

AU-215

**B.C.A. (Part—III) Semester—VI Examination**  
**ADVANCED DATABASE MANAGEMENT SYSTEM**  
**Paper—6ST5**

Time : Three Hours]

[Maximum Marks : 60

**Note :—**(1) All questions are compulsory.

(2) All questions carry equal marks.

(3) Assume suitable data wherever necessary.

1. (a) Explain the concept of Normalization with its different types in detail. 6
- (b) Explain the need of database tuning. 6

**OR**

2. (a) Explain the concept of database file organization. 6
- (b) Explain the DBMS benchmarking in detail. 6
3. (a) Explain concurrency control transaction and its scheduling techniques. 6
- (b) What is log ? Explain its features. 6

**OR**

4. (a) What are the different specialized locking techniques ? Explain in detail. 6
- (b) Explain the concept of Crash Recovery. 6
5. (a) Explain parallel and distributed databases. 6
- (b) Explain the following :—
  - (i) Replication
  - (ii) Fragmentation. 6

**OR**

6. (a) Explain the concept of parallel query evaluation. 6
- (b) Explain the distributed concurrency control system with suitable example. 6

7. (a) What is inheritance ? Explain. 6  
(b) What is OODBMS ? State and explain the advantages and disadvantages. 6

**OR**

8. (a) Explain the database design for ORDBMS. 6  
(b) State and explain storage and access methods in ORDBMS. 6  
9. (a) Explain metadata management in dataware house. 6  
(b) What is data mining ? Explain. 6

**OR**

10. (a) Explain DSS and OLTP of data warehousing. 6  
(b) What is data warehousing ? Explain its environment. 6