20P336	(Pages: 1)	Name
		Reg. No

# THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS-PG)

(Regular/Supplementary/Improvement)

## CC19P CSS3 C11 - ADVANCED DATABASE MANAGEMENT SYSTEM

(Computer Science)

(2019 Admission onwards)

Time: Three Hours

Maximum: 30 Weightage

### PART A

Answer any *four* questions. Each question carries 2 weightage.

- 1. Describe Selection and projection operation in Relational algebra?
- 2. Explain different database users?
- 3. What is BCNF? How to make a table into BCNF?
- 4. How to create and destroy a view in the database?
- 5. What is View Serializability?
- 6. How to create a Trigger?
- 7. Discuss the Drawbacks of OODBMS?

 $(4 \times 2 = 8 \text{ Weightage})$ 

#### PART B

Answer any *four* questions. Each question carries 3 weightage.

- 8. Explain different data models used in DBMS.
- 9. With the help of an example how we can eliminate anomalies in the database.
- 10. Explain the ACID properties of transactions.
- 11. What are Locks? Explain different types and levels of Locks?
- 12. Explain the time stamp ordering Protocol.
- 13. With proper examples discuss the use of Cursor in SQL.
- 14. Explain Commit protocols for distributed Databases.

 $(4 \times 3 = 12 \text{ Weightage})$ 

## **PART C**

Answer any *two* questions. Each question carries 5 weightage.

- 15. Draw and explain an E-R Diagram for the Company database with proper Entities and Attributes.
- 16. Explain DML and DDL commands used in SQL (use HAVING and GROUP BY)
- 17. Discuss in detail the Two-phase locking protocol.
- 18. Explain Normalization in detail.

 $(2 \times 5 = 10 \text{ Weightage})$