Complex Engineering Problem
Computer Programming

Total Marks: 10

Student administrative problems could be hard to tackle, especially when you are doing manually. Manually maintaining student fees records, attendance, and more can prove to be tedious and are more prone to human error. To bring more efficiency, it's essential to shift to the automation of tasks in this technological-driven world. This is where student record management software comes into the picture. Student record management system is designed to help manage the daily university activities of recording and maintaining by automating it. It is also known as the student information system (SIS) or school records system (SRS).

The system is equipped with a robust set of features like attendance tracking, library management, parent's portal, etc. These tools help in managing the institute efficiently and accurately. In other words, it saves time, cut fees loss, and other wastages. With its rising popularity, more and more institutes are now adopting the student information report management system.

1. Attendance Management

This module allows teachers to mark and view attendance of any respective students. Using the system, they can even share the attendance status of a student with their respective parents.

It also keeps track of staff members' complete attendance records.

2. Admission Management

The admission management module streamlines and automates every aspect of the admission process, including filling up online forms, fee submission, batch allotment, and document submission.

It helps collect students' information quickly as well as accurately.

3. Fee Management

It helps you manage all the fee-related tasks such as accepting fees, keeping fee records, maintaining receipts, taking care of dues and refunds, and more. It also allows you to create the fees cycle of the school.

4. Document Management

Document management allows you to upload/enter complete students' details. It includes contact details, parents' details, report cards, health details, and more. All information is safely kept.

Tasks:

Q1 – Analyze the complete model of Student Information System (SIS) and its development?

(CLO - 3, C4 , PLO 5)

Q2 – Analyze the C++ programming by develop the Student Information System (SIS) based on given requirements:

1. Current Status of Students (In-studies, Left, Pass out, etc.)

2. Admission Management

3. Managing Record of admitted Students

4. Fee Management Record

5. Attendance Management

6. Students Results and Performance Record

7. Students Health Fitness and Disability Record

8. Students Participation and Extra Curricular Activities Record

(CLO-3, C4 , PLO 5)

Complexity level:

<WP3 : Depth of Analysis required >