

Roll No.

Total No. of Pages : 02

Total No. of Questions : 07

BCA (2011 & Onwards) (Sem.-4)
DATABASE MANAGEMENT SYSTEM
Subject Code : BSBC-404
Paper ID : [B0243]

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 SIX questions carrying TEN marks each and students has to attempt any FOUR questions.**

SECTION-A

1. Write briefly :

- a) Discuss the role of DBA.
- b) Illustrate Data Independence.
- c) Define Data Dictionary.
- d) Discuss the concept of Foreign Key.
- e) Explain the term Functional Dependency
- f) Discuss Database anomalies with the help of example.
- g) Define Database Integrity.
- h) Explain Distributed database structure.
- i) Define the term Disaster Management.
- j) Explain the term Database aggregation.

SECTION-B

2. Enlist the advantages and disadvantages of file-oriented system and database-oriented system.
3. Compare and contrast Relational Data Model and Hierarchical Data Model with the help of suitable example.
4. Consider the relational database having fields (*supplier no, status, part no, quantity*) along with primary key (*supplier no, part no.*). Convert this database into first, second and third normal forms.
5. Why there is a need of database recovery? What are different recovery schemes? Discuss at least one in detail.
6. What do you mean by Concurrency Control? How the situation of deadlock can be handled? Explain with the help of example.
7. Explain the concept of Distributed Database with the help of suitable example.