Roll No. ....   **Total Pages : 02**

BCA/D-17   **1243**

FUNDAMENTALS OF DATABASE
BCA-235

Time : Three Hours]   [Maximum Marks : 80

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

                                                    16

Unit I

2. Define Database and its components. Discuss its comparison with traditional file system.   **16**

3. (a) Define DBMS, its working, merits and demerits.

    (b) Discuss role of DBA and its working.   **16**

Unit II

4. Explain three levels of Database architecture. Also show their interlinking mappings. **16**

5. Write notes on the following :
   (a) Centralized v/s Client Server Database.
   (b) Classification of DBMS. **16**

Unit III

6. What is E-R diagram ? Discuss its symbols. Make an E-R diagram for Teacher-Student Relationship. **16**

7. Discuss Record based and Object based data models with merits and demerits. **16**

Unit IV

8. Explain relational model with its properties. **16**

9. Write notes on the following :
   (a) Model Based on 1 : M association
   (b) Relational and Integrity Constraints. **16**