APRIL/MAY 2019

BCS41 — DATA BASE MANAGEMENT SYSTEM

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Data is distinct piece of information. Justify.
2. What is the use of ER Diagram?
3. State all the Relational operations in Relational Database
4. Explain Projection and Rename operator with example.
5. Why do we need Normalization?
6. Define Referential Integrity.
7. List the features of SQL.
8. What is nested query?
9. What is Stored Procedure?
10. What down the types of PL/SQL cursors?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Discuss on the components of ER- diagram.

Or

(b) With a neat diagram describe the Overall system structure of DBMS.

12. (a) Explain Structure of Relational Database.

Or

(b) Write short note on Relational Algebra.

13. (a) State BCNF. How does it differ from 3NF?

Or

(b) Discuss the problems caused by redundancy.

14. (a) Show how to group the output of the query.

Or

(b) Explain DML and DCL commands in SQL.

15. (a) Write a program to display "Hello World" in PL/SQL.

Or

(b) Show how to open and close a cursor.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the different approaches for data model

17. Discuss on relational model in detail.

18. Describe any two normalization forms with necessary examples.

19. Explain the various date functions used in SQL.

20. Write PL/SQI, procedure to read student roll number from user, fetch marks from student table for this student, compute grade and update the grade column of the table.STUDENT (roll number, name, marks1, marks2, marks3, marks4, grade)

[Follow regular convention for student grades (A, B, C, D, F)]