J-2/2116

FUNDAMENTALS OF DATABASE MANAGEMENT
SYSTEM—215
Semester—III

Time Allowed : Three Hours] [Maximum Marks : 75

Note :— Attempt five questions in all by selecting at least two questions each from Sections A and B. Section C is compulsory.

SECTION—A

1. (a) Define database system environment.
   (b) What are the different types of users of a database system? Explain.

2. Discuss in detail the three schema architecture of DBMS.

3. Discuss in detail the ER model. How aggregation and generalization are implemented in ER model? Explain.

4. Define integrity. What are the different types of integrity constraints? Explain giving examples.

SECTION—B

5. Explain the following concepts giving examples:
   (a) Domain compatible attributes
   (b) Union compatible relations
   (c) Types of joins.

6. Define normalization. What are the features of different normal forms? Explain.
7. How entity, domain and referential integrity constraints are applied in MS Access? Explain giving examples.  
8. How reports are created in MS Access? Explain.  

SECTION—C

9. **All** questions are compulsory:
   (a) What are the duties of DBA?
   (b) Distinguish between aggregation and generalization.
   (c) Distinguish between degree and cardinality of a relation.
   (d) Define transitive dependency.
   (e) How relations are established between tables in MS Access?

\[5 \times 3 = 15\]