

2024

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

Paper : DSE-5.2eBG

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. Mention the important advantages of SQL. 4

2. What is BCNF? 4

Or,

Differentiate between BCNF and 2NF. 4

3. Explain the concept of clustering in indexing. 4

4. State any four features of Data Definition Language. 4

Or,

Write a short note on Data Control Language. 4

Group - B

5. Discuss about the top-down approach of system design. 6

6. Highlight the important types of Database Management System. 6

Or,

What is SQL? Explain the concept of embedded SQL. 6

7. Explain the E-R model in Database Design. 6

Please Turn Over

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8. A school wants to manage its admission process through DBMS. What shall be the role of database administrator in this regard? 6

Or,

Discuss the network model with suitable examples. 6

Module - II

(System Analysis and Design)

Group - C

9. Discuss the advantages of meta-data. 4

10. Explain the challenges with Waterfall Model. 4

Or,

Discuss the steps of designing a Spiral Model. 4

Group - D

11. What do you mean by Documentation? 5

12. Explain process description in System Design. 5

Or,

Write a short note on process modelling. 5

13. Elucidate the steps in designing a User Interface. 5

14. Differentiate between physical and logical data flow diagrams. 5

Or,

Write a short note on Test case generation. 5

Group - E

15. Mention the features of 'evaluation phase' in system development. 6

16. "Data flow diagrams play a pivotal role in System Analysis and Design."— Discuss. 6

Or,

Write a short note on object modelling. 6