Reg. No ..... Name **25INT104**

END SEMESTER EXAMINATION- NOVEMBER 2025

SEMESTER 1 : INTEGRATED M.Sc. PROGRAMME COMPUTER SCIENCE - DATA SCIENCE

COURSE : **21UP1CRMCP3 : DATABASE MANAGEMENT SYSTEMS**

(For Regular - 2025 Admission and Improvement/Supplementary 2024/2023/2022/2021 Admissions)

Time : Three Hours Max. Weights: 30

PART A

Answer any 8 questions **Weight: 1**

1. Give two examples of distributed databases.
2. Write the syntax for dropping a constraint in SQL.
3. State the difference between tables and views.
4. Identify the data types that suits most to the following attributes:
   (i). employee_name (refers to employee name)
   (ii). employee_dob (refers to the date of birth of employee)
5. Define the term degree of a relation.
6. State the condition to be satisfied for a relation to be in 1NF.
7. Define the term data mining.
8. Expand the term SQL.
9. ---------- helps to maintain integrity in relational databases.
10. Given the following relation, find the degree of the relation:
    INVENTORY (item_no, item_name, item_price, item_doe)

(1 x 8 = 8 weight)

PART B

Answer any 6 questions **Weights: 2**

11. Differentiate between conceptual and external schema.
12. Discuss any four applications of ER model.
13. Discuss the significance of relational algebra.
14. Write a sample relational algebra query to display the loan number and loan amount of persons from the relation LOAN.
15. Discuss briefly the basic structure of Structured Query Language.
16. Explain the use of IN operator used with WHERE clause.
17. Examine how data abstraction is possible with databases.
18. Discuss the significance of data dictionary.

(2 x 6 = 12 weight)

PART C

Answer any 2 questions **Weights: 5**

19. Discuss briefly the layered architecture of Database Management System.
20. With an example query, explain how two relations can be joined and viewed.
21. Explain referential integrity constraint with an example.
22. Discuss about the characteristics of database approach.

(5 x 2 = 10 weight)
