B.E. / B. Tech. Degree Examinations

COMMON TO DEPARTMENT OF IT & CSE

CONTINUOUS ASSESSMENT TEST - II

Subject : DATABASE MANAGEMENT SYSTEMS **Duration: 1 hr 30 minutes**

Subject Code: CS8492 **Date** : 23/04/2021

Branch / Year / Sem: IT & CSE/ II / IV **Max. Marks: 50**

PART-A (5 X 2 = 10 Marks)

Answer all the Questions

1. What is meant by normalization of data?[U] (CO4)
2. Define BCNF [R] (CO4)

3. What are the different modes of lock? [R] (CO5)

4. Give the states of transaction. [U] (CO5)

5. What is called mirroring?[R] (CO6)

PART –B (2 × 13 = 26 Marks)

Answer all the Questions

6. (a) Describe in detail about the following

   (i) Non loss decomposition. (7)

   (ii) Lossy decomposition. (6) [R] (CO4) (Or)

   (b)   (i)What is Normalization? Explain the need for normalization.(6)

   (ii) Discuss First normal form. Second normal form and third normal with an example. (7)
       [U] (CO4)

7. (a) Write a brief Notes On Transaction Concept & Transaction State? [A] (CO5)

                                         (Or)

   (b) Briefly describe two phase locking in concurrency control techniques. [A] (CO5)

PART –C (1 × 14 = 14 Marks)

8. (a) Discuss the violations caused by each of the following: dirty read, nonrepeatable read and

       phantoms with suitable example.   [A] (CO5)

                                         (Or)

   (b) Define RAID and Briefly Explain RAID [A] (CO6)

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CS 8492 DATABASE MANAGEMENT SYSTEMS

(CO1)	Define the fundamental elements of database management systems.
(CO2)	Explain the basic concepts of relational data model and entity-relationship model.
(CO3)	Outline relational database design, relational algebra and database language SQL.
(CO4)	Explain the basic concepts of query processing, transaction management and file storage.
(CO5)	Analyze functional dependencies for designing a robust database.
(CO6)	Implement transactions, concurrency control and be able to do Database recovery and Query optimization.