

2020

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

Paper : DSE-5.2 eB

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)

Answer *any four* questions.

1. (a) What is database management system?
(b) Discuss the advantages of database management system. 3+7
2. Explain network data model with example. 10
3. Write short notes on :
(a) Data Manipulation Language
(b) Data Control Language. 5+5
4. (a) What is BCNF?
(b) Distinguish between BCNF and 2NF. 3+7
5. Write short notes on : 5+5
(a) Single level indexing
(b) Clustering indexing.
6. (a) Mention the important advantages of SQL.
(b) Write a note on embedded SQL. 5+5
7. Draw the ER diagram for a school. The entities involved are :
(a) School Name
(b) Headmaster / Headmistress / Principal
(c) Students (d) Streams.
More entities can be added but all these entities must be present compulsorily. 10

Please Turn Over

8. Write short notes on : 5+5
(a) Data abstraction (b) Query optimization in SQL.

Module – II

(System Analysis and Design)

Answer *any four* questions.

9. Explain the Spiral System Development Model. 10
10. Explain two important phases in System Development. 5+5
11. What is regression testing? Explain the advantages of regression testing. 3+7
12. Write short notes on :
(a) Decision table (b) Structured chart. 5+5
13. Explain the physical and logical data flow diagrams. 5+5
14. What is system? Explain the major steps involved in system development method. 3+7
15. Explain the following terms : 5+5
(a) Documentation
(b) Database design.
16. Write short notes on : 5+5
(a) Test case generation
(b) User Interface design.
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