17P344	(Pages: 2)	Name:
		Reg No

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2018 (CUCSS-PG)

(Computer Science)

CC17P CSS3 C01 - ADVANCED DATABASE MANAGEMENT SYSTEM

(2017 – Admission)

Time: Three Hours Maximum: 36 Weightage

PART A

Answer *all* questions. Each question carries 1 weightage.

- 1. Describe the levels of abstraction.
- 2. Define weak entity set.
- 3. Describe the objectives of normalization.
- 4. Write an example for GROUP BY statement.
- 5. Define Join.
- 6. Explain the aggregate functions in SQL
- 7. Define scalar function.
- 8. Define granularity in DBMS
- 9. Differentiate database schema and state.
- 10. What is meant by timestamp.
- 11. List the DDL commands in SQL
- 12. Define deadlock.

 $(12 \times 1 = 12 \text{ Weightage})$

PART B

Answer any six questions. Each question carries 2 weightage.

- 13. Define data model, Explain different data models.
- 14. Explain with example why concurrency control is needed in database transaction.
- 15. Explain with an example 'when a schedule is said to be serializable'
- 16. Write note on transparency in distributed database.
- 17. Explain recoverability in transaction management.
- 18. Explain the approaches to storing relation in distributed database.
- 19. Discuss transaction states with a neat diagram.
- 20. Explain recursive relation with suitable example.
- 21. Explain the three tier architecture in DBMS

 $(6 \times 2 = 12 \text{ Weightage})$

PART C

Answer any three questions. Each question carries 4 weightage.

- 22. Explain in detail query processing in distributed database.
- 23. Write note on applications of database management system.
- 24. Explain two phase locking protocol.
- 25. Discuss the various types of join operators in relational algebra.
- 26. Explain Boyce-Codd Normal form. How it is different from third normal form?
- 27. Explain Cursors with suitable example.

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