Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

M.Sc.(IT) (2015 Batch) (Sem.–2)

RDBMS

Subject Code : MSIT-202

Paper ID : [72729]

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students has to attempt any ONE question from each SECTION.**
2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**
3. Use of non-programmable **scientific calculator** is allowed.

SECTION A

1) A department store consists of many item sections. A section is in charge. The store has three kinds of employees : accounts and billing; administrators; section maintainers. A request for purchase of items for the store is initiated by accounts and billing department which has the inventory details. Purchases are made by administration with proper quality checks from specified vendors. The section maintainers update the inventory placed at shelves. Draw the E-R diagram for the store.

2) What are the various objective of a data base system? Explain the architecture for a relational data Model.

SECTION B

3) Explain the working of client - server architecture of DBMS, using a diagram.

4) Compare and contrast the features of simple locking, intention mode locking and time stamping mechanism from the viewpoint of transaction control under concurrent transitions.

SECTION C

5) What is the structure of distributed data bases? Explain the difference between distributed database and distributed processing.

6) How concurrency control is done in the distributed data bases.

SECTION D

7. What are the various characteristics of operational data and decision support data? Explain with example.

8. What are the security requirements in a distributive and client server environment? Explain with example.

SECTION E

9. **Write briefly :**

   i. What are the benefits of distributed data base? Explain.

   ii. What do you understand by Attribute and Key? Explain.

   iii. What is atomicity of transaction?

   iv. What do you understand by Relationship? Explain.

   v. What are the features of MPMD?

   vi. Give example using SQL for the Retrieval with a subquery with same table involved.

   vii. What is the major difference of data base approach and file approach?

   viii. What is OLAP?

   ix. What are the security needs of data base?

   x. What is the client / Server Architecture?