

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2021

COMPUTER SCIENCE

FCSS3C11-ADVANCED DATABASE MANAGEMENT SYSTEM

Time: 3 Hours

Maximum Weightage: 30

Section A: Short answer questions. All questions can be answered. Each carries two weightage (Ceiling 6 weightage).

1. How is an entity relationship diagram drawn?
2. Write the methods to identify functional dependency.
3. Define cursor in DBMS with example.
4. Brief the transaction managements in SQL.
5. What is commit protocol in DBMS?
6. Write notes on lossless join with example.
7. List the various ACID properties of database transaction.

Section B: Short essay questions. All questions can be answered. Each carries four weightage (Ceiling 12 weightage).

8. With a neat diagram, explain the structure of a DBMS.
9. Describe normal forms and its type.
10. What is ORDER BY clause and GROUP BY clause in SQL?
11. Explain Serializability in DBMS and its testing.
12. List the three types of DBMS architecture.
13. Write the differences between selection and projection in relational algebra.
14. Explain unique key and foreign key constraints.

Section C: Essay questions. All questions can be answered. Each carries six weightage (Ceiling 12 weightage).

15. Enumerate and explain the different types of data models.
16. Explain the various anomalies in DBMS with example. How are database anomalies removed?
17. Write an essay on locks in DBMS.
18. What are the advantages and disadvantages of OODBMS?