

B.C.A. (Part-III) Semester-VI Examination
ADVANCE DATABASE MANAGEMENT SYSTEM

Paper-6ST5

Time : Three Hours]

[Maximum Marks : 60

Note :- (1) All questions are compulsory.

(2) All questions carry equal marks.

1. (a) What is Normalization ? Explain 2 NF and 3 NF with example. 6
- (b) Explain the following :
 - (i) Redundancy
 - (ii) Inconsistency. 6

OR

2. (a) Explain database file organization concept in detail. 6
- (b) Explain the following :
 - (i) Database Tuning
 - (ii) Database Security. 6
3. (a) What is Deadlock ? Explain deadlock detection with example. 6
- (b) How recovery is executed from a system crash ? Explain in detail. 6

OR

4. (a) Explain lock based concurrency control. 6
- (b) What is serializability ? Explain the types of Serializability. 6
5. (a) Explain the Architectures for parallel database. 6
- (b) Explain the following :
 - (i) Fragmentation
 - (ii) Replication. 6

OR

6. (a) Explain the working of distributed concurrency control system with example. 6
- (b) Explain the need of Distributed recovery. 6
7. (a) Explain the difference between RDBMS and ORDBMS. 6
- (b) What is Query Optimization ? Explain with example. 6

OR

8. (a) Explain the concept of Inheritance in object oriented DBMS. 6
- (b) Explain database design for an ORDBMS. 6
9. (a) What is Metadata ? Explain Metadata management in Data Warehouse. 6
- (b) Explain :
- (i) OLAP
- (ii) OLTP. 6

OR

10. (a) What is data mining ? Explain the application areas of data mining. 6
- (b) Explain the data warehousing environment in detail. 6