Roll No. 14037 Total No. of Pages : 2

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PC 2345-N

P-14/2115
FUNDAMENTALS OF DATABASE MANAGEMENT SYSTEM–215
Semester-III

Time Allowed : Three Hours] [Maximum Marks : 75

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

SECTION—A

1. Define database management system. What are advantages and disadvantages of using DBMS ? Explain. 15

2. Write short notes on the following :
   (a) Physical data models
   (b) Database independence
   (c) Relational model. 3×5=15

3. Discuss in detail the ER model. How aggregation and generalization are implemented in ER model ? Explain. 15

4. Discuss in detail the relational data model. 15

SECTION—B

5. Define relational algebra. What are the different types of operators available in relational algebra ? Explain giving examples. 15

6. What are the problems of bad database design ? How these problems are handled ? Explain giving examples. 15

7. How entity, domain and referential integrity constraints are applied in MS Access ? Explain giving examples. 15

8. How queries and reports are created in MS Access ? Explain. 15

SECTION—C

9. *All* questions are compulsory :

   (a) Define primary key.

   (b) Distinguish between internal and external schema.

   (c) What do you mean by union compatibility ?

   (d) How referential integrity is implemented in MS Access ?

   (e) What is the meaning of cascading update and delete in relations in MS Access ? 3×5=15