Branch - MATHEMATICS WITH COMPUTER APPLICATIONS

RDBMS .

Time: Three Hours   *   • Maximum: 75 Marks

SECTION-A (20 Marks)
Answer ALL questions
, • ALL questions carry EQUAL marks   ($10 x 2 = 20$)

1   What refers physical schema and logical schema in DBMS?
2   State the various components to build E-R diagram.
3   What is primary key?
4   What is natural join?
5   State the basic structure of SQL queries.
6   Write a short note on order by clause.
7   Write a short note on NULL values.
8   Write a short note on complex queries.
9   State the two major pitfalls in designing a database schema.
10   What refers relationship instance?

SECTION - B (25 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks ($5 x 5 = 25$)

11 a Explain the major disadvantages of file-processing system.
                        OR
   b Explain the different types of users of a database.

12 a. Explain the basic structure of relational database.
                        OR
   b Explain the following relational algebra operations with suitable example
        (i) Set - intersection operation (ii) Division operatibn.

13 a Explain the basic schema definition in SQL.
                        OR
   b Explain the various set operations in detail.

14 a ' Explain the built-in aggregate function with suitable example.
                        OR   w
   b ■ Explain about Nested sub-queries.

15 a , Explain about data base design phase in detail.
                        OR
   b Explain the mapping Cardinalities and participation constraints.

SECTION - C (30 Marks)
Answer any THREE Questions
ALL Questions Carry EQUAL Marks (3 x 10 = 30)

16   Discuss about database design in detail.   '

17   Explain the fundamental relational - algebra operations with suitable example.

18   Discuss the basic' structure of SQL queries with suitable example.

19   Discuss about views with suitable example.

20   Explain the following in E-R model.
        (i) Entity sets ii) Relationship sets iii) Attributes.