

Reg. No

Name

23U415

B. Sc. DEGREE END SEMESTER EXAMINATION : MARCH 2023

SEMESTER 4 : COMPUTER APPLICATION

COURSE : 19U4CRCAP8: DATABASE MANAGEMENT SYSTEM

(For Regular - 2021 Admission and Improvement / Supplementary - 2020 / 2019 Admissions)

Time : Three Hours

Max. Marks: 75

PART A

Answer All (1 mark each)

1. What is the responsibility of database designer?
2. What is inherent model-based constraints?
3. What you mean by non - prime attribute?
4. What you mean by anchor record?
5. What is the use of JOIN operator?
6. What you mean by stand alone user?
7. Define incorrect summary problem.
8. What is an entity relationship model?
9. Define temporary update.
10. What are key constraints?

(1 x 10 = 10)

PART B

Answer any 8 (2 marks each)

11. Define i) super key ii) candidate key iii) primary key
12. What is redundancy? What are the problems caused by redundancy?
13. What is data model? List the types of data model.
14. Differentiate internal level and external level schema.
15. Differentiate ALTER and UPDATE commands with syntax.
16. What are the database access operations of a transaction?
17. Discuss about Data Definition Language.
18. What is meant by multivalued dependency? Explain with example.
19. Explain about domain relational calculus.
20. Define nested queries.

(2 x 8 = 16)

PART C

Answer any 5 (5 marks each)

21. Explain about DBMS Interfaces.
22. Define entity, attributes, entity set, relationship with appropriate notations.
23. List and explain operators in SQL.
24. Explain different types of query languages.
25. Explain different states of transaction with a diagram.
26. Explain about primary index with diagram.
27. Explain about clustering index with diagram.

(5 x 5 = 25)

PART D

Answer any 2 (12 marks each)

28. Explain various DML commands with syntax and examples.
29. What is the use of ER diagram? Draw an ER diagram for a banking enterprise.
30. Draw a relational schema diagram of a university database.
31. What do you mean by normalization? Explain in detail various normalization forms with examples.

(12 x 2 = 24)