D3ACS2101 **(1 Page)** **Name.....**

Reg.No.....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2022

(Regular/Improvement/Supplementary)

COMPUTER SCIENCE

FCSS3C11-ADVANCED DATABASE MANAGEMENT SYSTEM

Time: 3 Hours **Maximum Weightage: 30**

Section A: Short answer questions. Answer any *four* questions. Each carries *two* weightage.

1. Who is DBA? Explain briefly the main responsibilities of DBA.
2. List the types of relational model.
3. Mention different data types in SQL.
4. What are the ACID properties in DBMS?
5. How is a time stamp implemented in database?
6. What is commit protocol in DBMS?
7. Write a short note on Domain key normal form.

(4 × 2 = 8 weightage)

Section B: Short essay questions. Answer any *four* questions. Each carries *three* weightage.

8. Explain ER model with a neat diagram.
9. What is normalization? What is the difference between 3NF and BCNF?
10. Explain how to create, modify and delete tables in SQL with examples.
11. How does deadlock occur in DBMS?
12. Write on design approaches in distributed database.
13. Briefly explain database languages in DBMS.
14. What are joins in DBMS?

(4 × 3 = 12 weightage)

Section C: Essay questions. Answer any *two* questions. Each carries *five* weightage.

15. Explain in detail the various anomalies in DBMS with example. How are database anomalies removed?
16. What is a lock? Explain the types and levels of lock.
17. Write in detail on states of transaction in DBMS.
18. What is OODBMS? Describe the features of OODBMS?

(2 × 5 = 10 weightage)