K21U 1936

Reg. No. :

III Semester B.C.A. Degree CBCSS (OBE) Reg./Sup./Imp. Examination, November 2021 (2019 - 2020 Admission) General Awareness Course 3A13BCA : DATABASE MANAGEMENT SYSTEM

Time : 3 Hours

Max, Marks: 40

PART - A

(Short Answer)

Answer all questions.

1. What are the various kinds of interactions catered by DBMS ?

- 2. What is a relation ?
- 3. What is an entity ?

4. Who proposed the relational model ?

5. Define database instance.

6. Define integrity constraints.

PART - B

(Short Essay)

Answer any 6 questions.

7. List the pitfalls in Relational Database Design.

8. What is guery optimization ?

9. Distinguish conceptual view and end user view.

10. Write the general syntax of delete command.

11. Discuss the role of DBA.

12. Why does SQL allow duplicate tuples in a table ?

13. What do you mean by INF ?

14. Write a note on Mapping Cardinality.

P.T.O.

 $(6 \times 1 = 6)$

 $(6 \times 2 = 12)$



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(Essay)

PART-C

Answer any 4 questions.

 $(4 \times 3 = 12)$

15. What is normalization ? What is its role in database design ?

- What is a view in SQL ? Describe the procedure for renaming a column of a view .
- 17. What are the basic concepts of E-R model ?
- 18. Write short note on anomalies in a database.
- 19. Explain the use of ORDER BY clause in SQL.
- 20. Write short notes on authorisation mechanisms available in SQL.

PART – D (Long Essay)

Answer any 2 questions.

 $(2 \times 5 = 10)$

- 21. Draw and Explain the overall system structure of DBMS.
- Draw an ER-diagram for a library database system. Identify the appropriate entities, attributes and relationships.
- 23. Explain the concept of lossless join decomposition with an example.
- Discuss in detail the operators SELECT, PROJECT, UNION with suitable examples.