

**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.  
(3) Assume suitable data wherever necessary.

1. (a) Explain the concept of Normalization with its different types in detail. 6  
(b) Explain choices in tuning queries and views. 6

**OR**

2. (a) Explain the DBMS bench marking in detail. 6  
(b) What is the need of database tuning ? Explain. 6  
3. (a) What are the different specialized locking techniques ? Explain in detail. 6  
(b) Explain the concept of Crash Recovery. 6

**OR**

4. (a) Explain Recovering from a System Crash. 6  
(b) What do you mean by concurrency control transaction ? Explain its scheduling techniques. 6  
5. (a) Explain the architecture for parallel databases. 6  
(b) Explain the following :—  
(i) Distributed Query processing  
(ii) Catalog management. 6

**OR**

6. (a) Explain the concept of parallel query evaluation. 6  
(b) Explain distributed concurrency control with suitable example. 6  
7. (a) Explain the storage and access methods of ORDBMS. 6  
(b) Explain :  
(i) Objects  
(ii) Inheritance. 6

**OR**

8. (a) Explain the database design for ORDBMS. 6  
(b) Explain query processing and optimization. 6  
9. (a) Explain DSS and OLTP of data warehousing. 6  
(b) What is data mining ? Explain. 6

**OR**

10. (a) Explain Metadata Management in Data warehouse. 6  
(b) Explain OLAP and Data warehousing environment. 6

