2020

DATABASE MANAGEMENT SYSTEM AND
SYSTEM ANALYSIS AND DESIGN — HONOURS

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. Explain the following terms (*any two*) :   5+5

   (a) 1NF   (b) 3NF   (c) DML.

2. Discuss the Primary and Secondary indexing with example.   5+5

3. Explain the role of a database administrator (DBA).   10

4. Write short notes on :   5+5

   (a) DDL   (b) DCL.

5. (a) What are the advantages of SQL over other Programming languages?

   (b) What is embedded SQL?   7+3

6. Draw the ER diagram for a college. The entities involved are :

   (a) College Name   (b) Principal   (c) Students   (d) Courses.

   You can add more entities but these four entities must be considered while designing the ER diagram.
                                                                           10

7. (a) What is hierarchical database?

   (b) Explain a check point in DBMS. When does it occur?   3+7

8. Explain the importance of DBMS to a modern e-commerce organization with example.   10

Please Turn Over

Module - II

(System Analysis and Design)

Answer *any four* questions.

9. Explain the Waterfall System Development model. 10

10. Briefly explain the different Phases in System development. 10

11. Write short notes on :
    (a) Data Dictionary (b) Decision Tree. 5+5

12. (a) What is regression testing?
    (b) Explain the advantages of regression testing with example. 3+7

13. Explain the components of data flow diagram. 10

14. Discuss top down and bottom up system development methodologies. 5+5

15. Explain the following terms : 5+5
    (a) Integration testing
    (b) Input/Output controls.

16. Discuss the important steps involved in system development methods. 10

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