

NOVEMBER/DECEMBER 2019

**BCA41 — DATABASE MANAGEMENT  
SYSTEMS**

Time : Three hours

Maximum : 75 marks



**SECTION A — (10 × 2 = 20 marks)**

Answer ALL questions.

1. What is a Flat file?
2. Define the term – Database system.
3. What are Null values?
4. Define the term – Primary key.
5. What is Normalization?
6. Define the term – Functional Dependence.
7. Mention any two features of SQL.
8. What is Trigger?
9. Distinguish between Explicit and Implicit Cursors.
10. What are Exception handlers in PL/SQL?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Explain roles in E-R diagram and representation of Strong, Weak Entity sets.

Or

- (b) Describe the responsibilities of DBA.

12. (a) Discuss on fundamental relational algebra operations.

Or

- (b) Explain the Tuple Relational Calculus.

13. (a) Describe the purpose of Normalization.

Or

- (b) Discuss on BCNF with example.

14. (a) Explain the method of GROUPING the output of Query and Query from Multiple Tables in SQL.

Or

- (b) Describe the procedure in using Aggregate functions in T-SQL.

15. (a) Discuss on PL/SQL Executable statements and composite data types.

Or

- (b) Explain the PL/SQL Tables.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Discuss on Relational, Hierarchical and Network approaches in Data models.

17. Describe the additional and extended relational algebra operations.

18. Explain the 1NF, 2NF and 3NF with example.

19. Discuss on the different forms of Nested Queries using example.

20. Describe the sub programs and functions and stored packages in PL/SQL.

