D 6774	(Pages : 2)	Name
		Reg. No
THIRD SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2016		
	(CUCSS)	

Computer Science

CSS 3C 01—ADVANCED DATABASE MANAGEMENT SYSTEMS

(2014 Admissions)

Time: Three Hours Maximum: 36 Weightage

Part A

Answer all questions.

Each question carries 1 weightage.

- 1. What is Database Management System?
- 2. What are the constraints on relation?
- 3. Define instance of a database?
- 4. What is a weak entity?
- 5. What is referential integrity constraints?
- 6. Write any two DML commands of SOL?
- 7. State ACID properties?
- 8. What do you mean by strict schedule?
- 9. Define Granularity?
- 10. What are the advantages of distributed database?
- 11. What is serializability?
- 12. What is partial dependency?

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

Part B

Answer any **six** questions.

Each question carries 2 weightage.

- 13. Explain time stamp ordering protocol?
- 14. Explain the three schema architecture?
- 15. Explain the different types of attributes?
- 16. Give the different database languages?

Turn over

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- 17. What is dependency preserving decomposition? Give an example?
- 18. Explain the anomalies in a database system?
- 19. Explain data Independence?
- 20. Explain two phase locking mechanism?
- 21. State the different object oriented database system concepts?

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

Part C

Answer any **three** questions. Each question carries 4 weightage.

- 22. Explain the relational algebra operations?
- 23. With the help of a neat diagram explain the DBMS components and its interactions?
- 24. Explain the various concurrency control techniques?
- 25. Write an SQL statement to show a nested query?
- 26. Give an overview of ODMG data model?
- 27. What is 5 NF? Explain how such form is achieved.

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