Roll No. Total No. of Pages : 02

Total No. of Questions: 07

BCA (2011 & Onwards) (Sem.-4) DATABASE MANAGEMENT SYSTEMS

Subject Code: BSBC-404 Paper ID: [B0243]

Time: 3 Hrs. Max. Marks: 60

INSTRUCTION TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks
- SECTION-B contains SIX questions carrying TEN marks each and a student has to attempt any FOUR questions.

SECTION-A

1. Write briefly:

- a) Define the term data independence.
- b) List the functions of database administrator.
- c) What is meant by functional dependency?
- d) Discuss the concept of joins.
- e) How union operator is implemented?
- f) Differentiate distributed databases from centralized database.
- g) What is the benefit of disaster management?
- h) How primary keys are useful?
- i) Write short note on integrity.
- j) Write short note on database protection.

SECTION-B

- Differentiate the features of File Processing System and Database Systems. 2.
- 3. What is meant by Three level Architecture of Database System? Explain the role of conceptual level in detail.
- 4. Discuss the concept of entity relationship model. How it helps in designing relational databases?
- 5. Compare the features of Network, Hierarchical and Relational model with the help of examples.
- 6. Differentiate between the following:
 - a) Relational Algebra and calculus
 - b) Second and Third Normal Form
- What is meant by selection and projection Operator? Discuss their use on SQL based 7. queries.