Week 7 | SQL Queries on Views | 17- Feb- 2025

Observation (5 Marks)

1. Define view and state the purpose of views.
2. Write the syntax for the following
    a. Creating a view
    b. Creating a view with check option
    c. Updating a view
    d. Inserting rows into a view
    e. Deleting a view
    f. Dropping a view
3. Under what conditions, view can be updated?

Execution (15 Marks) (Use the existing relation AIMS)

1. Create a Student_View by selecting all the attributes from Student_Entity.
2. Create a Course view by selecting S_Id, Stu_Name, ,C_Id, C_Name, C_Sem.
3. Create a Stu_Course view by selecting the attributes from both views.
4. Create a Stud_view with check option by selecting the student age where the age is not null.
5. Create a grade_view and update the GPA by multiplying with credits as 5.
6. Insert a new department in the department view.
7. Delete a record from the stud_view where age is >22
8. Drop a Stud_view.
9. Create a separate view for listing computer science students
10. Create a view that lists Stu_id and GPA where grade is greater than the average grade.

Sub Queries

11. Retrieve the names of students who are enrolled in a specific course
12. Find the courses with the highest number of enrolled students.
13. List the names of instructors who teach more than one course.
14. List the names of professors who teach more than one course.
15. Find students who are not enrolled in any course.
16. Get the details of students who have the same course as a particular student (e.g., Student ID = 101).
17. Find the department with the highest average student GPA.
18. Retrieve courses that have never been taken by any student.
19. Find the student(s) who scored the highest marks in a specific subject (e.g., "Mathematics").
20. List instructors who teach students with an average grade above 80.