



INDIRA GANDHI NATIONAL TRIBAL UNIVERSITY,
AMARKANTAK (M.P.)

(A National University established by an Act of Parliament)

Ref. No.....

Date://.....

Subject: Pre-Bid Presentation for the Automation of Examination System

Dear Sir/Madam,

It gives me immense pleasure to invite the reputed Govt. /Private Companies/Firms for the pre-bid presentation for the automation of Examination System (ERP Software) of the University.

IGNTU is a Central University functioning under the Ministry of HRD, Govt. of India, established in 2008, situated at Lalpur, Amarkantak, Distt-Anuppur, Madhya Pradesh. It is approx 125 KM from Bilaspur and 220 KM from Jabalpur and 225 KM from Raipur.

The University is holding a pre-bid presentation from Reputed Govt. /Private Companies/Firms for the automation of Examination System (ERP Software) at IGNTU campus between 8th and 9th December 2016 from 11 am to 2 pm in the Conference Hall in the Exam Section.

Reputed Govt. /Private Companies/Firms are hereby requested to make their presentations for the automation of Examination System. The details of the requirements of the automation are enclosed for your reference.

Thanking You,

Controller of Examinations

Details of Automation of Examination System (ERP Software) are as follows:

1. Student Life Cycle:

1. Pre Admission
2. Admission
3. Academics
4. Fee Management
5. Alumni Management and Student verification
6. Self Service Portal for Students
7. Examination Management and Result Processing

2. Entrance Test

1. University gives Advertisement in NEWS Paper.
2. Candidate fills form online along with details of entrance examination center city information and submit fee online or by bank.
3. Scrutiny of application based on the eligibility criteria defined in the rules.
4. Center creation and allocation of Centers to candidates.
5. Admit cast will be created and information sent to candidates for downloading of their admit cards (Bar-coded Admit cards will also be available from our Local Support Centers).
6. Information of exam date time will be sent to designated centers.
7. Information sent to secrecy department for paper setting and number paper required in different exam centers.
8. Send attendance sheets & other related documents to Exam centers.
9. Secrecy department send Question papers & Answer sheets to Centers (Bar-coded answer sheets required).
10. After exam secrecy department receive answer sheets from centers.
11. Secrecy department send answer sheets for evaluate to evaluator.
12. Score sheet preparation and approved by committee of Dean, Registrar & Hon'ble Vice-Chancellor.
13. Send score sheets to concerned department.
14. Department generate the Weightage on the basis of score sheet.
15. Send letters to selected candidates for counseling.

3. Feature List:

- Multiple College Creation
- Degree Type Creation (UG, PG, PhD, Certificate Courses etc.)
- Degree Creation (BA, B.Sc, B-Tech, M-Tech, PhD Etc.)
- Degree Course Creation (Configurable option of academic year wise course creation)
- Degree rules creation (Minimum Attendance Required, Notorious activities, Fee submission etc.)
- Student course allocation
- Student/ Faculty Timetable creation
- Student attendance
- Academic calendar
- Faculty course Allocation
- Faculty lesson plan
- Exam Creation (Internal, External, Class Test etc.)
- Exam Type Creation (Theory, Practical, Viva-Voce, Tutorial etc.)
- Grace Policies Configuration
- Dynamic Exam weight-age Configuration
- Dynamic Degree Semester Creation (I, II, III etc.)
- Dynamic Degree year Creation (1st, 2nd, 3rd etc.)
- Academic year creation
- Dynamic Statistical Report Generation (Gender, Category, Degree-wise etc.)

4. **Teacher's Course Allocation**

Fee Management:

This module allows the users to setup and define fee structure of any complexity with creation of different fee heads. Fee collection, exemption, Scholarship, adjustments, this includes generation of various management reports, fee slips and automatically generated fee payment alerts to students before the due dates.

Features:

- Define multiple tuition fee structure for different degree programs based on the University's Academic Fee policy and structure;
- Allow for different payment terms such as installments and/ or full payment;
- Ability to define and maintain an installment structure;
- Allow for collection of fees using different methods e.g. cash, cheques, bank deposits, online etc;
- Define different types of sponsorships e.g. self sponsor, financial aid, 3rd party sponsors etc;
- Scholarship Management.
- Allow for online payment of tuition fees;
- Ability to link a student account to a third party sponsor;
- Ability to define and apply exemption credits to student's account;
- Provision to calculate tuition fees based on residents and foreign students;

- Allow for multicurrency fee payment option.
- Allow for Electronic Funds Transfer EFT transaction (e.g. credit card) in real time with Banking institutions or their parties;
- Allow for automatic calculation of fees based on the degree programme and courses selected;
- Generate a reference number for all methods of payment; the number should be emailed to manual paid students;
- Automatically set an effective date to indicate when fees will be paid;
- Ability to apply penalties for returned cheques;
- Notify students by sending alert messages via SMS and/ or email of fee over dues or unpaid tuitions, etc;
- Integrate with Financial Module e.g. all student transactions, cash receipts etc, must be sent to the General Ledger;
- Integrate with the Accounts Receivable sub-module;

5. **Alumni Management:**

Alumni management system promotes interaction among alumni and provides newcomers to that university with valuable social and professional contacts. Membership also provides a way for alumni to help each other as well as prospective students, current students, and young alumni who seek guidance in pursuing their education and starting their careers. Alumni Interaction with University, on various requirements of alumni shall also be part of this module.

Feature List:

- Member registration
- Auto Verification by registration number
- Alumni Group management
- Discussion Forum management
- Alumni member search
- Alumni Donation opportunity
- Scheduling/ events/ Mass Messaging/ circulars to all members
- Polls
- Institutional news
- Integration with Placement cell
- Alumni meeting reports
- Pledges and donations
- Alumni directory

6. **F. Self Service Portal for Students:**

Self service portal provides a platform for majority of Institute stakeholders (like students, faculty, parents and employees) to get, share and disseminate the required & relevant information through discussion forums, chat rooms, mail, document sharing, SMS alerts etc.

All the portal users are allocated with adequate space on the portal to manage the information, events, mails, documents etc for the self use and can be shared among the group members created by the user. Faculty can made use of the portal services to upload on-line tutorials & assignments for the student groups, can apply for the leave on-line, view the details of the leaves into his credit, access to salary slip besides availing the other facilities provided for the users like document sharing & management etc. The users will be assigned a user ID & password to logon to the portal for availing such services.

Feature List:

- Online Assignments & Tutorials (for Students)
- Course Details
- Examination Schedules
- Time-Table
- Attendance Details and SMS Alerts (for Students, Faculty & Staff)
- Student Personal Details (like fee details, time table, lesson plan, notifications etc.)
- Academic Calendar
- Planner for Task and Meeting Management (Integration with Outlook)
- Discussion Forum & Instant Messaging
- Personal Document Management with Content Search
- Document Sharing (Workgroup)
- Mailing facility with Address Book, Groups and Attachments
- Album
- Notice Board
- Poll for Students & Employees
- Salary Slip and Loan Details (For Employees)
- Leave and Increment details (For Employees) etc.

7. Examination & Result Process Management System:

Brief Description

The Students would be able to access and fill up the examination forms (Regular, Private & Late exam forms) online and University would be able to maintain a central database for the same. Based on this database, University would generate the Roll List in pre-defined formats.

This database would also enable the University to estimate the actual number of Question Papers & Answer Sheets required and to procure the same. Further, the University would be able to dispatch these Question Papers & Answer Sheets to the Colleges based on their requirement. The examination process would be further streamlined with the Dynamic

Exam Centre Allocation, Examination Schedule generation, Student Exam Centre allocation, Admit card printing-college wise etc.

For Self-Financing Colleges, there will be an Examination Superintendent appointed for monitoring of exams at the self financing colleges. There would be information sent to the Secrecy Department for question paper setting & printing and to Stores Department for the procurement of answer sheets.

The Secrecy department on receiving the request for question paper setting would create a paper settler pool from faculty within University campus, colleges & external Experts depending upon the degree/ programme course to finalize two/ three sets of Question papers so as to decide at the last minute about which question paper to be sent for a particular course/ exam. The secrecy department shall also send information to Accounts department for release of Payment to the paper settler pool of people.

The Confidential department shall store the printed Question papers as per the date sheet and would sent these papers to colleges (code-wise) on the basis of student roll list, courses, electives etc. Some extra papers would be required for the answer sheet evaluators.

The system would further enable the University to dispatch the admit cards to the students. There would also be automatic generation of rule based seating arrangements for University campus exams and for affiliated colleges separately.

Student registration and Enrollment and Roll Number Generation:

Online Student Registration will be done with Photograph, Degree Programme name, Branch, Part time/ Full time, Personal/ demographic Details. Enrollment and Roll Number generated after approval from Controller of Examinations department. The format of enrollment/ roll number is fully configurable so the format can be change session wise if required.

- Online exam application this will be filled by the students using student self service portal, student can select various courses like core/ electives/Research on this online exam form. Students can also apply for backlog/ supplementary online.
- Online fee submission facility will be given, so students can submit fees using online payment gateway or through bank challans.
- Colleges can submit student attendance online the University.

- University can define various examination centers and generate exam schedule including details of regular/Back papers. Exam Schedules can be generated date wise/Programme wise/Center wise etc.

Hall Ticket Generation and Issue:

Examination hall tickets can be generated online and made available on student portal as well.

- Student Attendance data cross referenced
- Hall tickets generated online, approved with Electronic Signature of Controller of Examinations
- Exam schedule and Hall tickets can be downloaded by students and colleges online (on student and college portal respectively)
- Hall Ticket printed at University and duly authenticated by the signature of Chief Superintendent

Once the Pre-Examination Process is complete, University shall begin the process of conducting examination. The System would ascertain Faculty Flying Squads for random College visits. There would be online entry of daily Student Attendance at the exam centers.

8. Internal Examinations at Colleges/ Campus Departments.

During the Internal Examinations, Colleges shall feed the Internal Examination marks after approval of Competent Authority at college. These marks once fed, would be locked by the designated college's officials and then, would be made available to University Examination Department.

9. Annual/ Half Yearly External Examination:

The University would conduct yearly/ half yearly external examination for all the colleges, depending upon the course and would receive answer sheets, attendance sheets and unfair means cases from Colleges. The Answer Sheet would be encoded with a newly generated fictitious roll number. There would be **Evaluators' Pool Creation** & subsequent answer sheet allocation to be selected Answer Sheet evaluators, decoding of roll numbers and feeding of marks/ grades at centers by university staff. There would be the facility provided during the Evaluation of copies and marks feeding for capturing/ recording of videos at the evaluation centers, as the Answer sheet evaluation would be done at these centers only. For the payment of answer sheet evaluators the details would be sent to the Accounts Departments for disbursement.

The Practical Exams would also be handled by the system by way of selection of external practical examiners, pre-payment by University to colleges for examiners, allocation of colleges to examiners & information about dates of Practical Exam to colleges as well as examiners is prepared thru' system and sent to colleges and examiners, so that these examiners visit colleges for Practical Exam on these prescribed dates. They will feed the

marks and these marks shall be locked by HOD at the colleges. The Examiners payment shall be made by colleges there itself immediately after the practical Examination.

Immediately after this, the process of Result Generation, College-wise Result notification shall happen. This will follow with the process of generating merit lists, marks sheets & printing of certificates by the system.

Re-evaluation and Improvement in marks, if any is taken at this stage, if any student applies for the same. Thereafter system will generate Degrees for those who have completed their studies, dispatch of the above documents to respective colleges/ departments, organizing of Annual Convocation and award of Degree at the University.

10. Examination Configuration

Screen shot of Exam Type Configuration

Exams are scheduled and admit cards gets prepared and distributed. Question paper setters can be finalized and given assignments. The examiners are finalized and informed. The invigilators for observation are informed. Question papers are set and printed. Results is prepared and mark-sheets get printed. Result is declared and mark-sheets get distributed. Publishing of results online on the web, making the same available on Internet, Allowing online printing of results etc. Student can also apply online for re-examinations etc.

Facilitating payment to the examiners, involving: recording the activities, routing then to the appropriate office for approval, redirect the approved report to the Finance Department for payment, collecting the payment, issue to respective examiners etc.

Result processing and Notification:

- Practical and internal marks entry directly from the colleges/ departments
- Compilation of internal/ external/ practical marks
- Result processing on the basis of rules and regulations of the University
- Rollback of result process if any problem arises at runtime.
- Locking marks once it is finalized, so it cannot be changed.
- Online publication of results
- Graphical representation and Statistical report of the results (in the form of graphs, charts etc.)
- Short-listing of students for next semester, back log students, year back students etc.
- Various MIS reports like College-wise result report, Branch-wise result report, Subject-wise result report

- Facility for students to view their previous semester results, grades and marks obtained on student self service portal.

Mark sheets and Certificates generation:

- Printing of mark sheets in specified format (it can vary degree programme wise)
- Mark Sheets will have student photograph, and other student details along with his marks/ grades
- Suitable Security features on the marks sheets such as barcode, unique number etc.
- External organizations can verification marks sheets using unique number on every mark sheets with suitable payment system for online verification
- Generation of various certificates such as migration certificate, eligibility certificate and provisional certificates from the system
- System provides facility generation of duplicate mark sheets/certificates.

Student Data Capturing

The Students data's such as Name, DOB, Gender, Community, Address, Phone Number, Email ID, Candidate Photo & Signature and parents Photo and Signature, School Educational data will be collected. The Register Number of the student will be automatically created when the data is submitted.

Faculty Id Creation

The details of the staff such as Salutation, Name, Designation, Address, Phone Number, Email ID and Department will be stored and then a unique Faculty ID is created. All this required details will be carried from already available database of HRMS module.

Creation & Dispatch of HALL Ticket Based on the Application

The hall ticket will be generated through the system and populated at student portal.

11. ACTIVITIES DURING EXAMINATION:

Question Paper Configuration (Session Wise)

Question Paper author will submit questions along with answer keys in the system; on approval of moderator proposed questions saved in Question Bank for future use. Examination department configure question paper templates as per their requirement. Based on configured templates system will randomly generates question paper automatically using existing Question bank. Generated question papers can online delivered for printing.

12. ACTIVITIES AFTER EXAMINATION:

Scanning of the Answer Scripts for Valuation

After the examination the entire answer script is electronically scanned with the help of high end Scanners. The resulting image is stored in a secure database, before being delivered to the

Evaluators via a secured network. Scanning will be based on the Applications Put and the Absentees list for that particular Subject. There will be an Image Check and Scan Verification whether all the Present students answer Scripts has been evaluated.

Valuation of Answer Scripts

User IDs will be provided to Evaluators for online evaluation of assigned subject answer sheets. Evaluators can evaluate the answer sheet at university evaluation centers or from their own workplace. Online help tutorial will be provided for onscreen marking. Generated User ID and Password will be communicated to evaluators through Mail, SMS or by verbal communication.

13. **Examiner Database**

The university will have the option to do the double checking of process by the team of Moderators of Super Evaluators. After submitting the answer sheets by evaluators; assigned moderator will check the random evaluated answer sheets for ensuring the quality of evaluation.

Evaluators will be provided adequate training sessions for the evaluation process. Evaluators can refer to the Help File and tutorials if they encounter a problem.

Control Rooms will be setup at the Nodal Centers where the Examination System Admin can monitor the marking progress, using such statistics as the marking speed of the Evaluators and the number of Answer Scripts marked by the different individuals. They also check evaluated scripts to ensure that the Evaluators are applying the standards. If Evaluator appears to be too strict or too lenient, immediate action and suitable adjustments can be made. After approval of moderator final marks will be transferred to result module of IUMS for Result processing and final result will be generated through the system.

Note:

The presentation by the Firms and Companies can cover the areas that are not mentioned in the above draft.