

**B.Tech. - VIEP - COMPUTER SCIENCE AND
ENGINEERING (BTCSVI)**

Term-End Examination

December, 2016

00633

BICSE-007 : DISTRIBUTED DATABASE

Time : 3 hours

Maximum Marks : 70

Note : Answer any seven questions. All questions carry equal marks.

1. (a) What is fragmentation, in DDBMS ? What are the different types of fragmentation ? Why is fragmentation a useful concept in distributed database design ? 6
- (b) Discuss any two advantages of distributed databases. 4
2. (a) Differentiate between centralized and distributed databases. 6
- (b) What is replication in DDBMS ? What are its advantages ? 4

3. Explain the problems encountered in DDBMS in the context of concurrency control and recovery. 10
 4. What is a lock ? Discuss granularity in locks. Describe the different types of locks used in concurrency control along with their compatibilities. 10
 5. Discuss communication failures in DDBMS. 10
 6. (a) What are the desirable properties of a transaction ? 4
(b) Discuss the issues related to federated database systems. 6
 7. What are checkpoints in DDBMS ? How are checkpoints used for recovery in DDBMS ? 10
 8. Discuss the integrity constraints in distributed databases. 10
 9. Describe the reference architecture for distributed databases. 10
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