

**Exam. Code : 208602**

**Subject Code : 8392**

**M.Sc. (Information Technology) Semester—II**

**DISTRIBUTED DATABASES**

**Paper—MIT-202**

**Time Allowed—3 Hours]**

**[Maximum Marks—100**

**Note :—** Attempt any **FIVE** questions. All questions carry equal marks.

1. (a) Explain the concept of DDBMS. What should be the characteristics of DDBMS ?  
(b) Discuss various advantages of DDBMS citing suitable example.
2. (a) Differentiate between Heterogeneous and Homogeneous DDBMS.  
(b) Explain the Reference Architecture for a DDBMS.
3. Discuss the role of Data Fragmentation in DDBMS. Explain various types of fragmentation using suitable examples.
4. Explain the concept of Two-Phase Locking citing suitable example in DDBMS. How is it different from Centralized Two-Phase Locking ?
5. What do you mean by Distributed Concurrency Control ? What are its objectives ? Discuss different methods of Concurrency Control in detail.

6. Discuss the various steps of distributed query processing with the help of an example.
7. Discuss different available architectural models for DDBMS.
8. Explain various steps involved in Query Decomposition citing suitable example.