

BCA / D-15
FUNDAMENTALS OF DATABASE SYATEM
PAPER-BCA-235

Time Allowed: 3 Hours

Maximum Marks: 80

Note: Attempt five questions in all, selecting at least one question from each Unit.

Question No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. Attempt all the following :

- (a) Cardinality
- (b) Ternary relationship
- (c) Entity set
- (d) Primary key
- (e) Data aggregate
- (f) Redundancy
- (g) End-users
- (h) View.

UNIT-I

- 2. (a) What do you mean by Database? What are the advantages or objectives of a Database?
- (b) What are the features of qualities of Information?
- 3. (a) What do you mean by Database Management System? What are the functions of DBMS?
- (b) What are the disadvantages of File System?

UNIT-II

- 4. (a) Explain the term Data independence. Explain Physical and Logical data independence by giving example.
- (b) Explain client/server architecture of Database system?
- 5. (a) Explain various objectives of DBMS architecture.
- (b) Explain the concept of Schema and Instance of Schema.

UNIT-III

- 6. What is Data model? Compare network, Hierarchical and Relational models.
- 7. (a) What do you mean by Entity Relationship (ER) model? Explain with suitable example.
- (b) What is an Attribute? Explain different types of attribute.

UNIT-IV

8. (a) What are the various properties of a Relation?
(b) What do you mean by Constraints? Explain.
9. What do you mean by Integrity? Discuss the Entity integrity and Referential integrity constraints with example.