INSTITUTE BEST PRACTICES

[Pioneer Internal Quality Assurance Cell (IQAC) Initiative]

1. Title of the Practice:

"Automation of Student and Examination related functions using ERP"

2. Objectives of the Practice:

The main objective of the entire system is to provide a user friendly interface and powerful data system which make this system more useful. The College ERP system computerizes all the details of the college system which are updated by admin only can access by the students and faculties. ERP on college management system reduces the most of the human work that are done earlier to managing the college system. Once the details are entered into the system by the authorized person then there is no need for other users to deal with separate section. Only a person that is having an administrative authorization is enough to maintain all the reports and records of the system. The security can also be provided as per the requirements. The main thing is that our system reduces the human works at a great effort. It can be helpful such that - Records are always updated. - Manpower is decreased or reduced. - Large amount of data regarding college and their modules can be stored. - Accurate and perfect calculations are made. - Maintenance of file is efficient and flexible.

3. The Context:

A Higher Education ERP system can be used as a solution to integrate and increase the efficiency. We proposed a comparison framework of ERP solutions for higher education management. Due to a constant change in education landscape, it has become mandatory for higher education institutions to adopt the latest education ERP solution to handle all academic & non-academic activities effectively and provide a better learning environment to students including quality education. The replacement of the older legacy systems with centralized ERP brings quick and quantifiable improvement in the administration process. The software includes a set of tools which modernizes the campus along with upgrading the planning and management of processes related to student enrollment, courses, library, exams, result declaration etc.

An ERP system automates and streamlines all the processes functioning within the boundaries of the institution to significantly improve the effectiveness of allocating and operating academic resources better.

College ERP system provides a simple interface for maintenance of different student, department, faculties, library and others information. All the colleges usually have a number of departments and educational modules such as courses, seminar hall, etc. Managing all these departments and other modules manually is a very difficult and hard, ineffective and expensive task. So here we propose an ERP system for college. Our college ERP system has all the information about the students, teachers, events, library, departments and other respected information. The system allows the admin to add students, faculties and any other events. Our system allows a faculty to enter or input student’s attendance into the database which can later be viewed by students and faculties. The students can view his/her attendance through a separate student login. The admin can upload the timetables for various departments for exam

preparation. The time table is then available to be viewed by faculties and students on the web portal. These systems have easy user interface and have powerful data management system which makes this system is very useful.

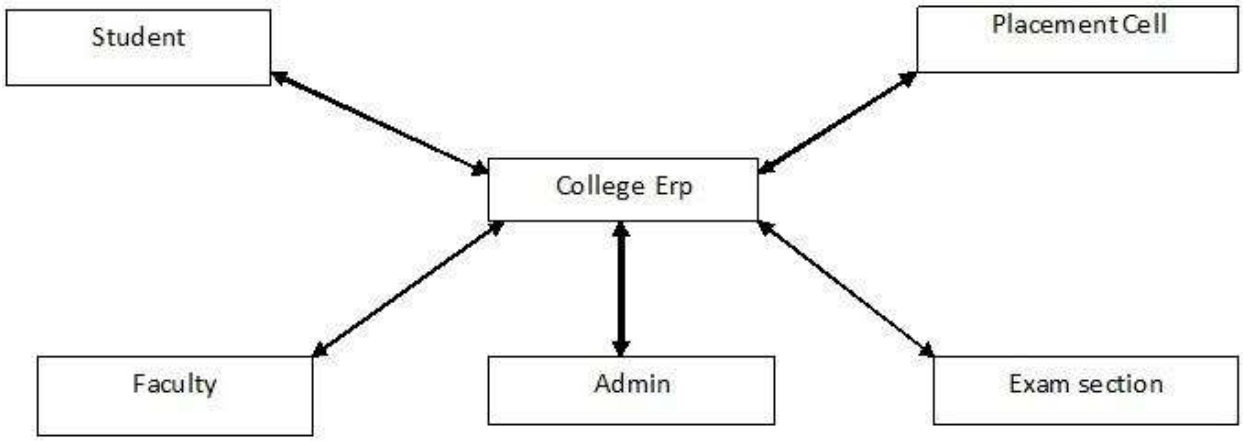
Enterprise Resource Planning (ERP) (ACCSOFT 2.0) college web application is the one kind of web application which integrates all the modules and functionalities of college system on a single system that can be handled by the administrative head and access by the students and faculties with valid user id and password. As we know that, a college consists of different departments, such as course departments, fees management, library, event management etc. Nowadays applications and uses of information technologies is increased as compared to before, each of these individual departments has its own computer system to do their own functionalities. By having one main system they can interact with each other from their respected system by having valid user id and password.

4. The Practice

The designed software for college database contains up to date or accurate information of the college. That should improve efficiency and flexibility of college record management and to provide a common and or simple platform for everyone to access the student's information.

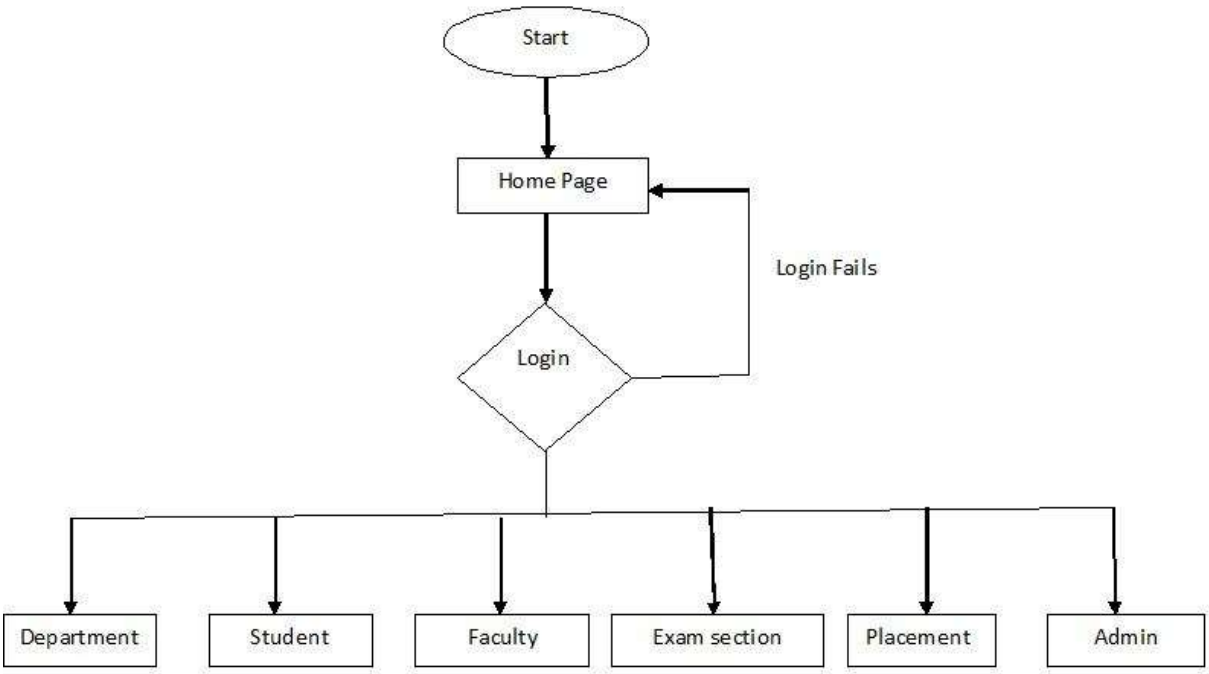
Simplify Admission Process

Admission process in colleges, universities or any other educational institutions is more often complicated and long. Each application consists of many pieces of information about the candidate including their date of birth, marks, specialization, and more. To determine the candidate's eligibility, we need to check all these records. If the task is done manually, the process becomes extremely time-consuming. However, with the help of ERP software, this procedure to enroll best-fit students gets simple. The system displays all the necessary components at a single place, which makes them easily accessible to the administrator and thus speeds up the accreditation process.



Centralized Data Management

Educational institutions need to store tremendous amounts of information about students, books, exams schedules and other data. An ERP solution integrates the whole campus and all the branches in a common system to make the process of data management easy. The software enables sharing of stored data across all departments to keep faculty, staffs, and students updated on important announcements. This makes a better control of internal and external communication in our institution and never experiences a communication breakdown.

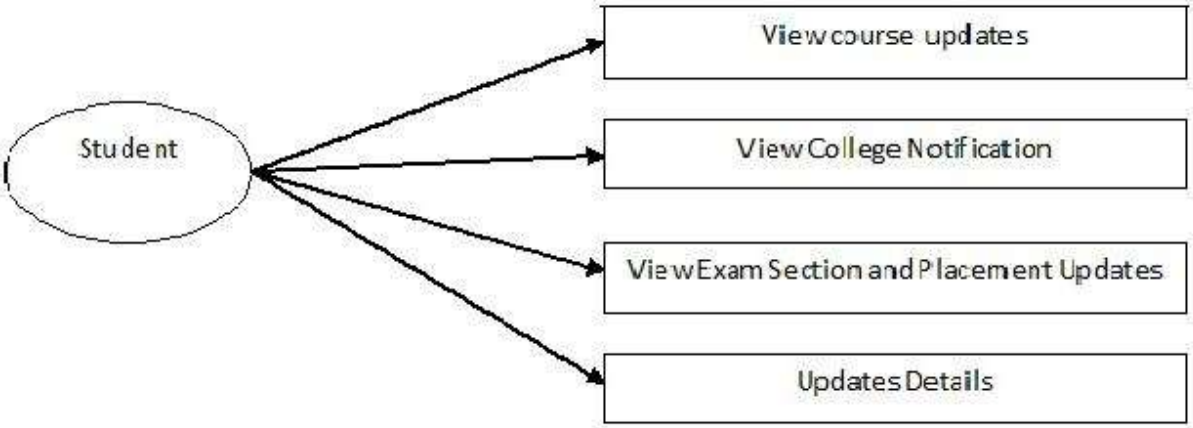


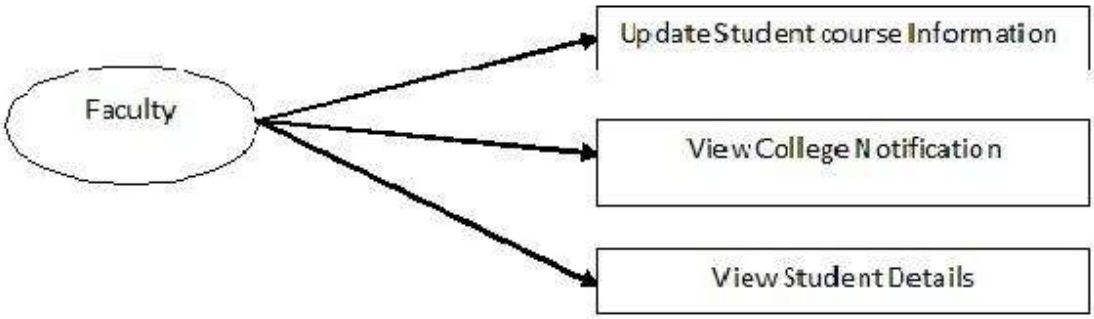
Cost Effective

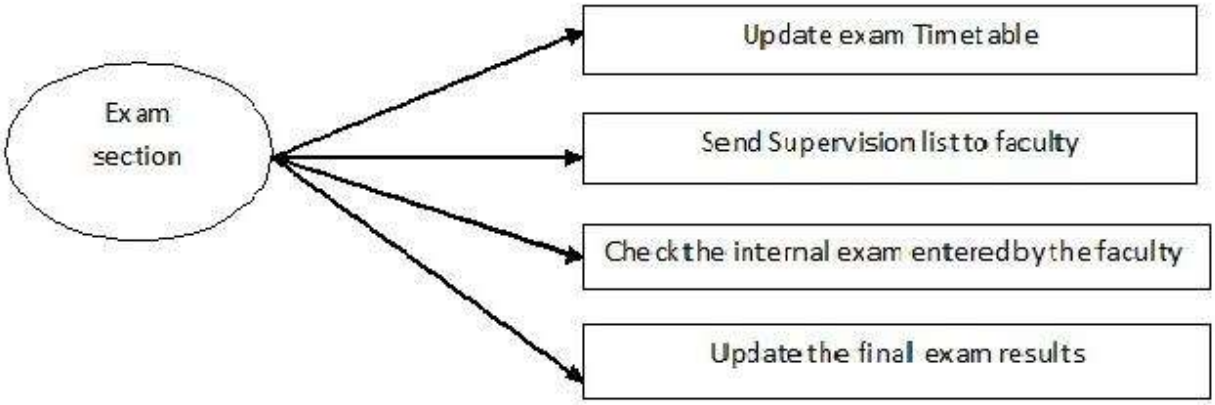
One of the most prominent advantages of ERP implementation in our institution is its cost-effectiveness. The software cuts down manual tasks involved in the fundamental methods of campus administration such as admission, payroll and others to reduce the number of man-hours, resulted in saving of money. The expenditure spared can be used for imperative educational purposes.

Quicker Management Process

Education ERP system provides easy and quick access to information about students, staff, timetables, examinations, admissions, fees, reporting, and so on. This helps the management to consider and analyze various aspects of the institution faster, leading to growth in planning capabilities. The improved data access also boosts well-informed decision-making through strategic data analysis.


Student
View course updates
View College Notification
View Exam Section and Placement Updates
Updates Details


Faculty
Update Student course Information
View College Notification
View Student Details


Exam section
Update exam Timetable
Send Supervision list to faculty
Check the internal exam entered by the faculty
Update the final exam results

Improve Resource Management

An efficient ERP system puts an end to manual maintaining of cumbersome resource databases. The software can track real-time resource usage, enabling you to optimize operations, allocate and monitor all activities in the institution in a seamless manner. This helps accelerate day-to-day activities and work out things well in time in case of any issue or problem.

Data Security

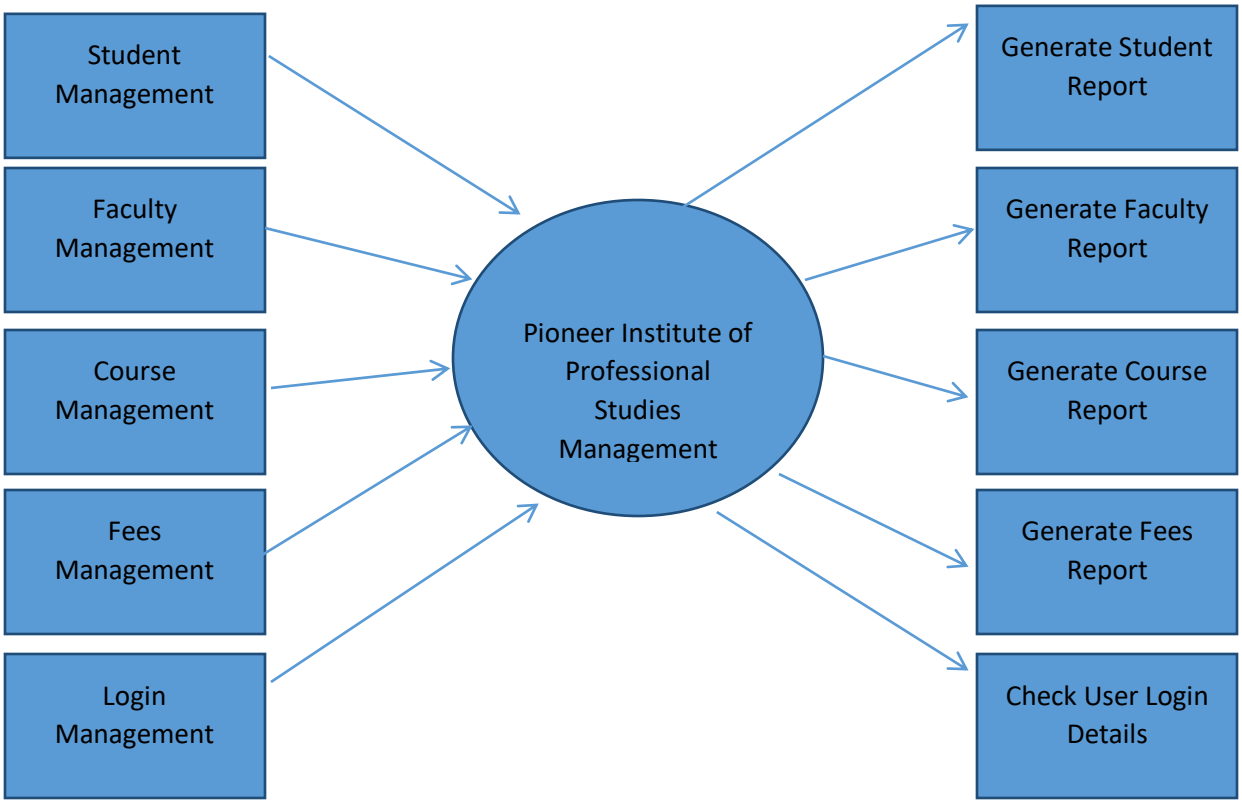
Keeping track of the data manually is quite a tedious task. For this, we have a robust ERP solution that can automate the process of recording, thus making the process simple and effortless.

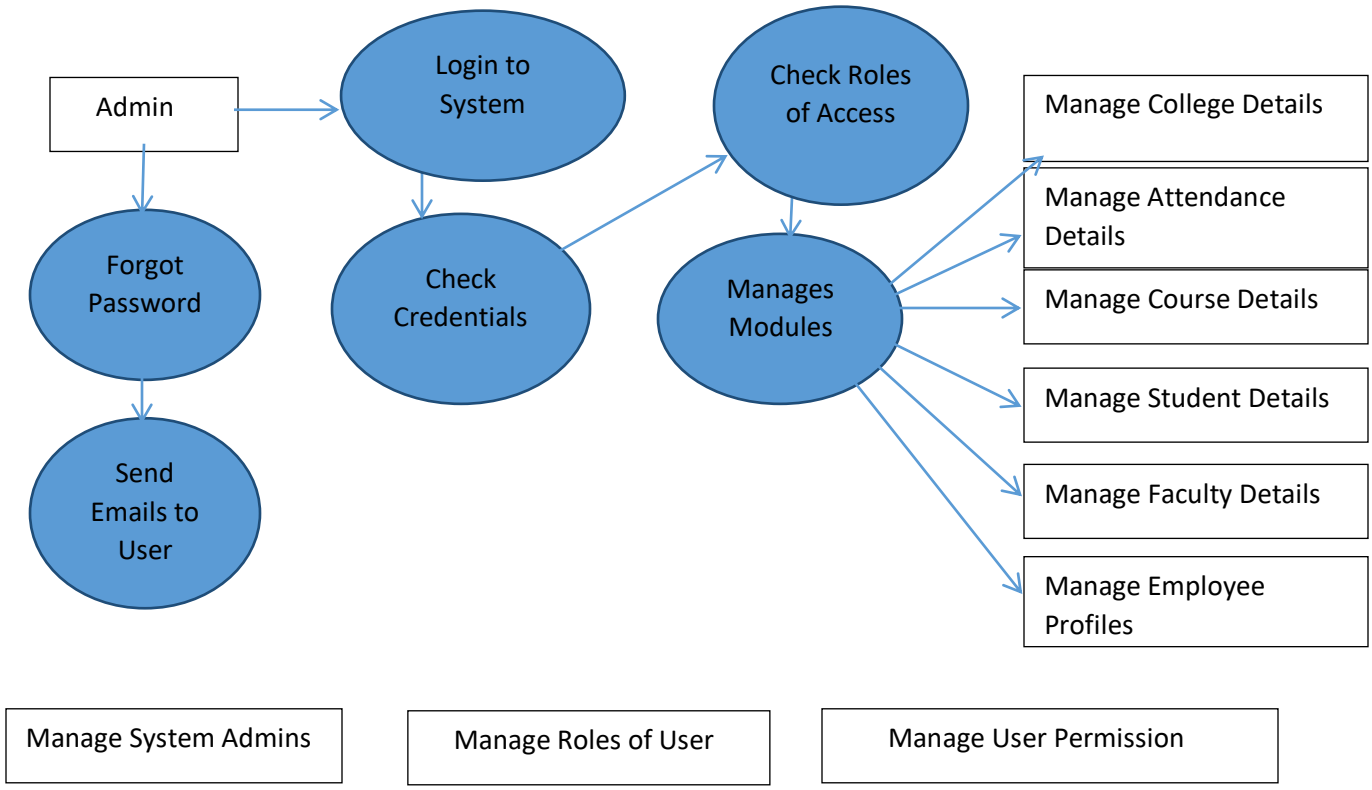
Our educational institution needs to keep records of students for the ongoing academic year as well as the alumni, faculty, books, and other resources of single or multiple campuses. Combined, the amount of data becomes huge and storing these physically on the shelves is never secure. ERP software can store this enormous amount of information securely. The application has a **BACK UP** system to preserve the info, which is quite impossible to have if it is stored in files.

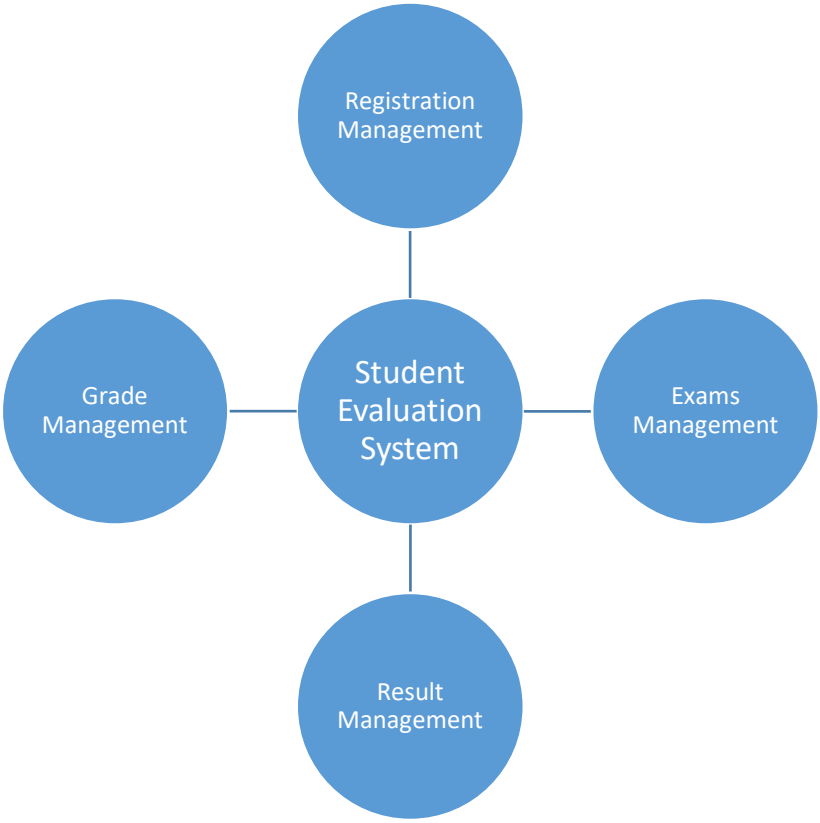
ERP MANAGEMENT AT A GLANCE

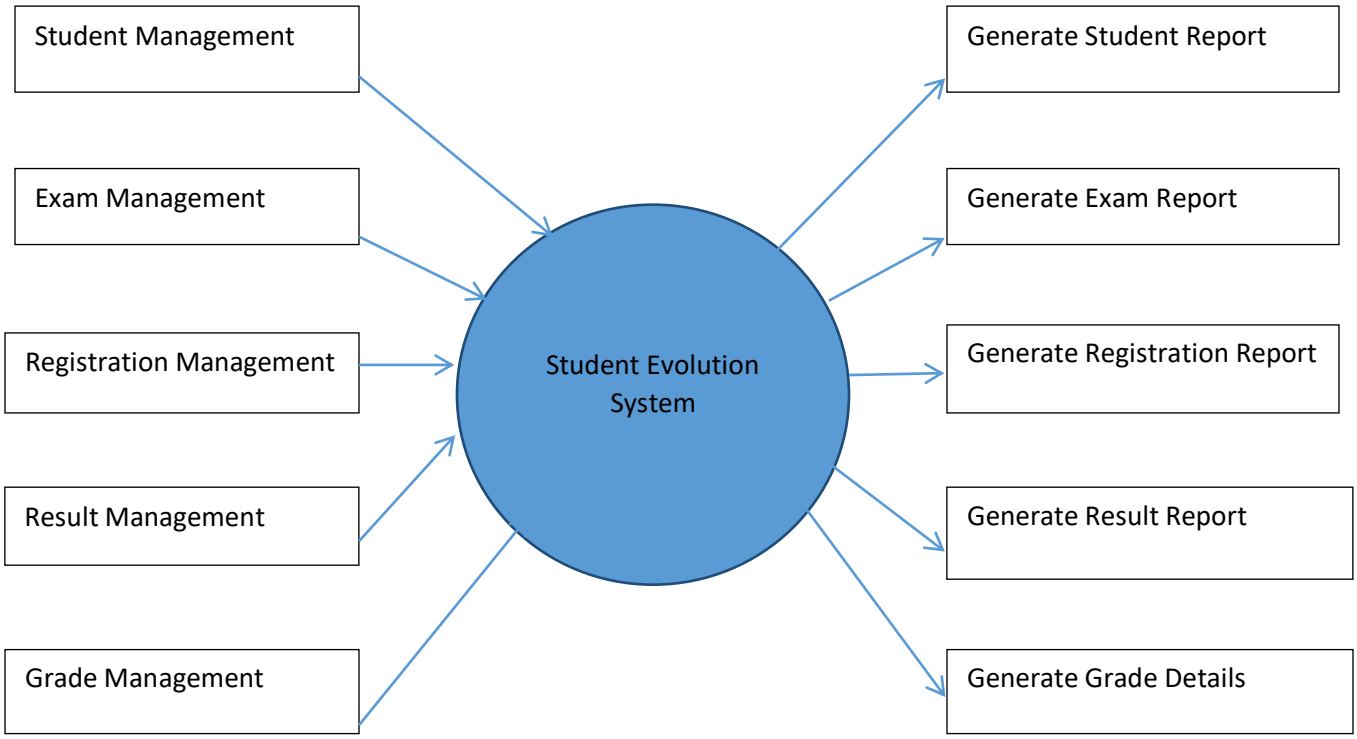
MODULES IN THE ERP

- Admission Management
- Payroll Management
- User Management
- Scholar Management
- Attendance & Leave Management
- Scholar Activities Management
- Result Processing
- Internal Result Processing, Final Result Processing
- Teachers Diary & Lesson Plan


Student Management
Faculty Management
Course Management
Fees Management
Login Management
Pioneer Institute of Professional Studies Management
Generate Student Report
Generate Faculty Report
Generate Course Report
Generate Fees Report
Check User Login Details


Admin
Login to System
Forgot Password
Send Emails to User
Check Credentials
Check Roles of Access
Manages Modules
Manage College Details
Manage Attendance Details
Manage Course Details
Manage Student Details
Manage Faculty Details
Manage Employee Profiles
Manage System Admins
Manage Roles of User
Manage User Permission


Registration Management
Grade Management
Student Evaluation System
Exams Management
Result Management


Student Management
Exam Management
Registration Management
Result Management
Grade Management
Student Evolution System
Generate Student Report
Generate Exam Report
Generate Registration Report
Generate Result Report
Generate Grade Details

5. Evidence of Success

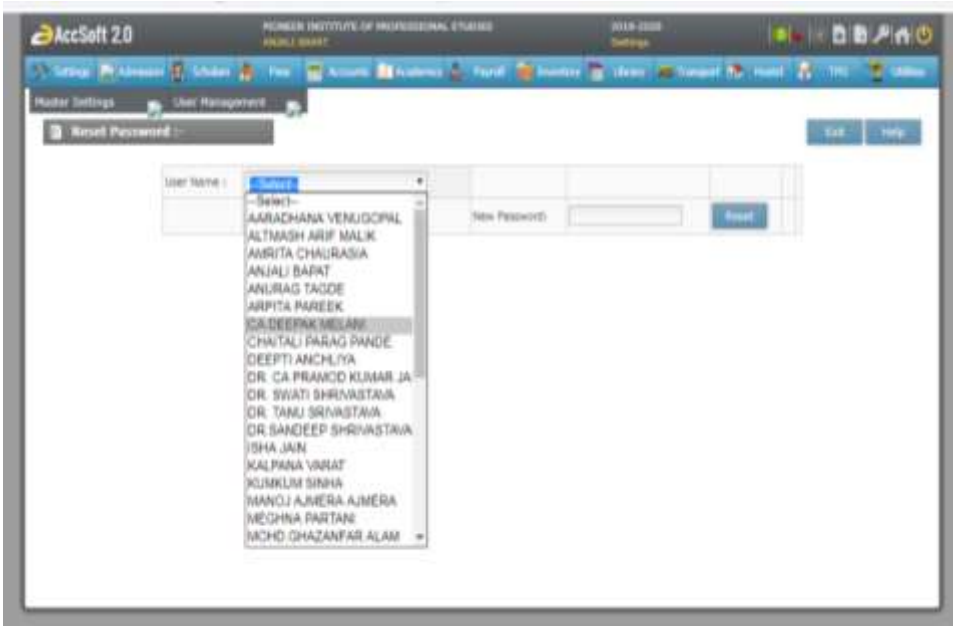
This best practice resulted in achieving the following as measure of success:-

- Web enabled
- Individual login for parents, staff and students
- Access from anywhere
- Mobile app for student and staff
- Individual model based dash board
- Individual student dash board
- Management and staff dashboard
- Easy access to find out the details
- Safe and secure of data or information and files
- Lowering the task weigh
- Increasing efficiency
- Better control
- Real time reports

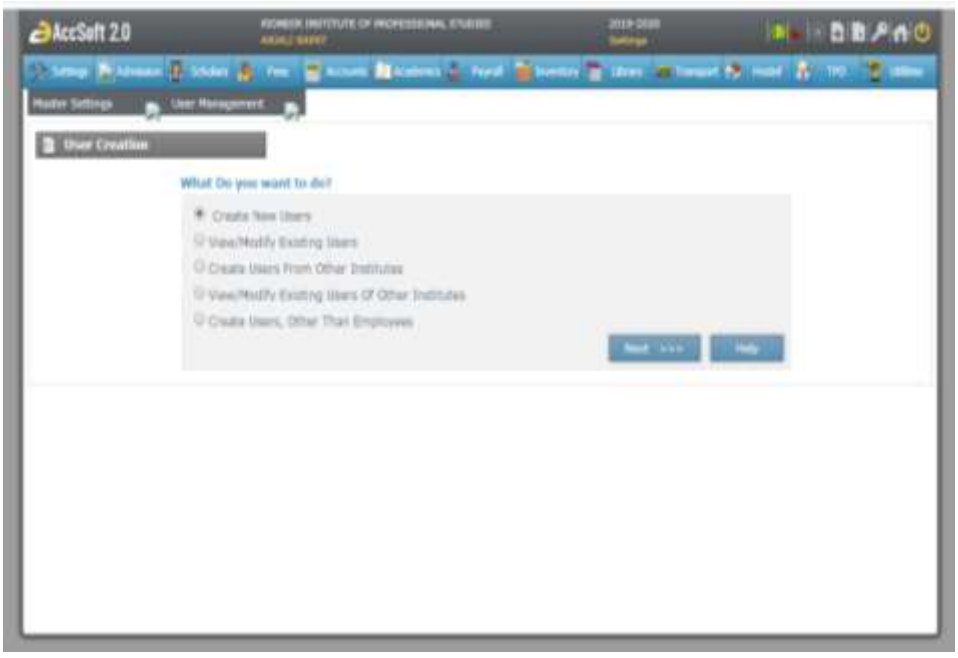
Evidence of Success: Highlight of some main Modules of the ERP system:

1. User login / Admin login

2. Forget password control by admin and or by user

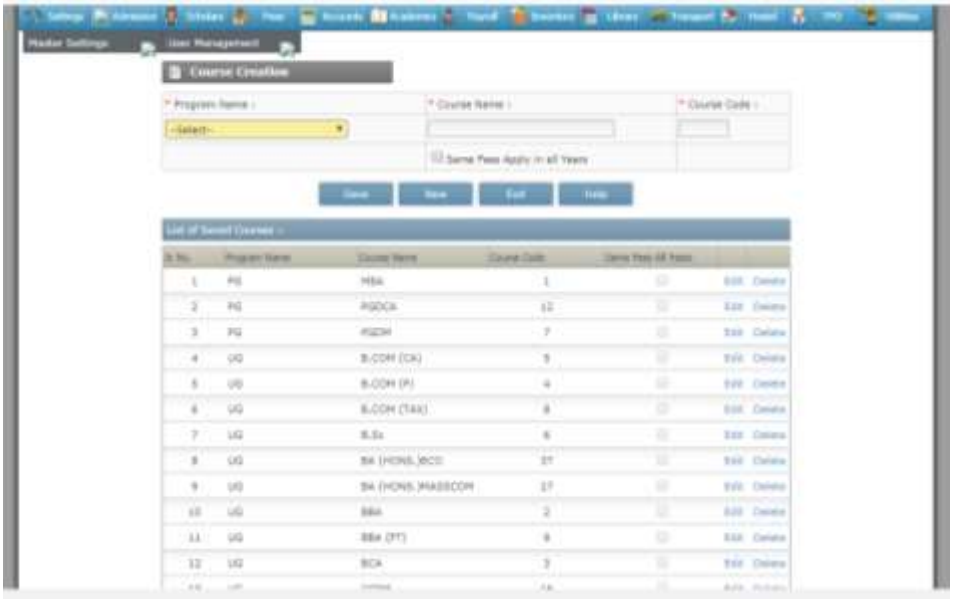


3. Update details/delete/add detail by admin

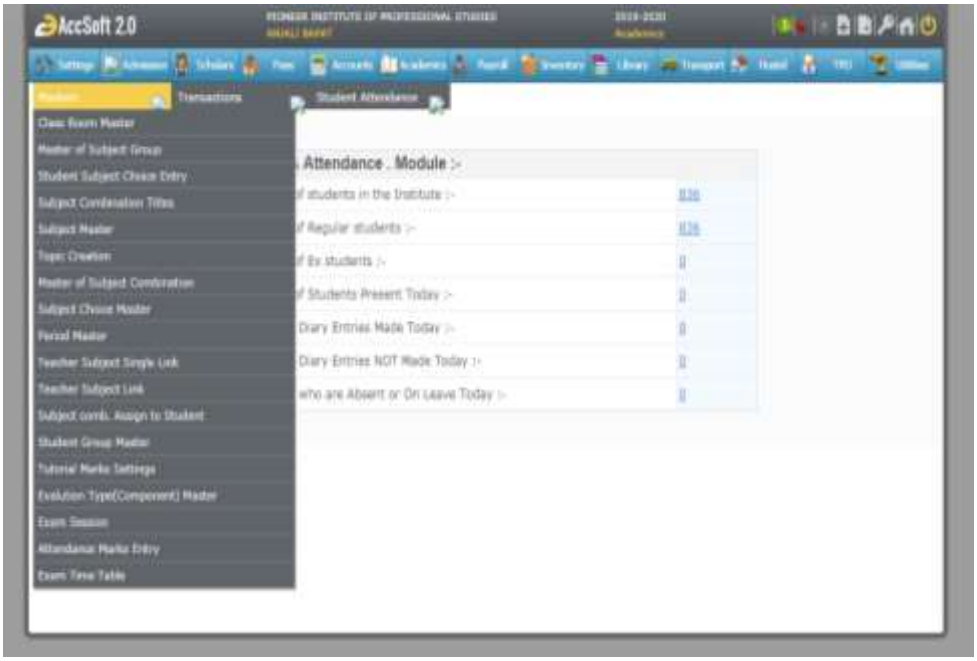


4. Academics Information: This module gives the information about

- Course: This contains the information about the number of the courses offered by the college

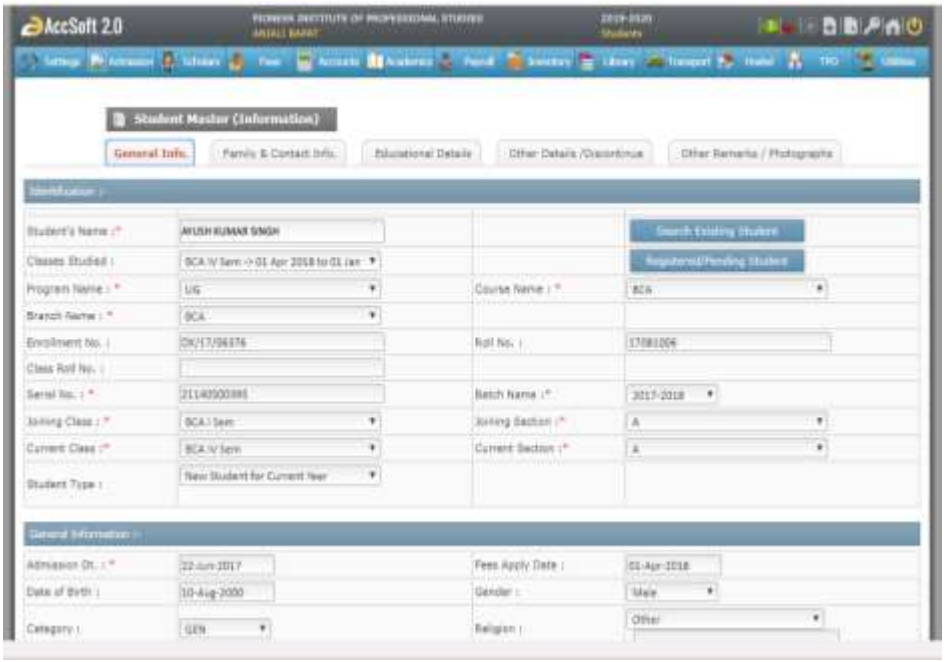


- All Master Entries: This contains the number of staff available in each department

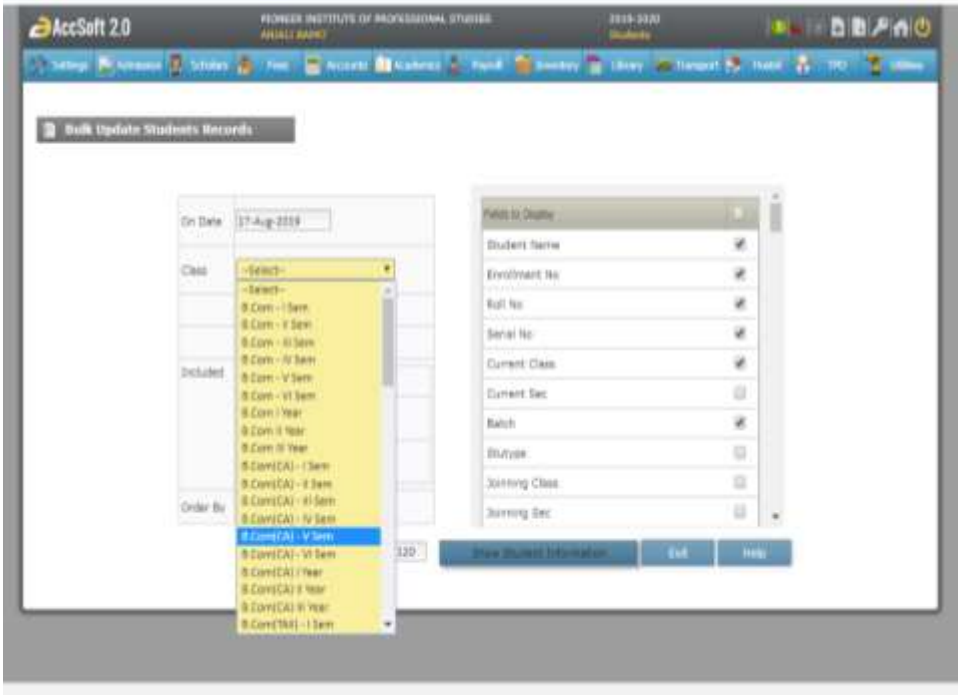


5. Scholar / Student Master: This module gives information about

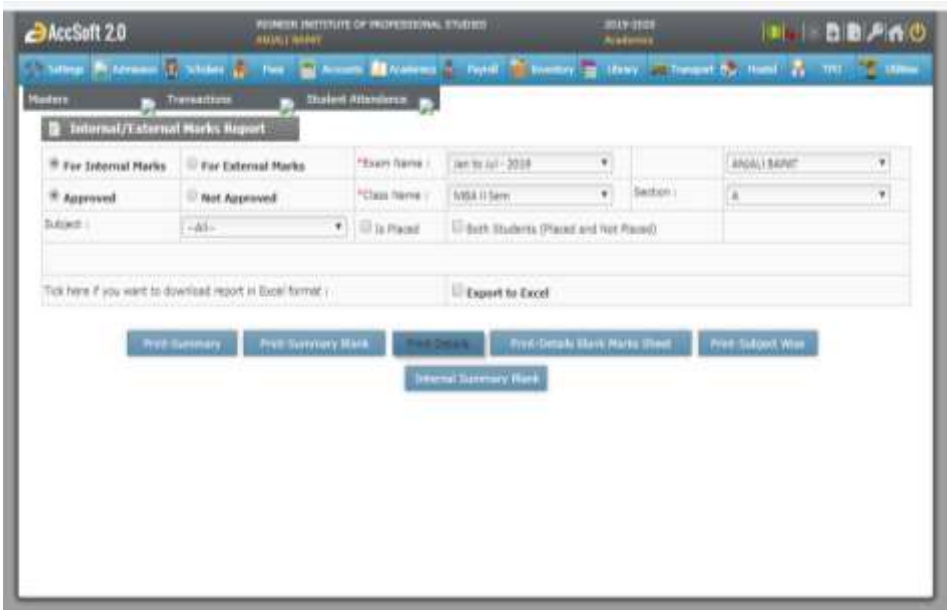
- Profile: This provides personal details of the student.

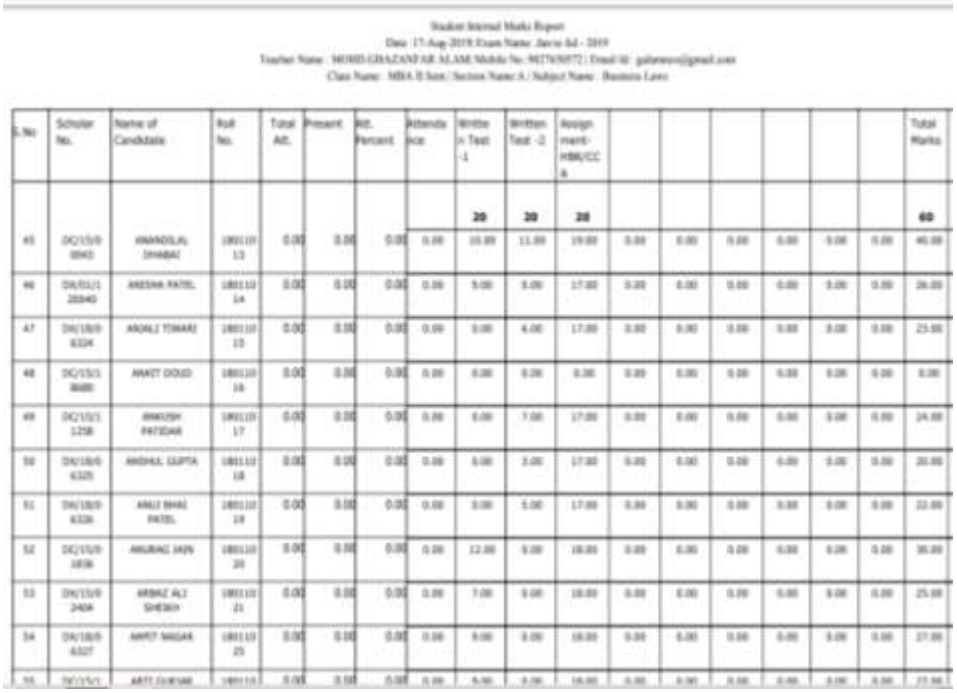


- Bulk Update Student Record:



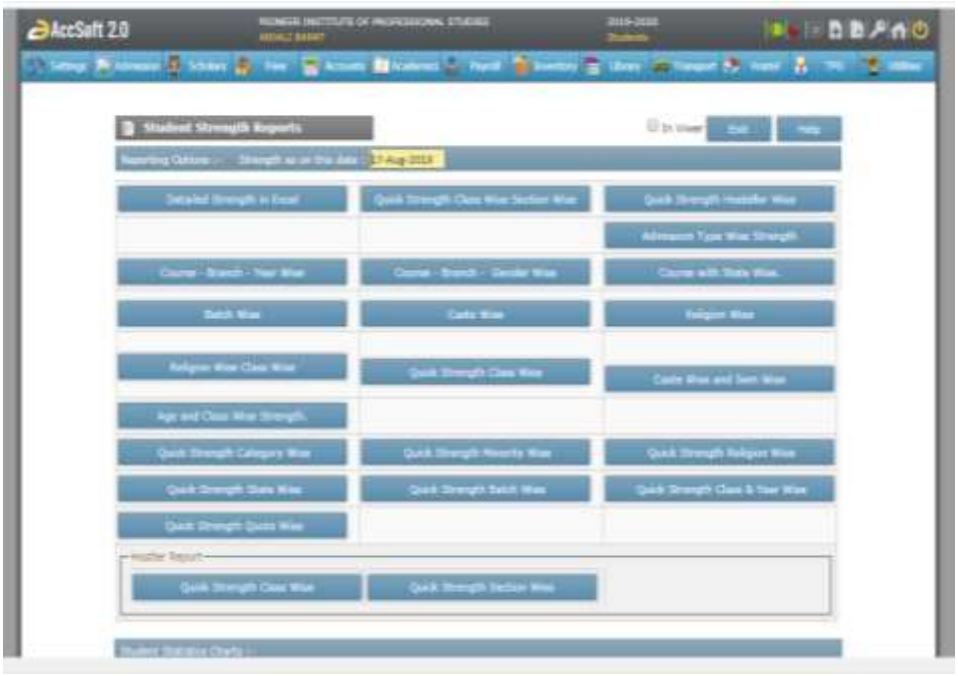
- Marks: This shows the internal/external marks of a respected student.



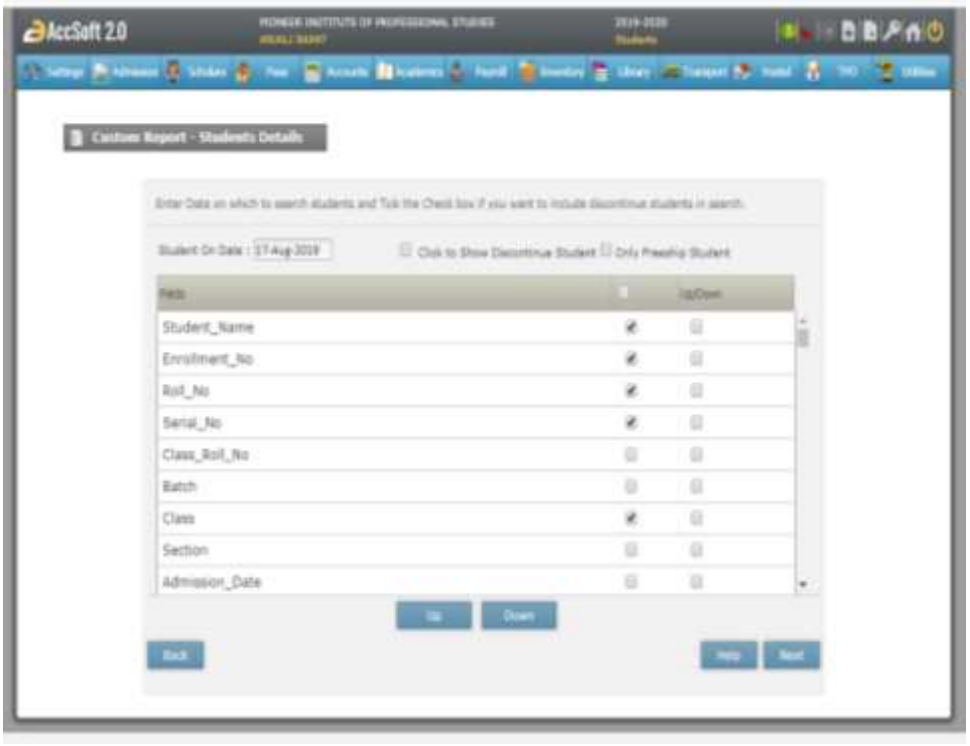


S.No	Scholar No.	Name of Candidate	Roll No.	Total Att.	Present	Att. Percent	Attendance	Written Test -1	Written Test -2	Assignment-HBK/CCA							Total Marks
								20	20	20							60
45	DC/15/0 0045	ANANDILAL DHABAI	1801101 13	0.00	0.00	0.00	0.00	10.00	11.00	19.00	0.00	0.00	0.00	0.00	0.00	0.00	40.00
46	DA/15/1 2004D	AKESHA PATEL	1801101 14	0.00	0.00	0.00	0.00	9.00	8.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00	26.00
47	DA/18/0 6324	AKJALI TOMAR	1801101 15	0.00	0.00	0.00	0.00	0.00	4.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00
48	DC/15/1 8680	AKKIT DOLD	1801101 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	DC/15/1 1258	ANKUSH PATIDAR	1801101 17	0.00	0.00	0.00	0.00	0.00	7.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00	24.00
50	DA/18/0 6325	ANSHUL GUPTA	1801101 18	0.00	0.00	0.00	0.00	0.00	3.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00
51	DA/18/0 6326	ANUJ BHAI PATEL	1801101 19	0.00	0.00	0.00	0.00	0.00	5.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00	22.00
52	DC/15/0 1836	ANURAG JAIN	1801101 20	0.00	0.00	0.00	0.00	12.00	0.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00
53	DA/15/0 2404	ARBAZ ALI SHEIKH	1801101 21	0.00	0.00	0.00	0.00	7.00	0.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00
54	DA/18/0 6327	ARPIT NAGAR	1801101 25	0.00	0.00	0.00	0.00	9.00	0.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	27.00
55	DC/15/1	ARTI [illegible]	1801101	0.00	0.00	0.00	0.00	8.00	0.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	26.00

- Student Strength Report:

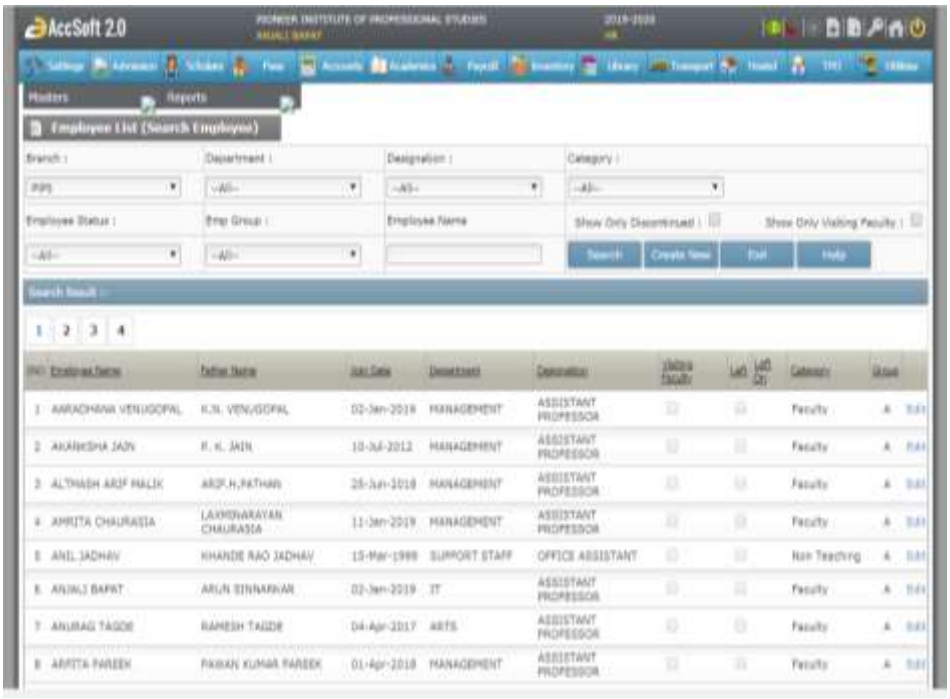


- Student Custom Report:



6. Faculty / Employee Information: This module deals mainly with

- Profile: This provides personal details of the staff



7. Result Processing: It is perhaps the most sensitive process in any university or in any educational institute because the future of students is depending on their results. Hence all the educational institutes require trustable, reliable, foolproof and secure software for their result processing/ examination department. Here is the short explanation of the process and workflow of ResultSoft 2.0. It's reliable and secure as any educational institute would want and also covers the all the possible tasks that are carried by examination department of a university.

Result Generation Information: All Examination and Result generation tasks are done with the help of **RESULTSOFT 2.0** Module.

Checking for Exam Eligibility

After examination form filled by students. Institute will appoint three verifier who will check student's eligibility for appearing in exam.

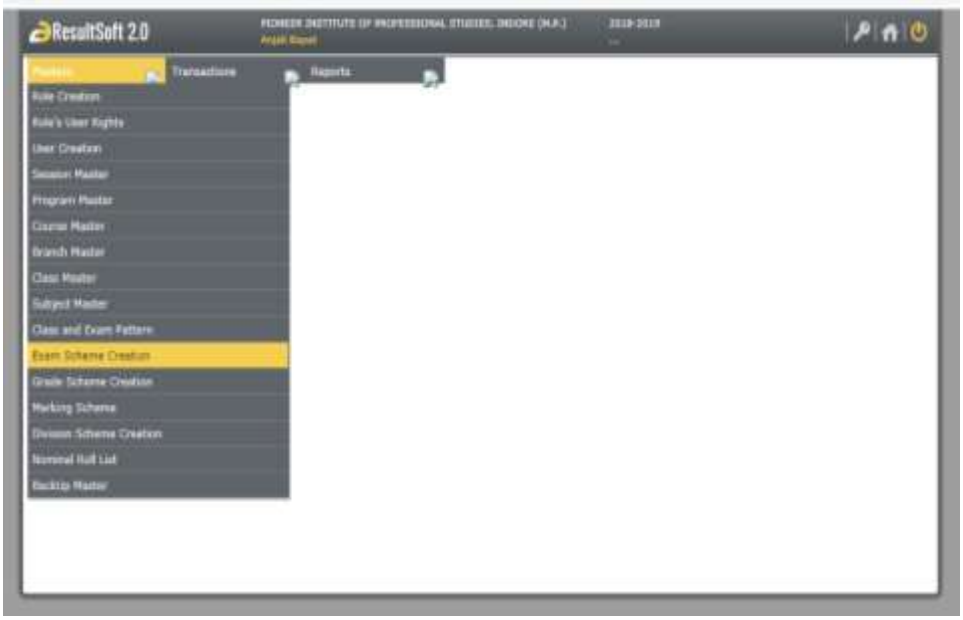
First will be from Library to verify library no dues of student second will be from accounts department to verify fees no dues and third will be from academic department to verify students' attendance.

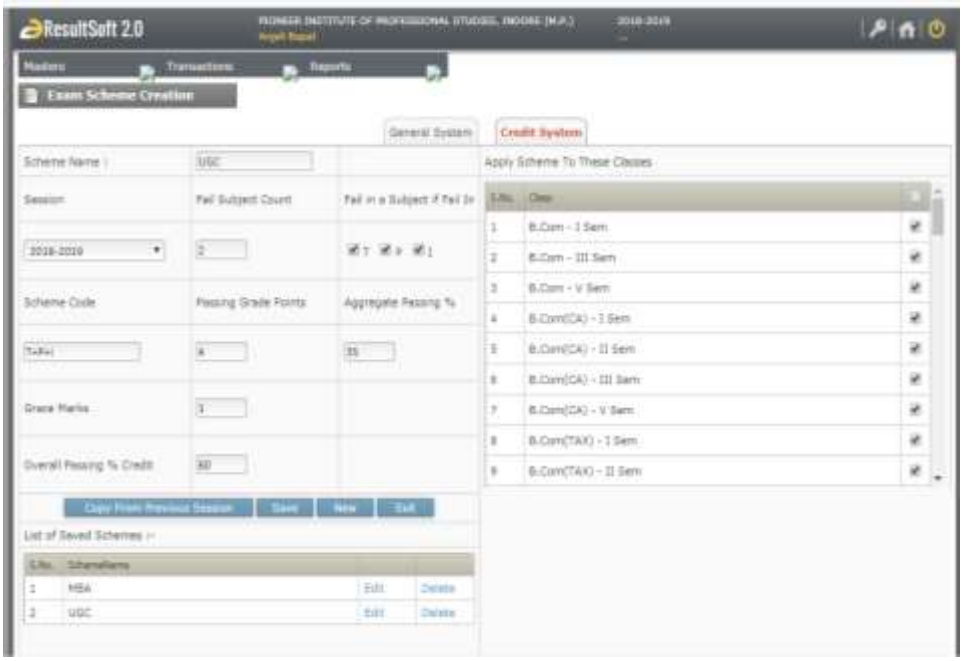
Admit Card Generation

After student is verified by all three departments admin will enable his/her name for Admit Card download. After that student can login to web site and download his/her Admit Card.

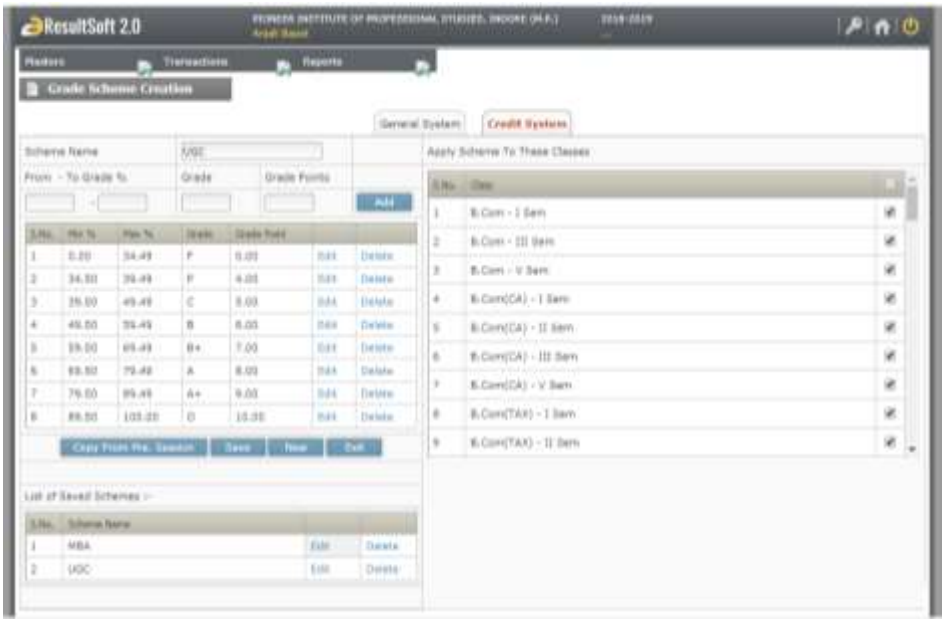
Nominal Roll List Creation

The examination forms data that is saved in software's database will be used to prepare nominal roll list by exam department for further result processing. This list can be printed for notice board display. Nominal roll list will have all the information related with student, his attempt (1st or more), his regularity (regular or ATKT) and the subjects in which he is going to appear in exam.

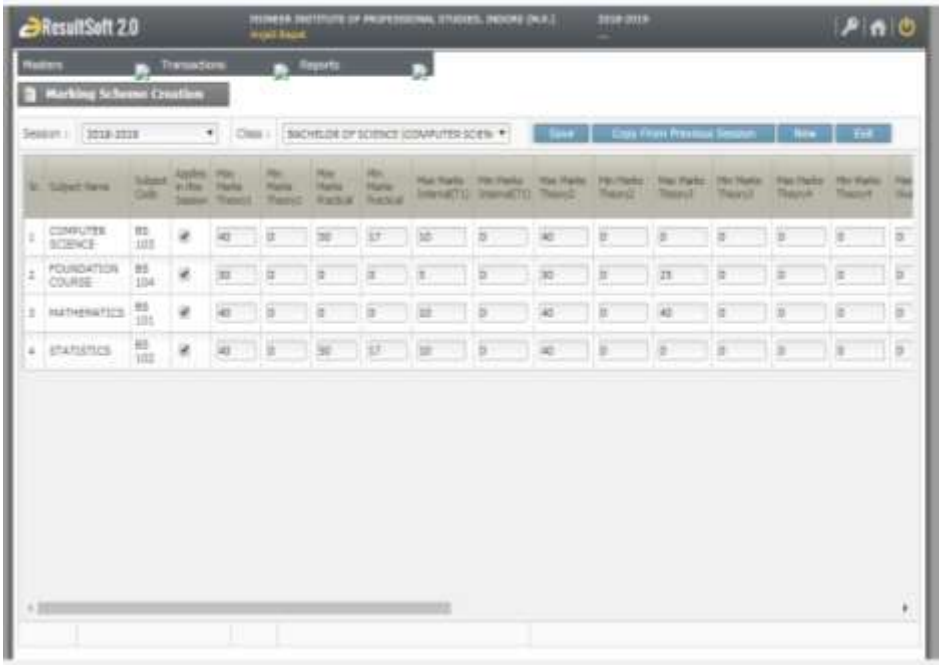




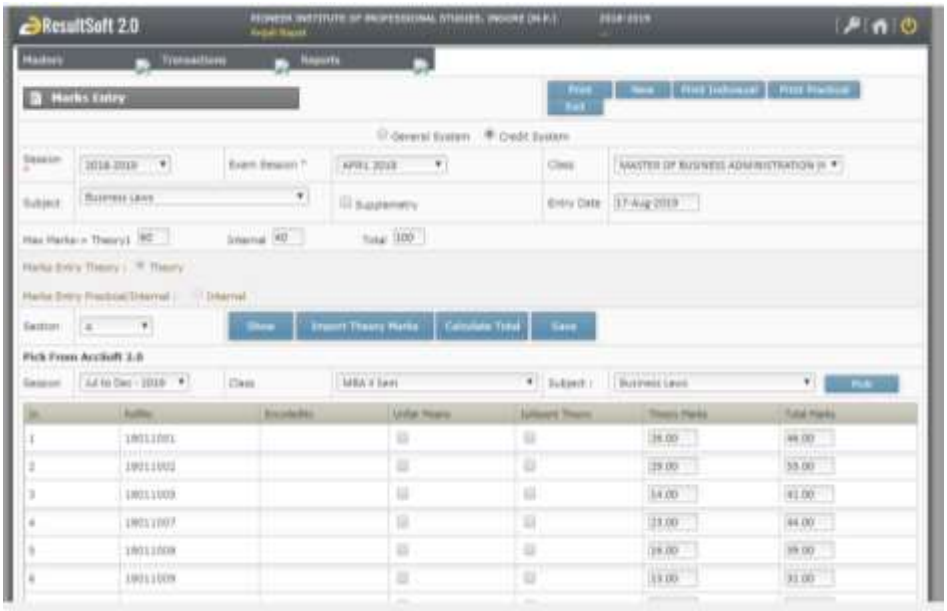
• Grade Scheme Creation: Student grades system should simplify the capture of grades; improve delivery of grade information and tracking of grade appeals, assuring data integrity and compliance with university graduation policy.



• Marking Scheme Module:



• Marks Entry Module:



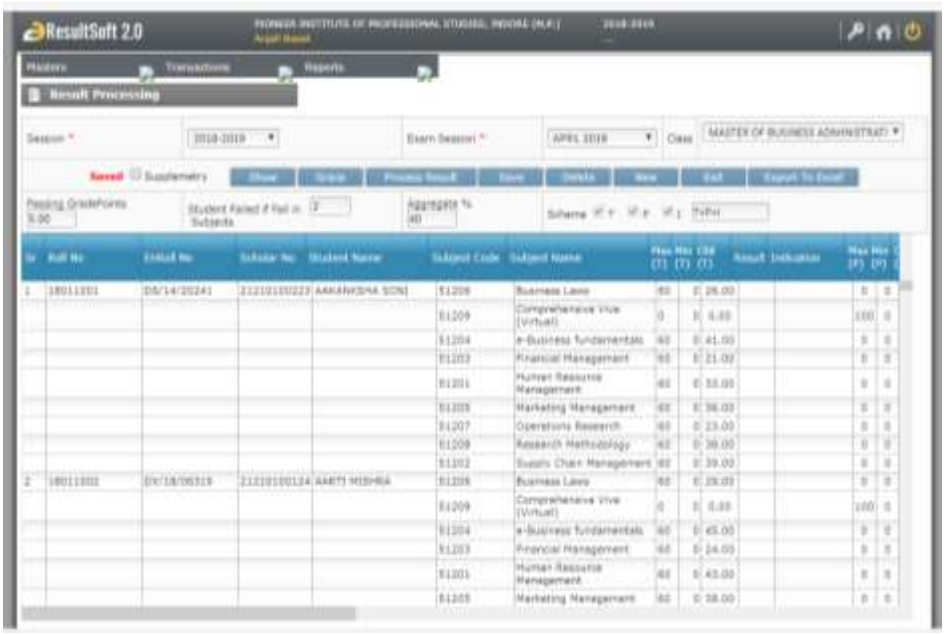
• Result Processing Module: Result Processing

A. For Regular Students

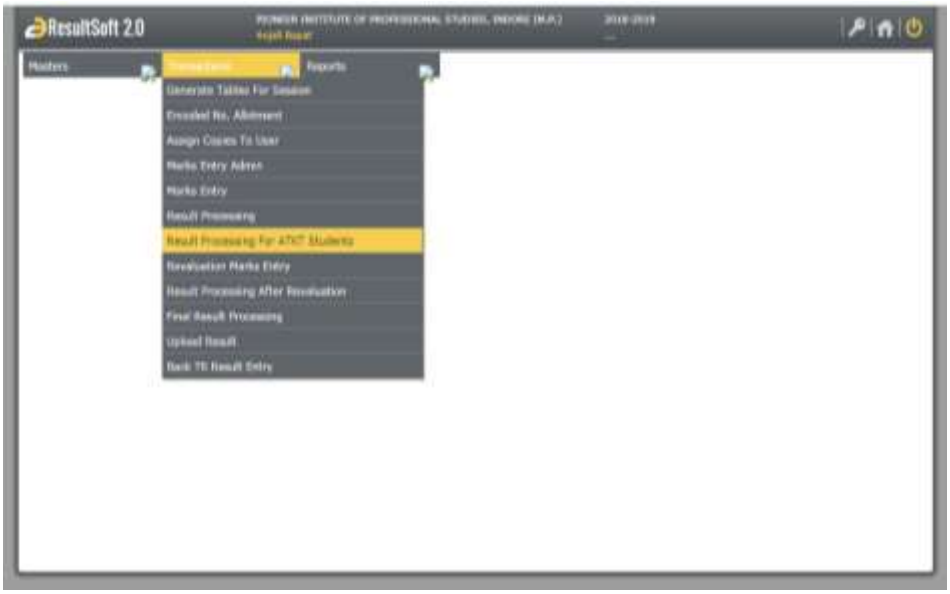
Result Processing will be done on the basis of Course / Branch and semester for regular students. After this processed result is saved marks entry will be locked automatically.

B. For ATKT Students

Result processing for ATKT students will be done separately for which the marks of non ATKT subjects will be picked from previous exam.



• Similarly Result Processing for ATKT and REVALAUTION Modules

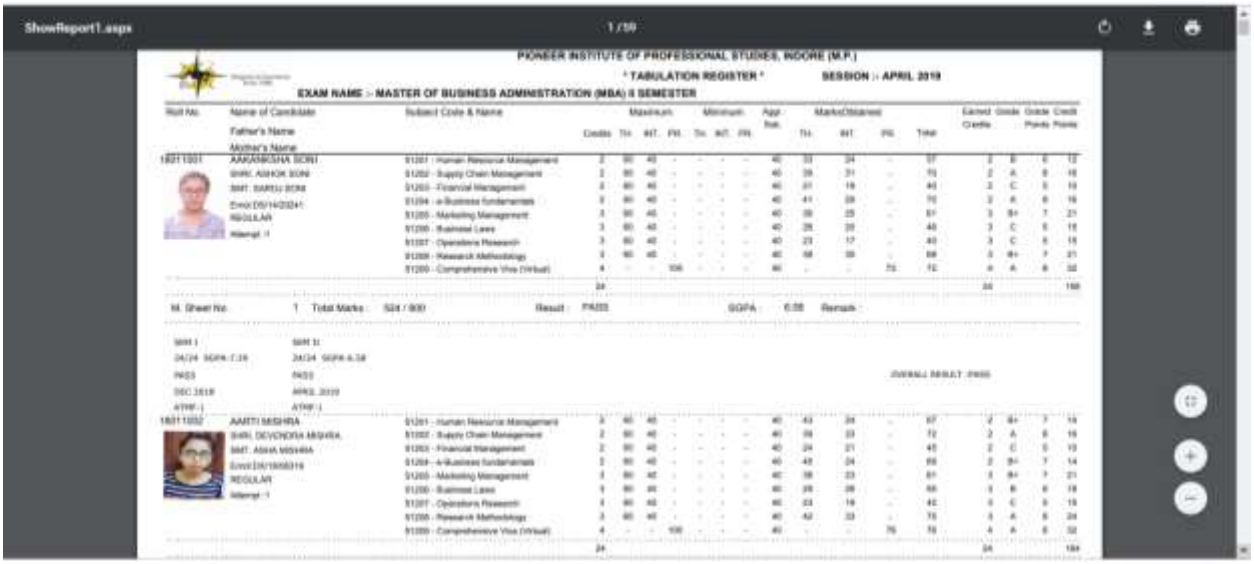


8. Result Declaration & Mark Sheets Generation:

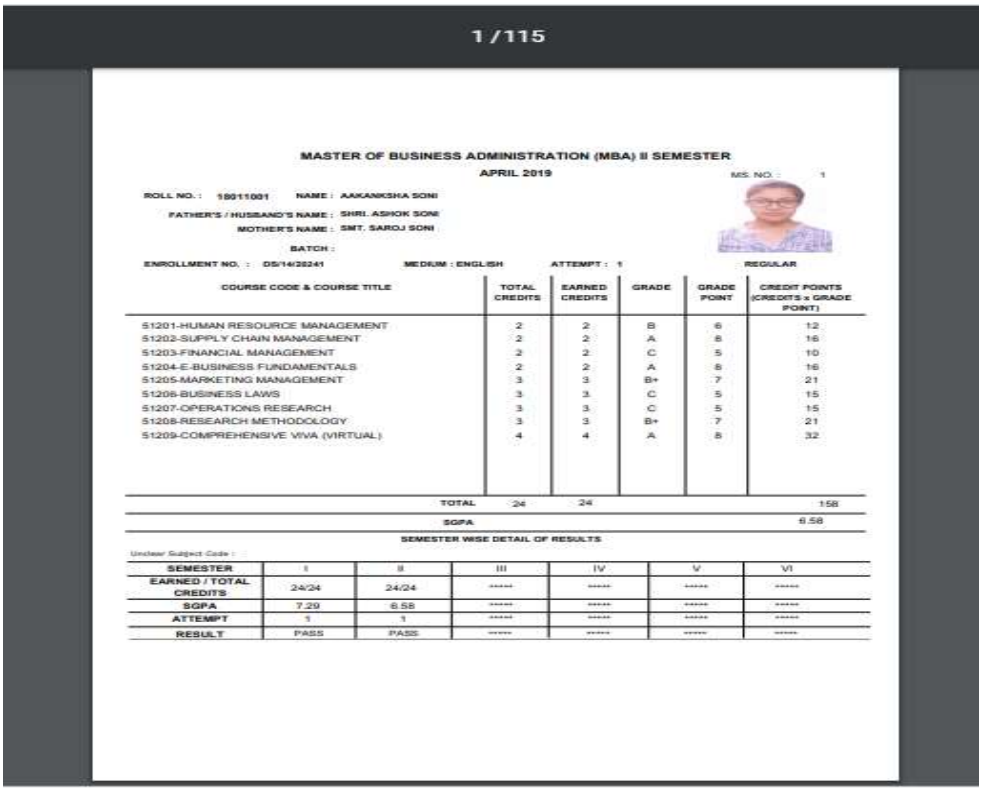
A. Mark Sheets Generation

After the result processing is done for a class, the mark sheets can be printed for that class. Mark sheets will be printed on preprinted papers given by university.

Tabulation Register (TR Sheet):



Mark sheet Print by Crystal Reports:



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MASTER OF BUSINESS ADMINISTRATION (MBA) II SEMESTER

APRIL 2019

MS. NO. : 1

ROLL NO. : 18011001 NAME : AAKANKSHA SONI

FATHER'S / HUSBAND'S NAME : SHRI. ASHOK SONI

MOTHER'S NAME : SMT. SAROJ SONI

BATCH :

ENROLLMENT NO. : DS/14/20241 MEDIUM : ENGLISH ATTEMPT : 1 REGULAR

COURSE CODE & COURSE TITLE	TOTAL CREDITS	EARNED CREDITS	GRADE	GRADE POINT	CREDIT POINTS (CREDITS x GRADE POINT)
51201-HUMAN RESOURCE MANAGEMENT	2	2	B	6	12
51202-SUPPLY CHAIN MANAGEMENT	2	2	A	8	16
51203-FINANCIAL MANAGEMENT	2	2	C	5	10
51204-E-BUSINESS FUNDAMENTALS	2	2	A	8	16
51205-MARKETING MANAGEMENT	3	3	B+	7	21
51206-BUSINESS LAWS	3	3	C	5	15
51207-OPERATIONS RESEARCH	3	3	C	5	15
51208-RESEARCH METHODOLOGY	3	3	B+	7	21
51209-COMPREHENSIVE VIVA (VIRTUAL)	4	4	A	8	32
TOTAL	24	24			158
SGPA					6.58

SEMESTER WISE DETAIL OF RESULTS

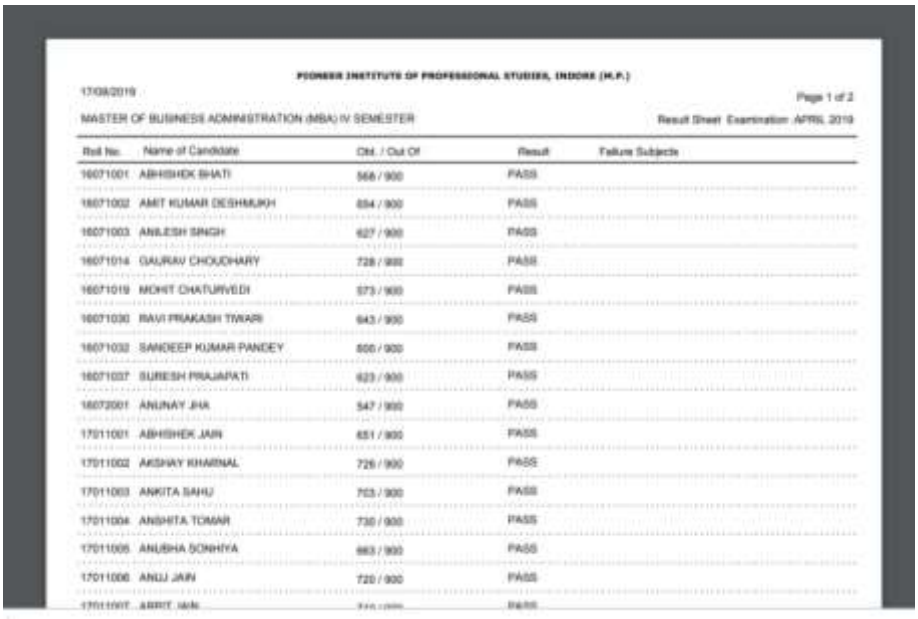
Unclear Subject Code :

SEMESTER	I	II	III	IV	V	VI
EARNED / TOTAL CREDITS	24/24	24/24	-----	-----	-----	-----
SGPA	7.29	6.58	-----	-----	-----	-----
ATTEMPT	1	1	-----	-----	-----	-----
RESULT	PASS	PASS	-----	-----	-----	-----

B. Upload Result for Online Mark Sheet

Exam department can upload result on web site. After that students can login to their accounts and see their mark sheets online.

Various Reports such as Pass Sheet/Pass Sheet with subjects/Result Sheet/Analysis Sheet/Pass Sheet with Grand Total can be generating from Report Module e.g.



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MASTER OF BUSINESS ADMINISTRATION (MBA) IV SEMESTER Result Sheet Examination APRIL 2019

Roll No.	Name of Candidate	Obt. / Out Of	Result	Failure Subjects
16071001	ABHISHEK BHATI	568 / 900	PASS	
16071002	AMIT KUMAR DESHMUKH	694 / 900	PASS	
16071003	ANILESH SINGH	627 / 900	PASS	
16071014	GAURAV CHOUDHARY	728 / 900	PASS	
16071019	MOHIT CHATURVEDI	573 / 900	PASS	
16071030	RAVI PRAKASH TIWARI	643 / 900	PASS	
16071032	SANDEEP KUMAR PANDEY	600 / 900	PASS	
16071037	SURESH PRAJAPATI	623 / 900	PASS	
16072001	ANUNAY JHA	547 / 900	PASS	
17011001	ABHISHEK JAIN	651 / 900	PASS	
17011002	AKSHAY KHARNAL	726 / 900	PASS	
17011003	ANKITA SAHU	703 / 900	PASS	
17011004	ANSHITA TOMAR	730 / 900	PASS	
17011005	ANUSHA SONHIYA	663 / 900	PASS	
17011006	ANUJ JAIN	720 / 900	PASS	

6. Problems Encountered and Resources Required

The success depends on the skills and experience of the workforce, including education and how to make the system work properly. Sharing internal information between departments can reduce the efficiency of the software. There were various problems and challenges faced in implementing the ERP such as coordination amongst the various departments, data gathering, data migration, security implementation, shifting from manual to automation, staff behavior challenges, etc.

An ERP implementation will probably be the most complex technology project ever undertaken on campus. Therefore, executives at institute and college community must know as much about ERP systems and the ERP project as practical. Service for students should be a major priority with an ERP system implemented within the institute.

In the coming years the biggest challenge of our college will be the attempt to manage the complexity in one systematic vision through an information system that can be shaped and up-to date with the evolution of technology.