Reg. No.

V Semester B.C.A.2 Degree Examination, November 2015

(Regular & Repeaters)

DATABASE MANAGEMENT SYSTEM

Time : 3 Hours]   [Max. Marks : 80

Instructions : 1) *All Sections are compulsory*

2) *Draw diagram wherever necessary.*

SECTION – A

Answer **any ten** questions :   **(10 × 2 = 20)**

1. Define data and database.

2. What is a query?

3. What is relationship type? What are their types?

4. What do you mean by redundancy? Why is must be controlled?

5. Explain in brief program - data independence.

6. Define Primary Key and Foreign key. Give example.

7. Who is an end user? Mention their categories.

8. Define transaction. Give Example.

9. What is entity and attribute? Give Example.

10. What are different cases (meaning) of NULL value.

11. Define domain. Give example.

12. What are Database System Utilities? Give Example.

SECTION – B

Answer **any six** questions : **(6 × 5 = 30)**

13. Explain with diagram, the three schema architecture.

14. Discuss the actors behind the scene.

15. Explain three basic Update Operations on relation.

16. Discuss different data types in SQL.

17. Explain the informal design guidelines for relation schema.

18. Differentiate between **(any two)** :

    (a) Simple attribute v/s Composite attribute.

    (b) Stored attribute v/s Derived attribute.

    (c) Single valued v/s Multi valued attribute. Give example for each.

19. Give the Syntax for the following SQL commands.

    (a) Create table   (b) Inserting record

    (c) Deleting record   (d) Alter table

20. Explain various DBMS interfaces.

SECTION – C

Answer **any thee** full questions : **(3 × 10 = 30)**

21. Discuss in detail the advantages of DBMS approach.

22. (a) Draw and name the various symbols used in E-R diagram.

    (b) Draw a neat diagram and explain the Simplified data base system environment. **(5 + 5)**

23. (a) What is unary relational operator? Describe the PROJECT and SELECT operation.

    (b) Explain the following algebra operation with example. **(any two)** :

    (i) UNION   (ii) MINUS   (iii) INTERSECTION   **(5 + 5)**

24. (a) Discuss the desirable ACID Properties with respect to Transaction processing.

    (b) Explain the Characteristics of relation. **(5 + 5)**

25. Write short note on **any two.**

    (a) DBMS Languages

    (b) Data base Administrator

    (c) Aggregate Functions in SQL. **(5 + 5)**

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