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

Total No. of Questions : 09

BMCI (2014 & Onwards)   (Sem.–3)

RELATIONAL DATABASE MANAGEMENT SYSTEM

Subject Code : BMCI-301

Paper ID : [72582]

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :
1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. **Answer briefly :**

   a) What is the difference between weak and strong entity sets?

   b) Differentiate between entity and attributes. Give example.

   c) What is De-normalization?

   d) What is Client/ Server architecture?

   e) What is BCNF?

   f) What is the difference between backward recovery and forward recovery?

   g) Explain Referential integrity constraint with an example.

   h) What are the types of Locks?

   i) Differentiate between centralized and decentralized design.

   j) What is OLAP?

SECTION-B

2. What are the components of DBMS?

3. Discuss and compare OOD and ORD.

4. Define Multi-valued dependency with an example.

5. Explain transaction transparency in distributed databases.

6. What is a DSS database? What are the requirements of DSS database?

SECTION-C

7. What is an Entity Relationship Model? Discuss the constructs and rules of the ER model.

8. What do you mean by Normalization? Discuss the various forms of normalization with suitable example.

9. What are Distributed databases? What are its characteristics? What are the methods of distributing databases?