

Register
Number

--	--	--	--	--	--	--	--	--	--

III Semester Diploma Examination, Oct./Nov.-2019

DATABASE MANAGEMENT SYSTEMS

Time : 3 Hours]

[Max. Marks : 100

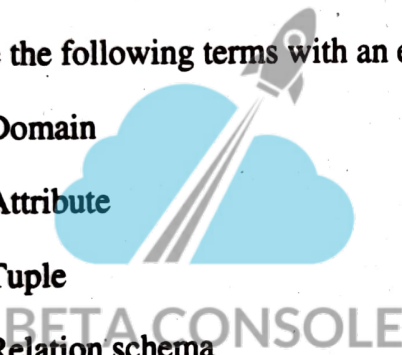
- Instructions :**
- (i) Answer any **six** questions from Part – A, each question carries **5** marks.
 - (ii) Answer any **seven** full questions from Part – B, each question carries **10** marks.

PART – A

1. Define Database. List the responsibilities of the Database Administrator. 5
2. Explain the different types of End Users. 5
3. Define Data Independence. Explain different types of it. 5
4. Explain the characteristics of relation. 5
5. Explain key constraint with an example. 5
6. Explain the different datatypes supported by SQL. 5
7. Define view. How to create it ? Give example. 5
8. Explain Second Normal Form with an example. 5
9. Explain the Desirable properties of a transaction. 5

PART – B

10. List and explain the important characteristics of Database approach. 10
11. Identify the entities, relationships and develop an E-R diagram for a company database. 10
12. Explain the different phases of Database design with a neat diagram. 10
13. Define the following terms with an example. 10
- (i) Domain
 - (ii) Attribute
 - (iii) Tuple
 - (iv) Relation schema
 - (v) Relation
14. Consider the following schema and write the SQL queries : 10
- EMPLOYEE** (Fname, Minit, Lname, SSn, Bdate, Address, sex, Salary, Super-SSn, Dno)
- DEPARTMENT** (Dname, Dnumber, Mgr_ssn, Mgr_start_date)
- (i) Retrieve the First & last name of all employees who works in C S Dept.
 - (ii) Find the Sum of the Salaries of all employees.
 - (iii) Sort the tuples of EMPLOYEE table by First name.
 - (iv) Retrieve the details of employees who are working in DNO 2 and Drawing Salary more than or equal to 15000.
 - (v) Retrieve the total no. of employees in each department.



Explain the following commands / clause with example :

10

- (i) Insert
- (ii) Delete
- (iii) Order by
- (iv) Group by
- (v) Drop

6. Explain the informal design Guidelines for Relational Schema.

10

17. Explain First Normal Form and Third Normal Form with example.

10

18. Explain the Advantages and disadvantages of Distributed Computing.

10

19. List and explain the different categories of NOSQL.

10

BETA CONSOLE

