

BCA/D-16  
FUNDAMENTALS OF DATA BASE SYSTEM  
PAPER-BCA-235

Time Allowed: 3 Hours

Maximum Marks: 80

Note: Attempt five questions in all. Question No. 1 is compulsory. All questions carry equal marks.

**Compulsory Question**

1. Attempt all the following :

- (a) Entity
- (b) Attribute
- (c) Secondary key
- (d) Database Designer
- (e) Inconsistency
- (f) Data and Information
- (g) Domain
- (h) Binary Relationship.

Unit-I

- 2. (a) What do you mean by Database System? What are advantages and disadvantages of Database System?
- (b) What are the disadvantages of File System?
- 3. (a) What are the Components of Database?
- (b) What are the duties of DBA?

Unit-II

- 4. (a) What do you mean by data independence? Explain various types of data independence.
- (b) Describe the Architecture of a Database System.
- 5. (a) Explain Classification of database system.
- (b) Differentiate between Schema and subschema.

Unit-III

- 6. What do you mean by data model? Explain various types of data models.
- 7. (a) What is E-R diagram? Draw E-R Diagram for a company database.
- (b) What is an entity? Explain the term weak and strong entity.

#### Unit-IV

8.
  - (a) What is relationship between tables and views? Explain with example.
  - (b) Differentiate between. Hierarchical and Network Data Model.
9. Explain Domain constraint, Key constraint, Entity integrity and Referential integrity.