



Department of Computer Science and Engineering,  
Anna University, Chennai- 600025  
CS23401- Database Management System (R 2023)  
Practical  
Jan- May 2025  
Year/Sem/Batch : II/IV/ P

### Observation (5 Marks)

1. Describe and illustrate entity sets and its types with an example.
2. Elaborate different cardinalities with example for each.
3. Write in detail about the participation constraints.
4. Enumerate and illustrate the different notations used in Entity Relationship diagram with an example.

### Execution (15 Marks)

Create an Entity Relationship Diagram for the Academic Information Management System(AIMS). It should reflect the visual instrument of database tables and the relations between Students, Faculties, Courses etc. The main entities of Academic Information Management systems (AIMS) are Students, faculties, Courses.

Entities and their attributes:

**Student\_Entity** : Stu\_id, Stu\_name, Stu\_fname, Stu\_Lname, Stu\_Phno., Stu\_DOB, Stu\_Age,

Stu\_Dept, Stu\_Addr, Stu\_Batch, Stu\_Sem

**Faculty:** F\_Id, F\_Name, F\_Dept, F\_Phno

**Department:** D\_Id, D\_Name, D\_Loc

**Course:** C\_Id, C\_Name, C\_Sem, C\_Credits, C\_Type

**Course Offered:** C\_Id, C\_Name, CDept\_Name

**Course Enrollment :** S\_Id, Stu\_Name, Stu\_Dept, C\_Id, C\_Name, C\_Sem, CDept\_Name

**Grade:** Stu\_Id, C\_Mark1, C\_Mark2, C\_Mark3, GPA

**Faculty Advisor:** F\_Id, F\_Name, Stu\_Id, Stu\_Name.