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

Total No. of Questions : 09

BMCI (2014 & Onwards)   (Sem.–2)

DATA BASE MANAGEMENT SYSTEM

Subject Code : BMCI-204

M.Code : 72466

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) Differentiate File processing System v/s Database management System.

   b) Who is DBA? Write short note on it.

   c) What is mapping in three level architecture? Explain.

   d) Define the term schema in database.

   e) What is database integrity?

   f) Explain Self Join in SQL.

   g) What is database consistency?

   h) Explain the structure of distributed database.

   i) Define Multivalued Dependency.

   j) What is Concurrency? How one can achieve it in DBMS?

SECTION-B

2. Write about the following with suitable examples :

   a. Hierarchical Model

   b. Network Model

   c. Relational Model

3. Explain Entity Relationship model in detail.

4. Compare & Contrast Relational Algebra v/s Relational Calculus.

5. Write short notes on :

   a. Database Recovery

   b. Database Security

6. Explain disaster management which helps in database protection. Support your answer with suitable example.

SECTION-C

7. Draw & Explain three level architecture of DBMS in detail with different levels of independence.

8. Explain Normalization & its various forms in detail by taking suitable examples.

9. Write short notes on the following :

   a. Structure of distributed database

   b. Design of distributed database

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.