

**2024**

**Skill Enhancement Course  
DATABASE MANAGEMENT SYSTEM**

**Paper Code : SEC0311303**

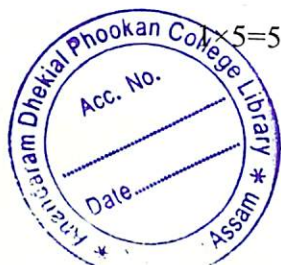
**Time : 1 Hour 30 Minutes**

**Full Marks : 30**

*(The figures in the margin indicate the full marks for the questions)*

1. Write very short answers of the following :

- What do you mean by data?
- What is tuple in relational schema?
- What do you mean by an attribute?
- What is Degree of a Relation?
- Primary key does not allow duplicate values but can be null. (True or False)



2. Write short answers for the following (*any five*) :

2×5=10

- What do you mean by DBMS. Give example of a DBMS software.
- What is Data Independence?
- Define Primary key and Secondary key with examples.
- How is a database management system better than the traditional file system.
- Define single and multivalued attribute with examples.
- Write any two types of cardinality ratios.
- Define Candidate key with example.

- h) What do you understand by Data model? Name any two Data models.
- i) What is database normalization?
- j) A male is married to a female. Express this relationship using ER diagram.
3. Explain the following questions (*any three*) : 5×3=15
- a) Draw an ER diagram of a College Management System.
- b) Explain the three schema architecture with diagram.
- c) Explain the third normal form with an example.
- d) Define various types of integrity constraints with example.
- e) Write the roles and responsibilities of DBA.
- f) Consider the following relational schema and solve the queries using SQL command.
- Employee (Eid, Ename, Eaddress, Dno)
- Department (Dno, Dname, Daddress)
- List the name of Employees who live in Nagaon.
  - Delete the record of the Employees who work in the Commerce department.
  - List the name of Employees who work in the Chemistry department.
  - Update the address of the Employee whose Eid is 2
  - Find the total no of Employees.