65222

Second Semester B.C.A. Degree Examination, May/June 2019

(CBCS Scheme)

Computer Science

DATA BASE MANAGEMENT SYSTEM

Time : 3 Hours]   [Max. Marks : 70

*Instructions to Candidates : Answer **ALL** Sections.*

SECTION – A

Answer any **TEN** questions. Each question carries **2** marks :   **(10 × 2 = 20)**

1. Define DBMS. Mention any two applications of DBMS.

2. What is an attribute? Give example.

3. Write any two responsibilities of data base administrator.

4. Define primary key and foreign key.

5. Define weak and strong entity set.

6. Define functional dependency.

7. What is integrity constraints? Give examples.

8. What is group by clause? Give examples.

9. What is data dictionary?

10. Explain commit and roll back commands.

11. What is PL/SQL? Mention the advantages of PL/SQL?

12. List the various SQL Data Types.

SECTION – B

Answer any **FIVE** questions : (5 × 10 = 50)

13. (a) Explain the architecture of DBMS with a neat diagram. **(5)**

    (b) Explain the various characteristic features of DBMS. **(5)**

14. (a) Describe the different notations used in ER diagram. **(5)**

    (b) Construct an ER diagram for employer payroll system. **(5)**

15. (a) What is file access? Mention any three file accessing methods. **(5)**

    (b) What is hashing? Explain different types of hashing techniques. **(5)**

16. What is normalization? Explain the various types of normal forms. **(10)**

17. (a) Explain insertion, update and deletion anomalies in database. **(5)**

    (b) List the properties of normalized relations. **(5)**

18. (a) What is SQL? Explain about DDL and DML with an example. **(5)**

    (b) What is Join operation? Explain different types of Joins with syntax and example. **(5)**

19. (a) What is a database trigger? Explain any four types of triggers. **(5)**

    (b) What is time stamp? What are the methods of generating time stamps? **(5)**

20. (a) Explain binary lock technique used in concurrency control. **(5)**

    (b) Define lock. Discuss the various types of locks. **(5)**