Exam. Code : 208602

Subject Code : 4668

M.Sc. Information Technology 2nd Semester

DISTRIBUTED DATABASES

Paper : MIT-202

Time Allowed—Three Hours]   [Maximum Marks—100

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

1. What is distributed database ? What are various design issues of Distributed Database ?

2. (a) What is difference between homogenous and heterogeneous DDBMS ?

   (b) Explain various functions of DDBMS.

3. (a) What is difference between Client-Server and Peer-to-Peer distributed systems ?

   (b) Explain following concepts with regard to DDBMS :

      (i) Design Autonomy

      (ii) Structural heterogeneity.

4. Explain any one algorithm used in horizontal fragmentation. What is hybrid fragmentation ?

5. What is allocation problem ? What are information requirements for allocation ?

6. What is the need of query optimization ? Explain any one algorithm for query optimization.

7. What is query decomposition ? Explain popular query decomposition techniques.

8. (a) What are objectives of concurrency control ?

   (b) Explain distributed two phase locking.