

Roll No.

3337

**B. Tech. 6th Semester (CSE) (Elective - II)
Examination – May, 2023**

ADVANCED DATABASE MANAGEMENT SYSTEM

Paper : PEC-CSE-310-G

Time : Three Hours]

[Maximum Marks : 75

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt five questions in all, selecting at least one question from each Unit. Question No. 1 is compulsory. All questions carry equal marks.

1. (a) Natural join
- (b) Log based recovery
- (c) 3NF
- (d) Query optimization
- (e) Cartesian product
- (f) Distributed database

6 × 2.5 = 15

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P. T. O.

UNIT - I

2. (a) Define normal forms. 8
- (b) Define Relational Algebra. 7
3. Explain detail about query processing. 15

UNIT - II

4. Why recovery is needed in database ? Discuss check point-based recovery. 15
5. What is concurrency control ? Discuss locking, Time stamp and Multiversion concurrency control in detail. 15

UNIT - III

6. (a) What do you mean by object-oriented database. 8
- (b) Discuss difference between relational and object-oriented databases. 7
7. Discuss various replication techniques of DDBMS by giving their merits and demerits. 15

UNIT - IV

8. Explain features of enhance SQL on object relational database with help of example. 15
 9. Discuss components of data ware house in details. 15
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