

2025

INFORMATION TECHNOLOGY

(Discipline Specific Core)

Paper Name: Introduction to Database Management System

Paper Code: BIT-DSC-144

Full Marks: 45

Time: Two Hours

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

Answer in English

1. **Fill in the blanks :** **1x4=4**
 - a) A _____ is an organized collection of data.
 - b) Thenormal form eliminates partial dependency.
 - c) DROP is a _____ statement in SQL.
 - d) An _____ refer to the real world object.

2. **Answer any three questions :** **2x3=6**
 - a) Differentiate in between candidate key and primary key.
 - b) What do you mean by Strong and Weak Entity ?
 - c) What is a nested query ?
 - d) What is data redundancy ?

3. **Answer any three of the following questions :** **5x3=15**
 - a) Explain roles and responsibility of DBA.
 - b) Explain DDL and DML.
 - c) Define data independence.
 - d) Explain various types of Indexes in DBMS.

e) What are the disadvantages of file processing system ?

4. Answer any two of the following questions : 10x2=20

- a) What is a Normalization ? Explain the 1NF, 2NF & 3NF with examples.
- b) What is data independence? Explain different types of data independency.
- c) Explain the different Relational Model constraints.
