

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?