

AM-251

B.C.A. (PART—III) (Semester-VI) Examination
ADVANCE DATABASE MANAGEMENT SYSTEM
Paper—6ST5

Time—Three Hours]

[Maximum Marks—60

N.B. :— (1) All questions are compulsory.

(2) Illustrate your answers with the help of neat diagrams. Wherever necessary.

1. (a) Explain the physical database design concepts. 6
- (b) What is Normalization ? Explain types of normalization in detail. 6

OR

2. (a) Explain : 6
 - (i) Database Security
 - (ii) DBMS Benchmarking.
- (b) Explain database file organization concept in detail. 6
3. (a) What are the different specialized locking techniques ? Explain in detail. 6
- (b) Explain the following : 6
 - (i) Serializability
 - (ii) Crash Recovery.

OR

4. (a) Explain Concurrency control transactions and its scheduling techniques. 6
- (b) What is a log ? Explain its features. 6

5. (a) What are the differentiating features of parallel and distributed database ? Explain. 6
(b) Explain :- 6
(i) Distributed query processing
(ii) Catalog Management.

OR

6. (a) Explain the architecture of parallel database system. 6
(b) How distributed concurrency control system works ? explain in detail. 6
7. (a) What is OODBMS, State & explain its advantages and disadvantages ? 6
(b) Explain : 6
(i) Inheritance
(ii) Query Optimization

OR

8. (a) State & Explain storage and access methods in ORDBMS. 6
(b) Explain the concepts of object database system. 6
9. (a) What is datawarehousing ? Explain its environment. 6
(b) Explain : 6
(i) DSS
(ii) OLTP

OR

10. (a) What is metadata management ? Explain in detail. 6
(b) What is data mining ? State is explain its application areas. 6