

2025

**DATABASE MANAGEMENT SYSTEM AND
SYSTEM ANALYSIS AND DESIGN — HONOURS**

Paper : DSE-5.2eBH

Full Marks : 80

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

Module - I

(Database Management System)

Group - A

1. Express the important drawbacks of SQL. 4

Or

State the advantages of RDBMS over DBMS. 4

2. Describe the hierarchical model in DBMS. 4

3. Explain four queries under SQL. 4

Or

Discuss the disadvantages of SQL. 4

4. Discuss the different roles of Database Administrator. 4

Group - B

5. Describe the important types of databases. 6

6. Discuss the importance of the three different normalisation (1NF, 2NF, 3NF) in DBMS. 6

Or

Discuss the condition for a relation to be in BCNF and illustrate your answer with a suitable example. 6

7. Who is a database administrator? What shall be his role in designing a badminton tournament? 2+4

Or

Draw the ER diagram for a Football Team for Inter-College Tournament with entities like College Name, Coach Name and Players. 6

Please Turn Over

(4292)

8. State the different challenges associated with SQL. 6

Module - II

(System Analysis and Design)

Group - C

9. What do you mean by Problem Analysis? 4
10. What do you know about the challenges of Spiral Model? 4

Or

What are the steps in designing a modern User Interface? 4

Group - D

11. State the importance of Decision Tree. 5
12. Why do we must have a data flow diagrams? 5

Or

What is the need of object modelling? 5

13. How do we evaluate a Waterfall Model? 5
14. Describe the challenges arising at the time of system development. 5

Or

Discuss the utility of Regression testing. 5

Group - E

15. Differentiate between Decision Tree and Decision Table. 6
16. How data flow diagrams plays an important role in System Analysis and Design? 6

Or

Explain the development methodologies in designing an online grievance redressal system for citizens of a municipal corporation. 6