hard cores, electives cores and the credits for each course and any such other constraints under any course like non-credit course.
- Can specify the minimum number of credits to pass in any course. For example An UG programme required minimum 120 credits. Out of these, minimum 48 credits are mandatory from Discipline Specific Courses (DSC) and the remaining credits are Discipline Specific Elective (DSE) for obtaining a degree in a particular discipline.

The syllabi of the course need to be revised to keep in tune with recent development in knowledge and innovations. Minor revisions in the already approved syllabus with proper justification shall be considered and recommended by the School Board to be placed in the academic council. However, the chairperson of the academic council may approve the revisions to facilitate implementation of the revised syllabi in a timely manner. Hence, the



portal should be capable of dynamic configuration.

B1.1.4. Role Management

- The portal should be based on the role base access control and roles should be able to create the roles separately with certain privileges as per the hierarchy in the university.
- There should be a provision to change the privileges of the each role at any time.

B1.1.5. User Management

- The portal should allow to create any number of the users according to the requirements.
- Can also be able to edit the details of any user.
- Create the users and should be able to assign the aforesaid roles to the users.
- The roles of the users should be able to Assign / Swap / Delete at any time as per the discretion of the university.

B1.1.6. Customizable Work flow

- The portal should allow to create the customizable work flow for the whole portal.
- Can also be able to modify the work flow time to time as per the requirement.
- The roles will be selected to create the work flow for certain activities.

B1.1.7. Fee Management:

- The portal should allow the process of creation of the fee types.
- The portal should allow managing the fee types and their details.
- Hold / Deletion of the fee type should be allowed.
- Configuring Fee structures should be possible
- Provision to revise / to modify the fee structure
- Should allow to access the payment / Non-payment details by applying various filters
- Exporting of the filtering details should be allowed
- This also should have the analytics parts with various graphs and charts.

B1.1.8. Student Management:

- The portal should allow the process of the enrollment under particular institution.
- Registration Number assignment should be allowed after registration
- Unique Code, which contains and possible to identify the year of admission, institution,



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course and the student's details is an identifier uniquely assigned to each student after admission should be allowed. The processing mechanism of the unique code should also be included in the system.

- Attendance Processing / verification should be allowed
- Allocating students to Redo Course either semester or whole year in cases of Lack of required attendance, Detention or whenever required as per the regulation
- Data related to students should be able to import or export by applying various constraints from / to listed formats.

B1.1.9. Examination Management:

- The portal should allow the processing and verification of the Payments and Attendance.
- Should be able to generate the list of the eligible candidates allowed to appear in the examinations
- Subsequently, generation of the admit card should be allowed by the portal.
- Date wise list of the students appearing for exams should be able to generate and Question Paper (QP) statistics for press for printing and distribution of the same to the examination centre.
- The portal should allow the process of the registration of the examiners / question paper setters.
- Unique numbers should get assigned to identify each member in this section as per category wise.
- History of their activities has to be maintained.
- History of their payments also has to be maintained.
- Should have the provision of the entering the cases of Absentees/ Malpractices / Withheld, etc and should get the effect on the other dependent fields.
- Should support the generation and assignment of the Dummy number to answer scripts for processing the evaluated marks to maintain the confidentiality.
- Answer scripts paper allocation per Session (Morning / Afternoon) should comply with the regulations.



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- Entering and processing of the marks according to the dummy numbers.
- Processing the moderation marks, grace marks and the generation of the Grades according to the regulations.
- Generation and printing the provisional results sheets by applying various filters should be allowed.
- Announcement and publication of the results on proper pages should support.
- The system should also have the process of the Revaluation to
 - Accept the applications.
 - Processing and Generation of the applications after considering the constraints and regulations.
 - Conducting the Revaluation.
 - Posting Revaluation Results.
 - Announcement / Publishing Revaluation Results
 - Printing of Revaluation Result Sheet
- The system should further allow the generation of the Final Results Sheets
- Portal should also allow printing of the Final Result Sheets
- At the end of the each semester, year and course closing procedure should be there to confirm and commit all the actions.
- At the end of the each semester and year closing procedure should be there to confirm and commit all the actions.
- Withheld closing for a range of students of a particular programme to the next session.
- Should support with strong and efficient filtering mechanisms to access / view / export or print various data.
- Generation and Printing of the list of Ranks for programme and course-wise
- Preparation and submission of results in the required format to National Academic Depository should support

B1.1.10. Analytics:

- The portal should have the Analytics part which should function as decision support system



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and should allow generation of various analytical reports.

- The portal should have the provision of the generation of the reports in different kinds of the pictorial, graphical representations including Graphs, Charts, and Tables etc.
- The analytics feature should support the generation of the report or graphical representations in Course wise, Degree-wise, Year wise, College wise or Fee status / Payments status wise etc.

B1.1.11. Email / SMS / OTP Management:

- This feature will have to allow the management of the Email / SMS / OTP settings from the backend.
- Further, it will have to allow the configuration of the SMTP or Gateway settings for Email, SMS or OTP by the admin.
- If there are any future changes in SMTP or Gateway settings, the portal should allow to do.

B1.1.12. Template Management:

- The portal should have the feature of managing the templates (Emails, SMS Alerts, and OTPs) management.
- Template management should allow creating new template, editing the created templates and deleting any existing templates etc.

B1.1.13. Help

- There should be a help section to help with certain frequently asked questions to help these users.

B1.2. INSTITUTION FUNCTIONS:

B1.2.1 Login, Recover Password

- The institution should be able to login with the credentials provided by the university.
- Also, Institution should be able to recover or reset the password if required as per the procedure defined by the University.

B1.2.2 View Institution Profile details

- Institution profile details should be able to be seen after logging into the system with



Institution credentials.

- Profile of the Institution could be added / updated / modified.

B1.2.3 View Programmes / Course details

- Accessing and viewing details of the Programmes / Course should be made possible in Institution Login.
- Details related to courses, credits and the other instructions / regulations related to the courses should be able to be accessed here.

B1.2.4. Role Management

- The portal should be based on the role base access control and roles should be able to create the roles separately with certain privileges as per the hierarchy in the institution.
- There should be a provision to change the privileges of the each role at any time.

B1.2.5. User Management

- The portal should allow to create any number of the users according to the requirements.
- Can also be able to edit the details of any user.
- Create the users and should be able to assign the aforesaid roles to the users.
- The roles of the users should be able to Assign / Swap / Delete at any time as per the discretion of the institution.

B1.2.6. Customizable Work flow

- The portal should allow to create the customizable work flow within the institution.
- Should also be able to modify the work flow time to time as per the requirement.
- The roles will be selected to create the work flow for certain activities.

B1.2.7 Registration of Students / Modification of Student Info

- Registering of the students should be able to be possible in this section.
- Modification of the permissible student's details should be allowed
- Photo of the student also should be able to be uploaded by the Institution.
- All the modifications of the student's details are courses to the verification & approval of the University.



B1.2.8 Post / Check Attendance

- Institution should be able to post the attendance of students.
- Checking the previous attendance should be allowed in this section
- Along with posting of attendance to individual students, there should be a provision of uploading group wise in the formats of excel, csv, db, etc.

B1.2.9 Post / Check Internal Assessment Marks

- The institution should be able to post the Internal Assessments Marks of the students.
- Checking the previous Internal Marks should be allowed in this section
- Along with posting marks to individual students, there should be a provision of uploading group wise in the formats of excel, csv, db, etc.

B1.2.10 Fee Management / Payment Status

- The portal should allow the institution to access the payment / Non-payment details by applying various filters related to their institution.
- Exporting of the filtering details should be allowed.

B1.2.11 Receipts View / Download / Print

- Institution can be allowed to view / download or Print the receipts of the payments
- The receipts can be downloadable for individual students or batch wise

B1.2.12 Examination Results

- Examination results Semester wise of the Batch or Individual students can able to Generate / Export or Print by the Institution.

B1.2.13 Process / Forward Revaluation Applications

- Institution will have a provision to Process and Forward the Revaluation Applications

B1.2.14 View Final Results

- Institution should be able to view final examination results
- Should be able to download / Print batch wise or for individual student wise

B1.2.15 Process / Forward Applications of Degree (Convocation / Absentia)

- Institution will have a provision to Process and Forward the Applications of Degree (Convocation / Absentia)



B1.2.16 Analytics and Reports generation

- This also should have the analytics parts with various graphs and charts and Reports generation feature.

B1.2.17 Date wise list of Students appearing for Exams

- The institution should be able to generate the list of the students appearing for exams in date wise.

B1.2.18 Entering Absentees / Malpractices / Withheld etc.

- Entering the examination cases such as Absentees, Malpractices etc. should be allowed by the Institution.

B1.2.19 Data Import / Export

- Data Import and Export facility should be provided wherever required in this section.

B1.2.20 Help

- There should be a help section to help with certain frequently asked questions to help these users.

B1.3. TEACHER FUNCTIONS

B1.3.1 Login, Recover Password

- The teacher should be able to login with the credentials provided by the Institution / university.
- Also, Teacher should be able to recover or reset the password if required as per password policy defined by the University.

B1.3.2 View Profile details

- Teacher's profile details should be able to be seen after logging into the system with his/her credentials.
- Profile of the Teacher could be added / updated / modified courses for approval of Institution and University.

B1.3.3 View Programme / Course details

- Accessing and viewing details of the Programmes / Course should be able to possible in



Teacher's Login.

- Details related to courses, credits and the other instructions / regulations related to the courses should be able to access here.

B1.3.4 Provision to Receive Applications for soft cores

- Teacher has the provision to receive and accept the soft core applications and offer the course subject to the regulations.
- Whenever teacher receives the application for soft core which he/she is offering, teacher should able to check the academic background of the applicant students.
- As long as the Teacher associates with a particular student in terms of soft core, hard core or by any other means, the faculty should be able to access the student's details such as his academic background, performance in other courses, Attendance or any other details specified by the university.

B1.3.5 Post / Check Attendance

- Teacher should be able to post the attendance of students.
- Checking the previous attendance should be allowed in this section
- Along with posting attendance to individual students, there should be a provision of uploading group wise in the formats of excel, csv, db, etc.

B1.3.6 Post / Check Internal Assessment Marks

- The teacher should be able to post the Internal Assessments Marks of the students and freeze the marks.
- Checking the previous Internal Marks should be allowed in this section
- Along with posting of marks to individual students, there should be a provision of uploading group wise in the formats of excel, csv, db, etc.

B1.3.7 Examination Results

- Examination results Semester wise of the Batch or Individual students whoever associate with him can able to Generate / Export or Print by the Teacher.

B1.3.8 View Final Results

- The teacher should be able to view final examination results of the students associated



with the teacher.

- Should be able to download / Print batch wise or for individual student wise whoever associated with the faculty.

B1.3.9 Data Import / Export

- Data Import and Export facility should be provided wherever required in this section.

B1.3.10 Help

- There should be a help section to help with certain frequently asked questions to help these users.

B1.4. EXAMINER FUNCTIONS

B1.4.1 Login

- Examiner should be able to login with the credentials if provided by the university.

B1.4.2 View profile details

- Also, Examiner should be able to view his details from profile sections.

B1.4.3 Post Marks

- Posting Results of the laboratory exam which may need to enter or modify or freeze or unfreeze again by the Examination section staff to ensure correctness and to prevent mistakes.

B1.4.4 Help

- There should be a help section to help with certain frequently asked questions to help these users.

B1.5. STUDENT FUNCTIONS

B1.5.1 Login

- The student should be able to login with the credentials provided by the Institution / University.

B1.5.2 View profile details

- The student should be able to view his details from profile sections and notify the Institution or University if there are any discrepancies.



B1.5.3 View Programme / Course details

- Accessing and viewing details of the Programmes / Course should be made possible in Student's Login.
- Details related to courses, credits and the other instructions / regulations related to the courses should be able to access in this section.

B1.5.4 Provision to choose soft cores

- The student will have the provision to choose the soft core applications and take the course courses to the availability under the regulations.
- Whenever a teacher is available for soft core which he/she is offering, the student will be added to that particular courses and can able to attend that course.
- As long as the students associated with particular teacher in terms of soft core, hard core or by any other means, the faculty should be able to access the student's details such as his academic background, performance in other courses, Attendance or any other details specified by the university

B1.5.5 Check Attendance

- The student should be able to check the attendance.

B1.5.6 Fee Payments / Payment Status

- The student should be able to make various payments such as Examination, Convocation, Registration or any other.
- Verification of the Payment status should be allowed.
- For every payment, student should be able to get the alerts such as Emails and SMS

B1.5.7 Receipts View / Download / Print

- Accessing Payment receipts, Downloading and Printing should be allowed.

B1.5.8 Admit Card View / Download / Print

- Accessing Admit card, Downloading and Printing should be allowed if eligible courses to the verification and generation by the University.



B1.5.9 Examination Results

- Examination results Course wise, Semester wise results should be allowed to access, download or print by the respective students.

B1.5.10 Application for Revaluation

- The application can be made for the evaluation if necessary by the students subject to the regulations of the University or CBCS. This application should undergo different levels of approvals by the respective admin.

B1.5.11 View Final Results

- Final Examination results of overall courses should be made accessible to the students once he/she successfully finishes the course.

B1.5.12 Application for Degree (Convocation / Absentia)

- Student can make Application for the Final degree with this feature for both Convocation modes and Absentia modes. This application may require to undergo different levels of approvals by the respective admins. Further Student needed to make the fee payment as per the regulations.

B1.5.13 Data Import / Export

- Data Import and Export facility should be provided wherever required in this section.

B1.5.14 Help

- There should be a help section to help with certain frequently asked questions to help these users.

B1.6 Analytics:

- The portal should have the Analytics part which should function as decision support system and should allow generation of various analytical reports.
- The portal should have the provision of the generation of the reports in different kinds of the pictorial, graphical representations including Graphs, Charts, and Tables etc.
- The analytics feature should support the generation of the report or graphical representations in Course wise, Degree-wise, Year wise disbursement / payment information.



B1.6.1 Email / SMS Management:

- This feature will have to allow the management of the Email / SMS settings from the backend.
- Further, it will have to allow the configuration of the SMTP or Gateway settings for Email, SMS by the admin.
- If there are any future changes in SMTP or Gateway settings, the portal should allow to do.

B1.6.2 Template Management:

- The portal should have feature of managing the templates (Emails, SMS Alerts) management.
- Template management should allow creating a new template, editing the created templates and deleting any existing templates etc.

B1.6.3 Help

- There should be a help section to help with certain frequently asked questions to help these users.

B.1.7 BANK API INTEGRATION

- The portal should be integrated with the Bank API for collection of the fee and any other payments.

B1.8 HTTPS

- The portal should be in secured protocol with SSL
- The data exchange should be happening in a secured manner

B1.9 ENCRYPTION

- The portal should contain the encrypted data exchange
- The data and the transactions should be encrypted to provide security

B.1.10 DATA BACKUP:

- The portal should allow taking continuous backup whenever required

B1.11 ATTRACTIVE USER INTERFACES:

- The portal should build with attractive interface

B1.12 RESPONSIVE:

- The portal should be responsive and have to support all popular browsers, operating systems, and devices including palm pads.



C) TYPES OF USERS & ACTIVITIES

C1. USERS FOR CBCS EXAMINATION MANAGEMENT MODULE

The various users are

- C1.1. SUPER ADMIN
- C1.2. SUPER ADMIN HANDLER
- C1.3. ADMIN Level-1
- C1.4. ADMIN Level-2
- C1.5. ADMIN Level-3
- C1.6. FACULTY
- C1.7. EXAMINER
- C1.8. STUDENT
- C1.9. GUEST USERS

ACTIVITIES OF THE USERS

C1.1. SUPER ADMIN

- » Will be the Controller of Examination (COE) of the University.
- » Responsible for the Implementing, monitoring the CBCS formulated guidelines through the software.
- » Responsible for arranging for the timely publication of the result of examinations and other tests.
- » The Controller shall also exercise such the powers and perform such other duties as may be prescribed or assigned to him for time to time under CBCS.

C1.2. SUPER ADMIN HANDLER

- » Will be the Controller of Examination Staff of the University.
- » Responsible for the Implementing, monitoring the CBCS formulated guidelines through the software under the subordination of the Examination Controller.
- » He / She also perform any other duties with the instructions of the COE under CBCS.



C1.3. ADMIN Level-1

- » Will be the Administrative Officers of the University like Vice Chancellor, Registrar, Assistant Registrars, and Academic Council etc.
- » Responsible for the monitoring the portal for the fair usage.
- » Responsible for exercising such powers and performing such other duties as may be prescribed or assigned to him/her from time to time under CBCS.

C1.4. ADMIN Level-2

- » Will be the School Deans of the University or any Affiliated Institution Head.
- » Responsible for the monitoring the portal for the fair usage and to access the performance of the students by applying filters and analytics belongs to their School / Institution.
- » Responsible for exercising such powers and performing such other duties as may be prescribed or assigned to him/her from time to time under CBCS.

C1.5. ADMIN Level-3

- » Will be the Department Head of the University or any other Institution affiliated to the University.
- » Responsible for the monitoring the portal for the fair usage and to access the performance of the students by applying filters and analytics belongs to their department.
- » Responsible for exercising such powers and performing such other duties as may be prescribed or assigned to him/her from time to time under CBCS.

C1.6. FACULTY

- » Will be the Faculty being the instructor for a particular course for a class in any department of the University or any other Institution affiliated to the University.
- » Responsible for the monitoring the portal for the fair usage and to access the performance of the students by applying filters and analytics belongs to his course / class.



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- » Responsible for exercising such powers and performing such other duties as may be prescribed or assigned to him/her for time to time under CBCS.

C1.7. EXAMINER

- » The examiner may require performing such activities assigned by the examination section to him.

Note: This section has not finalized and may require change as per the discretion of the university during the phase of the designing and development.

C1.8. STUDENT

- » Will be the Students enrolled for course in any department of the University or any other Institution affiliated to the University.
- » Responsible for registration, opting electives by giving preferences, checking own performance, Results etc.
- » Responsible for exercising any other such activities from time to time allowed under CBCS.

C1.9. GUEST USERS

- » Will be the Students, Parents of the Students or any other users who wished to check the results without registration login from the portal.
- » By just entering registration number / any other details prescribed by the university, these users can access the results of any particular student.

C2. USER FOR EXAMINATION FINANCE MANAGEMENT MODULE

The various users of the application and their activities/functionality are listed below for the second software (i.e. B2) CBCS Examination Finance Management Module.

C2.1 SUPER ADMIN

C2.2 ADMIN

C2.3 TEACHER



C2.1 SUPER ADMIN

- » Will be the Controller of Examination (COE) or any other authorized by him of the University.
- » Can create the Roles, Users and manage them and can create various remuneration types and their details.
- » Responsible for the monitoring and managing the financial activities related to the examination.
- » Can approval the requests for payments and disburse the payments under examination activities.
- » Responsible for maintaining the details of the various payments and the persons to whom the payments were made also the reasons why the payments were made.

C2.2 ADMIN

- » Will be any administrative officer of the office of the Controller of Examinations.
- » Responsible for the receiving the requests for payments from teachers and to forward to the admin.
- » Responsible for verifying the nature of the work, a number of questions, disbursement claims etc.

C2.3 TEACHER

- » Will be the user responsible for the setting of the question paper or evaluation of the answer scripts.
- » Responsible to raise the request for payment for the task he/she undertaken such as answer sheet evaluation or question paper setting.



D) TECHNOLOGY:

Hardware:

Suitable configuration for Server to be prescribed by the Vendor.

Client System is standard PC with 4GB RAM.

On-site training:

The vendor has to provide onsite training to the officials in the overall workflow of the developed solution and backend administration module. The training shall include, but not limited to the following:

- ✓ Identify and execute training requirements for successful execution of the project
- ✓ Unit-wise training to users for uploading contents on the website
- ✓ Preparation of necessary training documents and Manuals
- ✓ Support Training / Demo on need basis

Standards of the web portal or application:

- ✓ Should be responsive in nature – Browser Compatibility
- ✓ Able to scale or integrate with other applications
- ✓ Industry standard of look and feel (Rich Look)
- ✓ Easy to maintain and should be secure system

Technologies to be used for development:

- ✓ Open Source technologies – Angular JS, Spring, Hibernate MVC Frameworks
- ✓ MongoDB Database
- ✓ To be hosted on Apache Server
- ✓ Have standard interface capabilities (standards like ISO, XML, web services)

E) PROJECT DELIVERABLES

Work Execution:

Method and Process of Choice Based Credit System (CBCS) & Examination Finance Management System at Pondicherry University

- Project Initiation



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- Preparation of Sample Layouts and Finalize of Home Page / Color Schemes, Template etc.
- Development of various Functionality modules
- Approval of Functionality
- Testing
- Vulnerability testing
- Demonstration to Client / User Acceptance
- Go- Live and Training

Deliverables:

- ✓ Work Plan Schedule
- ✓ Source Code, Executable Code with Complete Documentation (including System & Operations Manuals)
- ✓ A copy of backend executable code shall be made available by the agency to the PONDICHERRY UNIVERSITY
- ✓ Documentation and support
- ✓ Bug-Fixing
- ✓ Configuration Management and Version Control
- ✓ Release Management
- ✓ User Technical Support & Administrative Support

Submission of Bids

All bid documents duly filled-in and complete in all respects for both Technical Bid Part-I and the Financial Bid—Part—II should be sealed in separate covers superscribing the Technical Bid/Financial Bid. The two sealed covers should then be sealed in a single envelope superscribing “*Tender for Choice Based Credit System (CBCS) and Examination Finance Management Software(EFMS), Pondicherry University*”.

Bidder’s name, address and phone number should be mentioned on the bottom left side of the envelope.



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EMD Amount

A Demand draft towards EMD amount for **Rs.75000/-** drawn in favour of **The Finance Officer, Pondicherry University** payable at Puducherry to be enclosed along with the Technical Bid. Those bids submitted without the EMD amount will be summarily rejected.

ELGIBILITY CRITERIA (Documents to be submitted along with Technical Bid)

- The bidder should have experience in design, development, and implementation of CMS based applications/websites in open source technologies during the last five years prior to the last date of the bid submission.
- Vendor should have experience in Integration of Online Fee/Payment collection with the application and Securing the Software against any Vulnerability.
- List of clients along with details of software developed/delivered including ongoing projects to be furnished.
- Vendor should have valid ISO 9001; 2015/ISO 27001 certification.
- The bidding firm should have registered with the Registrar of Companies.
- Average annual financial turnover of the bidder during the last three consecutive financial years should be at least Rs. 75.00 Lakhs.
- Bidder should submit audited annual financial reports and IT returns for the last three (Assessment Year 2014-15, 2015-16 & 2016-17) financial years in support of the above.
- The bidders should have successfully completed at least one project involving software development and implementation to any Educational Institution/University during the last three years.
- Consortium bidding is strictly not allowed.
- Self declaration stating that the bidder has not been blacklisted by any Department/ Ministry/Organizations of the Government of India or any State Government.

EVALUATION & SELECTION CRITERIA

- Bids will be examined for fulfillment of eligibility criteria as given above. Bids which do not fulfill the eligibility criteria will not be considered for further evaluation.
- Bids which fulfill the eligibility criteria will be examined for fulfillment of technical specifications/requirements and the Eligible bidder's will be called for detailed presentation. The bidder's response will be evaluated on the basis of technical parameters given below.
 1. Successful end-to-end Completion of related software projects in reputed Organization.
 2. Years of Domain Experience with Client & Project Details.
 3. Experience in Integration of Online Fee/Payment collection with the application.
 4. Securing the Software against Vulnerability.



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- Only those bids securing a minimum of 70% marks in the technical evaluation will be considered for Financial Bid opening and evaluation.
- The final selection of the Bidder will be based on Quality and Cost Based Selection (QCBS) procedure. There will be 70% weightage for Technical Bid Evaluation and 30% for Financial Bid Evaluation.
- The representatives of the firms which fulfil technical specification will be invited for opening of financial bids and for presentation.
- The successful bidder will be given Work Order.
- On acceptance of the Work Order, the Vendor should sign an agreement with the University.

Other Terms & Conditions:

- 1) Successful bidder shall sign an agreement with the University including a Non-Disclosure clause
- 2) Prices quoted should be inclusive of all duties and taxes
- 3) The firm should complete the tasks – system study, design, development, testing & implementation, training & commissioning, documentation, etc., within 2 months (two months) on receipt of confirmed order.
- 4) Post-commissioning support (online/offline) for the software should be for a minimum of three years from the date of successful commissioning.
- 5) For the successful implementation of the project, the firm should always remain in touch with the Officials Authorized by the University for the monitoring of the status, quality and timely delivery/implementation.
- 6) The firm should give proper training to all the end users of the Pondicherry University.
- 7) If any additional features are required at the time of implementation of the project, the firm should undertake the work without any additional cost.
- 8) Non – Compliance of any of the pre-requisites specified in the Tender document may lead to rejection of the bid without any notice / communication. No communication in this regard will be entertained.
- 9) The University reserves the right to accept / reject any or all tenders received in response to this advertisement without assigning any reasons, whatsoever. University also reserves the right to raise the eligibility criteria for short listing the vendors.
- 10) The University also reserves the right to initiate legal proceeding as per the relevant provisions of the Indian laws against the firms for suppressing the facts or for providing false / misleading information or for attaching any kind of fabricated material as proof.
- 11) The finalized firm should sign an agreement with the University for Execution of the project.



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Payment Terms & Conditions:

- i) 50 % payment on successful commissioning of software
- ii) 25% payment on successful completion of one entire semester of operations from the date of successful commissioning
- iii) 15 % payment on successful completion of subsequent (second) semester of operations
- iv) 10% after satisfactory completion of warranty period for 3 years and after entering into annual maintenance contract with the University.



Technical Bid Form

1. Name of the Organization / Firm
2. Year and type of Registration of proposing Organization/Firm
3. Name of the Chief Functionary of the Organization
4. Address of the registered office of the organization
5. Communication Address of the organization
6. Permanent Account Number (PAN) of the organization
7. Organization's Vision & Mission
8. Estimated Number of professional Staff-months required for the job & availability
9. Experience in design, development, and implementation of CMS based applications/websites using open source technologies during the last five years
10. Experience in Integration of Online Fee/Payment collection with the application
11. Experience in Securing the Software against any Vulnerability
12. Details of valid ISO or equivalent certification



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13. Vendor should have successfully completed at least one project involving software development and implementation to any Educational Institution/University
14. Self declaration stating that the bidder has not been blacklisted by any Department/ Ministry/Organizations of the Government of India or any State Government.
15. Details of EMD for Rs. 75000/-

FINANCIAL DETAILS

Financial Year	Turnover Rs.	Audited statements and IT Returns enclosed?
2013-2014		
2014-2015		
2015-2016		

FIRM'S EXPERIENCE IN PAST 5 YEARS *(including ongoing projects with probable date of completion)*

Description of similar jobs undertaken by the firm	Client Name and address	Start and End date of the job	Remarks



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KEY PERSONNEL

Name	Qualification	Description of similar job undertaken	Total Experience (in Years)

Attach separate sheets wherever required

Signature with Company Seal

Date:



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Financial Bid Form

(to be submitted in separate cover)

Particulars	Rs.
<p>System study, design, development, testing & implementation, training & commissioning, documentation, etc for the Choice Based Credit System (CBCS) and Exam Finance Management System (EFMS) software for the Examinations Wing of Pondicherry University</p> <p>Prices quoted should include all Duties, Taxes and cost for Annual Maintenance contract after the warranty period.</p>	

Signature with Company Seal

Date:



SUBMISSION OF BID OFFER

Sealed tenders shall be received by the Controller of Examinations, Pondicherry University at the address specified below, not later than the time and date specified in the invitation of Tender document. In the event of the specified date for the submission of Bid offers being declared a holiday, the offers will be received up to the appointed time on the next working day.

Bids submitted by fax or email will not be considered.

Bid Offer received late will be rejected.

Canvassing in any form will result in disqualification of the Bid

Address for Communication:

**Controller of Examinations
Pondicherry University
R.V Nagar, Kalapet
Puducherry – 605 014**



Annexure - I

Name of Affiliated Institutions

1. ARIGNAR ANNA GOVT. ARTS AND SCIENCE COLLEGE
2. AVVAIYAR GOVT. COLLEGE FOR WOMEN
3. MAHATMA GANDHI GOVT. ARTS COLLEGE
4. Dr. S. R. K. GOVT. ARTS COLLEGE
5. TAGORE ARTS COLLEGE
6. JAWAHARLAL NEHRU RAJKEEYA MAHAVIDYALAYA, PORT BLAIR
7. MAHATMA GANDHI GOVT. COLLEGE, MAYABUNDER
8. RAJIV GANDHI ARTS & SCIENCE COLLEGE
9. PERUNTHALAIVAR KAMARAJAR ARTS COLLEGE
10. BHARATHIAR PALKALAI KOODAM
11. COMMUNITY COLLEGE, PONDICHERRY
12. SARADHA GANGADHARAN COLLEGE
13. INDIRA GANDHI COLLEGE OF ARTS & SCIENCE
14. IDHAYA COLLEGE OF ARTS AND SCIENCE FOR WOMEN
15. ACHARIYA ARTS & SCIENCE COLLEGE
16. RATHNAVEL SUBRAMANIAM COLLEGE OF ARTS & SCIENCE
17. KASTHURBA COLLEGE FOR WOMEN
18. MAHE CO-OPERATIVE COLLEGE OF HIGHER EDUCATION AND TECHNOLOGY
19. DON BOSCO COLLEGE OF ARTS & SCIENCE
20. ANDAMAN COLLEGE (ANCOL)
21. COMMUNITY COLLEGE, MAHE



Annexure II

Name of Under Graduate Degree Programmes

1. B.A (Bengali)
2. B.A (Economics)
3. B.A (English)
4. B.A (French)
5. B.A (Functional Tamil)
6. B.A (Hindi)
7. B.A (Historical Studies)
8. B.A (English Language & Literature)
9. BA (English Literature & English for Careers)
10. B.A (Malayalam)
11. B.A (Professional English)
12. BA (Philosophy` Yoga & Cultural Tourism)
13. B.A (Philosophy Yoga & Indian Culture)
14. B.A (Political Science)
15. B.A (Psychology and Mental health)
16. B.A (Sociology)
17. B.A (Social Work)
18. B.A (Tamil)
19. B.B.A
20. B.B.A (Tourism & Travel Management)
21. B.B.M.
22. B.C.A.
23. B.Com (Co-operative Management)
24. B.Com.
25. B.Com (Corporate Secretaryship)
26. B.Com (Foreign Trade)
27. B.P.A (Dance)
28. B.P.A (Music)
29. B.P.A Music (Hindustan (Vocal))
30. B.P.A (Music)
31. B.P.E (Bachelor of Physical Education)
32. B.SC (Bio Chemistry)
33. B.SC. (Bio Informatics)
34. B.SC. (Bio Technology)
35. B.SC. (Chemistry)
36. B.SC. (Computer Science)
37. B.SC. (Electronics)



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38. B.SC. (Geography)
39. B.SC. (Home Science)
40. B.SC. (Information Technology)
41. B.SC. (Applied Micro Biology)
42. B.SC. (Mathematics)
43. B.SC. (Nutrition & Dietetics)
44. B.SC. (Physics)
45. B.SC. (Plant Science)
46. B.SC. (Psychology)
47. B.SC. (Statistics)
48. B.SC. (Visual Communication)
49. B.SC. (Zoology)
50. B.V.A (Visual Arts)
51. B.Voc (Radiographic & Imaging Technology)
52. B.Voc (Renal Dialysis Technology)
53. B.Voc (Operation Theatre Technology)
54. B.Voc (Optometry Technology)
55. B.Voc (Tourism & Service Industry)
56. B.Voc (Fashion Technology)
57. B.Voc (Journalism & Mass Communication)
58. Advanced Diploma in Cardiac Lab Technology
59. Advanced Diploma in Operation Theatre Management

Degree Programmes are subject to change. Approximate no. of students on roll is 16,000.