

7E4242

B. Tech. VII Semester (Main/Back) Examination 2013

COMPUTER ENGINEERING # 0CS0.0 Common with CS & IT

# ADVANCE DATABASE MANAGEMENT SYSTEM

Time : 3 Hours

Min. Passing Marks : 24

Maximum Marks : 80

Instruction to Candidates :

Attempt any five questions, selecting one question from each unit. All questions carry equal marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)

## Unit-I

1. (a) What are the goal of Query Optimization. Explain pushing section in alternative plan? [8]
- (b) Explain the term system catalog? Also explain how catalog are stored? [8]

OR

1. (a) Describe Enumeration of alternative plan in brief? [8]
- (b) Write short note on:
  - (i) Decomposition of query into blocks
  - (ii) Estimation cost of a plan. [4 × 2 = 8]

## Unit-II

2. (a) Explain ORDBMS and OODBMS in brief? [8]
- (b) What are different structured data types available in object database system? [8]

OR

2. (a) What is the object database system? How object database system support for complex object and types of object? [8]
- (b) Compare ORDBMS and OODBMS with various database system? [8]

## Unit-III

3. (a) What is concurrency control? What are the recovery techniques to overcome from concurrency? [8]
- (b) Explain parallelizing individual operation. [8]

OR

3. (a) What is distributed DBMS? Explain its architecture. [8]
- (b) Write short note on:
  - (i) Data replication and allocation.
  - (ii) Distributed query processing. [4×2=8]

## Unit-IV

4. (a) What is the database security? Explain Secrecy, integrity and availability within database security? [8]
- (b) Explain Access control in briefly? [8]

OR

4. (a) Explain the additional Issues related to security? [8]
- (b) Write a short note on:
  - (i) Authorization
  - (ii) DOD Security level. [4×2=8]

## Unit-V

5. (a) Describe POSTGRES user interface? Explain its architecture? [8]
- (b) Explain storage and indexing in brief? [8]

OR

5. (a) Explain in brief Query processing, Optimization and system architecture? [8]
- (b) What is XML? What is the background of XML with SGML & HTML? [8]