Program: Computer Engineering **Semester: IV**
Course: Database Management System **Course Code: DBS198917**

Question Bank: PT2

1	Explain ACID properties of transaction	4
2	Draw and explain state diagram of transactions	4
3	Define Transaction with an example.	3
4	Explain the steps involved in query processing and optimization.	3
5	Give the advantages of concurrency in DBMS.	4
6	Draw and explain slotted page structure of file organization	6
7	Describe various RAID levels in detail.	3,4,6
8	Discuss fixed length records with suitable example.	6
9	Discuss variable length records with suitable example.	4
10	Explain steps in deadlock recovery system	6,8
11	Explain Timestamp Based Protocols	6,8
12	Explain Validation based protocol	6,8
13	Describe the recoverability of a schedule in transaction.	6,8
14	Explain cascading and cascadelessness schedule	4,6
15	Explain the concepts of LOCK in concurrency control	6,8
16	Explain starvation of transaction. Also state steps to avoid starvation	3,4
17	Describe two-phase locking protocol	6,8
18	Define deadlock with the help of an example	3,4
19	Explain wait-for graph for deadlock detection	6,8
20	Explain the concept of view and conflict serializability.	4,6,8
21	Write SQL query to retrieve the data for given tables.	6,8
22	Problems on serializability.	6,8
23	Describe Functional dependency in DBMS.	3,4
24	Problems on Relational algebra.	6,8
25	List the pitfalls in Relational Database Design.	3,4
26	Explain views in database with its advantages.	3,4
27	Discuss the various type of join operations in DBMS with example	3,4
28	What is decomposition and what are the properties of decomposition	3,4
29	Explain 1NF and 2NF with example.	4,6
30	Explain 3NFand 3.5NF with example.	4,6

NOTE: Questions would be added or deleted as per syllabus coverage.

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