

IT23303-Database Management Systems**Date: 29/7/25****Session 3-Database Structure Redefinition and Data Manipulation Operations**

Design and implement the following database schema for a university. The system should manage students, faculty, courses, departments, enrollments, attendance, and course-teaching information.

Department(DepartmentID, DeptName, HOD)**Student(StudentID, Name, Gender, DOB, DepartmentID)****Faculty(FacultyID, Name, Email, DepartmentID)****Course(CourseID, CourseName, Credits, DepartmentID)****Enrollment(StudentID, CourseID, Semester, Grade)****Teaches(FacultyID, CourseID, Semester)****Attendance(StudentID, CourseID, Date, Status)**

1. Modify the data type of the DeptName column in Department table from VARCHAR(50) to VARCHAR(100).
2. Add a check constraint to the Course table to ensure that Credits must be between 1 and 10.
3. Update the grade to 'A+' for the student with specific StudentID and semester
4. Delete faculty members who belong to the department with specific DepartmentID.

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Design and implement the following database schema for a hospital. The system should manage patients, doctors, departments, treatments, appointments, and prescriptions.

Department(DepartmentID, DeptName, HeadOfDept)**Doctor(DoctorID, Name, Specialization, Email, DepartmentID)****Patient(PatientID, Name, Gender, DOB, BloodGroup)****Treatment(TreatmentID, TreatmentName, Cost, DepartmentID)****Appointment(PatientID, DoctorID, AppointmentDate, Slot, Status)****Prescription(PrescriptionID, PatientID, DoctorID, DateIssued, Notes)****PatientTreatment(PatientID, TreatmentID, StartDate, EndDate)**

1. Update the notes in the prescription with any specific PrescriptionID value to include 'Continue medication for 2 more weeks'.
2. Delete the treatment record with specific TreatmentName.
3. Add a column Allergies of type VARCHAR(100) to the Patient table.
4. Add a NOT NULL constraint to ensure Patient Name is always entered.