280290 DCCA-301 Rep

III Semester B.C.A. Degree Examination, December/January - 2025/26
(NEP Scheme)(Repeaters)
COMPUTER APPLICATIONS
Database Management Systems
Paper - CACO7

Time : 2½ Hours **Maximum Marks : 60**

***Instructions*:**

Answer all the Sections.

SECTION - A

I. Answer any Six questions. Each question carries 2 marks. **(6×2=12)**

1. Differentiate between data and information.
2. List two applications of database.
3. Define data independence.
4. What is entity sets?
5. What is Primary key constraint?
6. What is decompositions?
7. List the different data types in SQL.
8. What is Deadlock and starvation?
9. Define transaction processing system.

[P.T.O.

SECTION - B

II. Answer any Four questions. Each question carries 6 marks. **(4×6=24)**

10. Explain DBMS architecture with neat diagram.

11. Define relationship. Explain the different types of relationship with example.

12. Discuss Integrity constraints.

13. Explain Join operation with an example.

14. Explain the concept of PL/SQL.

15. Describe different states of transaction with neat diagram.

SECTION - C

III. Answer any Three questions. Each question carries 8 marks. **(3×8=24)**

16. a) Discuss different data model in DBMS. **(4)**
    b) Discuss advantages and disadvantages of database approach. **(4)**

17. What is ER Diagram? Draw ER diagram for university database. **(8)**

18. a) Write a note on basic relational algebra operations. **(4)**
    b) Discuss different DML statement with syntax and example. **(4)**

19. What is normalization? Discuss 3NF and BCNF with examples. **(8)**

20. a) Explain single user and multi user DBMS systems. **(4)**
    b) Explain the types of failure in DBMS. **(4)**
