Reg. No	Name	21U413
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BSc DEGREE END SEMESTER EXAMINATION - JULY 2021 SEMESTER 4 : COMPUTER APPLICATION

COURSE: 19U4CRCAP8; DATABASE MANAGEMENT SYSTEM

(For Regular - 2019 Admission)

Time : Three Hours Max. Marks: 75

PART A Answer All (1 mark each)

- 1. Define Rolename.
- 2. What you mean by End users?
- 3. What you mean by Network data model?
- 4. Define degree.
- 5. What you mean by domain constraints?
- 6. What is the use of JOIN operator?
- 7. What is transitive dependency?
- 8. What you mean by non trivial Functional dependency?
- 9. What you mean by a read-only transaction?
- 10. Define Lost Update Problem.

 $(1 \times 10 = 10)$

PART B

Answer any 8 (2 marks each)

- 11. Differentiate total and Partial Participation.
- 12. Differentiate Binary Relationship and Ternary relationships
- 13. Define weak entity and strong entity sets?
- 14. Differentiate Single valued and multivalued attributes
- 15. Explain about Domain relational calculus?
- 16. Differentiate Groub by and Order by clause
- 17. What is the difference between Char and Varchar datatypes in SQL?
- 18. Explain about 2NF.
- 19. what you mean by Secondary index?
- 20. What is data warehouse with examples.

 $(2 \times 8 = 16)$

PART C

Answer any 5 (5 marks each)

- 21. Explain about Three-schema Architecture
- 22. Explain about different Classification of dbms.
- 23. Explain about different types of integrity constraints?
- 24. Explain the working of union, intersection and except operations?
- 25. Explain about different anomalies.
- 26. If $X \rightarrow Y$ in R, this does not say whether or not $Y \rightarrow X$ in R. Explain it with examples.
- 27. What are the different types of failures in transaction?

 $(5 \times 5 = 25)$

PART D Answer any 2 (12 marks each)

- 28. What is the use of ER Diagram and Draw an ER diagram for a banking enterprise
- 29. 3 Explain about relational algebra?
- 30. Write short note on SQL with DDL and DML Commands.
- 31. Explain normalization with Informal Design Guidelines for Relation Schemas.

 $(12 \times 2 = 24)$