BCA/D-17
FUNDAMENTALS OF DATA BASE
Paper: BCA-235

Time: Three Hours   Maximum Marks: 80

Note: Attempt five questions in all, selecting at least one question from each Unit. No. 1 is compulsory.

1. (a) Define Data, Information, Domain and Attribute.
   (b) Define physical and logical data independence.
   (c) Discuss simple and complex mapping.
   (d) Define primary key and foreign key with example.

Unit-I

2. Define Database and its components. Discuss its comparison with traditional file system.

3. (a) Define DBMS, its working, merits and demerits
      (b) Discuss role of DBA and its working.

Unit-II

4. Explain three levels of Database architecture. Also show their interlinking mappings.

5. Write notes on the following :
   (a) Centralized v/s Client Server Database.
   (b) Classification of DBMS.

Unit-III

6. What is E-R diagram? Discuss its symbols. Make an E-R diagram for Teacher-Student Relationship
7. Discuss Record based and Object based data models with merits and demerits.

Unit-IV

8. Explain relational model with its properties.

9. Write notes on the following :
   (a) Model Based on 1 : M association
   (b) Relational and Integrity Constraints.