$\boxed{\text{BICSE-007}}$

B.Tech. – VIEP – COMPUTER SCIENCE AND ENGINEERING (BTCSVI)

00331   **Term-End Examination**
June, 2014

BICSE-007 : DISTRIBUTED DATABASE

Time : 3 hours   *Maximum Marks : 70*

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

1. Explain Distributed Database System. Write the difference between Centralized and Distributed DBMS with respect to DBA, redundancy, indexing, reliability and performance.   *2+8*

2. (a) Describe the various components of DDBMS.   *5*

    (b) Explain the File Server and Client/Server architecture.   *5*

3. (a) What is data fragmentation ? Describe the various types of fragmentation.   *5*

    (b) Explain checkpoint and cold restart of a distributed database system.   *5*

4. (a) Explain framework for Query Optimization.   *5*

    (b) Briefly explain about Heterogeneous databases.   *5*

5. (a) What is distributed transparency ? Explain different levels of distributed transparency. *5*

   (b) What are the advantages and disadvantages of replication ? *5*

6. Define database recovery. Explain different techniques for database recovery with the help of suitable example. *2+8*

7. Discuss the advanced transaction models suitable for different kinds of distributed DBMS. *10*

8. (a) Explain Distributed Cost Model with an example. *5*

   (b) Discuss the Cardinality of Selection. *5*

9. Write short notes on any *two* of the following : *2×5=10*

   (a) Buffer Management

   (b) 2 PC

   (c) Distributed Deadlocks

   (d) Scheduler