BICSE-007

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

Term-End Examination

00623

June, 2018

BICSE-007 : DISTRIBUTED DATABASE

Time : 3 hours   *Maximum Marks : 70*

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

1. What are the two types of fragments ? Explain through examples. What are the rules to be followed when defining fragments ? Discuss.   *10*

2. (a) What are the issues related to query processing in a distributed database management system ? Discuss.   *5*

    (b) What are the basic objectives of distributed concurrency control mechanism ? Discuss.   *5*

3. What are the different levels of distribution transparency which can be provided by DDBMS for updating applications ? Discuss.   *10*

4. (a) Briefly discuss some of the issues related to distributed recovery. *5*

(b) Discus the following terms : *5*

(i) Federated DBMS

(ii) Multidatabase system

5. (a) Why is concurrency control needed ? Explain. *4*

(b) What is a time stamp ? How does a system generate time stamps ? *6*

6. (a) What is 2-phase locking protocol ? How does it guarantee serializability ? *5*

(b) Define the concept of a schedule and serializable schedule. *5*

7. (a) With the help of an example, explain when it is useful to have replication or fragmentation of data. *5*

(b) Discuss the naming problem in DDBMS in brief. *5*

8. What are checkpoints in DDBMS ? How are checkpoints used for recovery in DDBMS ? *10*

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