



**K21U 1936**

Reg. No. : .....

Name : .....

**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.

**(6×1=6)**

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.

**(6×2=12)**

7. List the pitfalls in Relational Database Design.
8. What is query 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.

**PART – C****(Essay)**

Answer any 4 questions.

**(4×3=12)**

15. What is normalization ? What is its role in database design ?
16. 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.

**(2×5=10)**

21. Draw and Explain the overall system structure of DBMS.
22. 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.
24. Discuss in detail the operators SELECT, PROJECT, UNION with suitable examples.