

## MAI172 : Advance Database Technologies

Register Number:

Name:

Experiment Number and Name : 2 : Use of integrity constraints and referential integrity

Date : 18/07/2024 Time : 9.45 to 11.45

### Scenario:

Consider an application for an educational institute. Every department has several instructors but an instructor can be associated with only one department. One among the instructors would act as head of the department. Instructors are allocated to take classes in multiple courses. There are many instructors for a given course. Various relations and their sample data are provided below:

#### Department(DeptId,DName,HODId)

DeptId	DName	HODId
1	Electronics	11
2	Mechanical	12

#### Instructor(InstrId,Name,DeptId,EMail)

InstrId	Name	DeptId	EMail
11	John	1	aaa@zz.com
12	Mark	2	bbb@zz.com
13	Jane	1	ccc@zz.com
14	Joe	2	ddd@zz.com

#### Allocation (CId,InstrId)

CId	InstrId
101	11
101	13
102	11
102	12
103	14
103	12

**Course** (CId,CName,Credit)

CId	CName	Credit
101	Microprocessors	5
102	Programming	3
103	Thermodynamics	3

**Tasks:**

1. **Create** a tables as per the format given above and identify the candidate key, primary key and foreign keys of each entity and create.
2. **Display** Course Name, Instructor Name and Department Name all attributes in single table.