Reg. No…… Name…….. **25U420**

B B A DEGREE END SEMESTER EXAMINATION - MARCH 2025

SEMESTER - 4: BUSINESS ANALYTICS

COURSE: 23U4CRBBA13 - DBMS

(*For Regular 2023 Admission*)

Time: Three Hours Max. Marks: 60

PART A

Answer All (1 mark each)

1. Define a View in SQL.
2. Explain the function of the IN operator in SQL
3. Define data in the context of DBMS.
4. List any two functions of DBMS.
5. Explain the concept of BCNF in DBMS
6. Describe functional dependency in DBMS.
7. Explain Normalisation in the context of database design.
8. Explain the term complex view.

(1 x 8 = 8)

PART B

Answer any 6 (2 marks each)

9. Illustrate the difference between Commit and Rollback.
10. Differentiate between hierarchical DBMS and network DBMS?
11. Explain the role of a DBMS in an airline reservation system.
12. Explain the different types of database failures.
13. Explain the properties of a Lossless Decomposition?
14. Differentiate between Theta Join and Natural Join in Relational Algebra.
15. Explain the Disadvantages of DBMS.
16. Describe Atomic property in DBMS.

(2 x 6 = 12)

PART C

Answer any 4 (5 marks each)

17. Explain the disadvantages of file-oriented approach.
18. Explain the normalised and unnormalized schema with the help of examples.
19. Explain the various types of relationships in ER modelling with examples.
20. Explain how Set Operations work in SQL and give real-world applications.
21. Compare between the hierarchical model and relational model.
22. Explain the ACID properties of a transaction.

(5 x 4 = 20)

PART D

Answer any 2 (10 marks each)

23. Discuss the applications of DBMS in real life .
24. Discuss the components of ER models with the help of examples.
25. Discuss the different concurrency control techniques? Explain their working.
26. Discuss the Schema Refinement in Databases, Explain Why is it Necessary.

(10 x 2 = 20)