

**PARUL UNIVERSITY**  
**FACULTY OF IT & COMPUTER SCIENCE**  
**BCA Summer 2018 – 19 Examination**

**Semester: 2****Subject Code: 05101153****Subject Name: Database Management System****Date: 20/04/2019****Time: 02:00 pm to 04:30 pm****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

**Q.1 Answer the followings.****A. Write short notes.****(05)**

1. Describe LIKE operator with example.
2. Which command is used to insert a data in new column?
3. What is the purpose of normalization in DBMS?
4. What is the main difference between Primary key and Unique Key?
5. Elaborate the difference between DROP and TRUNCATE commands in DBMS.

**B. Multiple choice type questions/ Give the sentence true or false. (Each of 01 marks)****(10)**

1. Which normal form is the partial dependency removed?
  - a. First
  - b. Second
  - c. Third
  - d. BCNF
2. An attribute or combination of attributes in one table whose values must either match the primary key in another table or be null is called \_\_\_\_\_.
  - a. Secondary Key
  - b. Super key
  - c. Candidate Key
  - d. Foreign Key
3. DML is provided for
  - a. Description of logical structure of database.
  - b. Addition of new structures in the database system.
  - c. Manipulation & processing of database.
  - d. Definition of physical structure of database system.
4. An entity set that does not have sufficient attributes to form a primary key is a
  - a. strong entity set.
  - b. weak entity set.
  - c. simple entity set
  - d. primary entity set.
5. In case of entity integrity, the primary key may be
  - a. not Null
  - b. Null
  - c. both Null & not Null.
  - d. any value.
6. What is a relationship called when it is maintained between two entities?
  - a. Unary
  - b. Binary
  - c. Ternary
  - d. Quaternary
7. Which of the following is a valid SQL type?
  - a. CHARACTER
  - b. NUMERIC
  - c. FLOAT
  - d. All of the above
8. Which of the following is a legal expression in SQL?
  - a. SELECT NULL FROM EMPLOYEE;
  - b. SELECT NAME FROM EMPLOYEE;
  - c. SELECT NAME FROM EMPLOYEE WHERE SALARY = NULL;
  - d. None of the above
9. NULL is
  - a. the same as 0 for integer
  - b. the same as blank for character
  - c. the same as 0 for integer and blank for character
  - d. not a value
10. The data model which describes how the data is actually stored is
  - a. Internal model
  - b. External model
  - c. Logical model
  - d. None of these

- Q.2 Answer the followings. (Any Five) (15)**
1. Describe Data Dictionary.
  2. Explain Physical and Logical Data model.
  3. Give the difference between Generalization and Specialization.
  4. Elaborate types of database Language.
  5. What is weak entity set? Explain with example.
  6. Construct E-R Diagram for Hospital Management System.

- Q.3 Answer the following. (Any three) (15)**
1. What is DBMS? List advantages and disadvantages of DBMS.
  2. Describe data model with its various types.
  3. What is Constrain Explain Different constrain with example.
  4. Draw and Explain Architecture of Database.

- Q.4 Answer the following.**
- A. Explain union, intersect and minus with example. (05)**
- B. What is normalization? Explain 1NF, 2NF and 3NF with example. (10)**

**OR**

- B. Explain inner Join and Outer join with example and give the difference between inner Join and Outer Join. (10)**