

NOVEMBER/DECEMBER 2020

**UCS51 — DATABASE MANAGEMENT
SYSTEM**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define Data confidentiality.
2. What is mapping?
3. Give any two examples for relation.
4. What is domain?
5. Define SQL.
6. List the aggregate functions in SQL.
7. List any two pitfalls in relational database design.
8. Define 4NF.
9. How does to define function in pl/sql?
10. Define cursor.

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Write any five applications of database.

Or

- (b) Describe the purpose of database with examples.

12. (a) Give the various forms of query language.

Or

- (b) Describe Natural join and outer join with examples.

13. (a) Explain aggregate functions and set operations.

Or

- (b) Describe any five data functions in SQL.

14. (a) Show the steps to normalize the database using functional dependencies.

Or

- (b) Compare second normal form with third normal form.

15. (a) Explain any three DDL commands in SQL.

Or

- (b) Write a PL/SQL block to handle any sort of exception if occurs.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Develop an ER model for banking system.
17. Give the detailed schema of student information system.
18. Describe how nested sub queries help to extract data from the database.
19. Explain how Schema can be decomposed into BCNF.
20. Develop PL/SQL block that uses %ROWCOUNT to fetch the names and marks of the five highest – scored students from student table.
