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**II.B. TECH- II-SEM-II MID EXAMINATIONS, *Date: 06/05/2025* Time*:* 01:30-3:30 PM**

**Subject: DBMS Common to Branchs: CSM, DS, IT Marks: 30 M**

***Note: Question paper contains two parts, Part - A and Part - B.***

***Part-A is compulsory which carries 10 marks. Answer all questions in part-A.***

***Part-B consists of (21/2) units. Answer any Four questions.***

**PART-A 5x2=10**

**BTL CO**

1. **Define** atrigger? Write a SQL query to create a Trigger? **1 (CO3)**

2. **Write** about Nested Queries? **6 (CO4)**

3. **Define** redundancy? What are the problems caused due to redundancy? **1 (CO3)**

4 **Define** Serializability. Explain types of schedules? **1 (CO4)**

5 **What** is File organization? What are different types of file organization mechanisms? **2 (CO5)**

**Answer Any Four Questions**

**PART-B 4X5=20**

6. **Define** Normalization? Explain 1NF, 2NF, 3NF Normal forms? **1 (CO3)**

7. **What** is indexing ?Explain about Hash based Indexing and? **2 (CO3)**

8. **Explain** about different concurrency protocols in detail**? 2 (CO4)**

9. **Define** serializability? Explain test for serializability using precedence graph? **1 (CO4)**

10. **Define** transaction management? Discuss about ACID properties**.? 1 (CO5)**

11. **Explain** deletion and search operation in B+ trees?. **2 (CO5)**

**SCHEME OF EVALUATION**

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| **S.No** | **Theory(Part-A)** | **Marks** | **Total** |
| 1 | trigger and create a Trigger | 2M | **2M** |
| 2 | Nested Queries | 2M | **2M** |
| 3 | Redundancy, What are the problems caused due to redundancy? | **2M** | **2M** |
| 4 | Serializability. Explain types of schedules | **2M** | **2M** |
| 5 | File organization? What are different types of file organization mechanisms | **2M** | **2M** |
|  |  | **Total** | **10M** |

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| --- | --- | --- | --- |
| **S.No** | **Theory(Part-B)** | **Marks** | **Total** |
| 6 | Normalization. Explain1NF,2NF,3NFNormalforms | **5 M** | **5M** |
| 7 | indexing .Explain about Hash based Indexing and | **5M** | **5M** |
| 8 | concurrency protocols | **5M** | **5M** |
| 9 | Serializability, test for serializability using precedence graph? | **5M** | **5M** |
| 10 | transaction management,Discuss about ACID properties | **5M** | **5M** |
| 11 | deletion and search operation in B+ trees?. | 5M | **5M** |
|  |  | Total | **15M** |