HERALD COLLEGE
DIPIT07 MOCK TEST QP

Total No. of pages: 02

DATABASE MANAGEMENT SYSTEM
SUBJECT CODE: DIPIT07

Time: 2:00 **Max.Marks: 100**

SECTION-A (1 marks each)

1. Which one of the following provides the ability to query information from the database and to insert rows into, delete rows from, and modify rows in the database?
a) DML(Data Manipulation Language)
b) DDL(Data Definition Language)
c) Query
d) Relational Schema

2.
```
CREATE TABLE employee (name VARCHAR, id INTEGER)
```
What type of statement is this?
a) DML
b) DDL
c) View
d) Integrity constraint

3. The basic data type char(n) is a _____ length character string and varchar(n) is _____ length character.
a) Fixed, equal
b) Equal, variable
c) Fixed, variable
d) Variable, equal

4. Which one of the following attribute can be taken as a primary key?
a) Name
b) Street
c) Id
d) Department

5. The most commonly used operation in relational algebra for projecting a set of row from a table is
a) Join
b) Projection
c) Select
d) Union

6. Here which of the following displays the unique values of the column?

```
SELECT ________ dept_name
FROM instructor;
```
a) All
b) From
c) Distinct
d) Name

7. The query given below will not give an error. Which one of the following has to be replaced to get the desired output?

```
SELECT ID, name, dept name, salary * 1.1
WHERE instructor;
```

a) Salary*1.1
b) ID
c) Where
d) Instructor

8. Which one of the following has to be added into the blank to select the dept_name which has Computer Science as its ending string?

```
SELECT emp_name
FROM department
WHERE dept_name LIKE' _____ Computer Science';
```

a) %
b) _
c) ||
d) $

9. This query does which of the following operation?

```
SELECT instructor.*
FROM instructor, teaches
WHERE instructor.ID= teaches.ID;
```

a) All attributes of instructor and teaches are selected
b) All attributes of instructor are selected on the given condition
c) All attributes of teaches are selected on given condition
d) Only the some attributes from instructed and teaches are selected

10. The primary key must be
a) Unique
b) Not null
c) Both Unique and Not null
d) Either Unique or Not null

SECTION-B

1. Write Syntax for following: (2 marks each)
    a. Create
    b. Insert
    c. Update
    d. Delete
    e. Select
2. What is database? A department store wants to create a database to manage their store. They want to record all their products, Employee and customer information, which are identified with a unique ID assigned to each of them. They also want to store the records of the customers buying the products and all the sales that takes place there every day.
   Identify the entities and attributes from the above scenario. Also while listing the attributes, define their datatypes and type of attribute. (15 marks)

3. Define SQL. Name the types of SQL language and explain them in brief. (10 marks)
4. Define the following terms (2 marks each)
    a. Information
    b. Keys
    c. DBMS
    d. Relational Database
    e. View
5. What does ACID mean in Database Systems? (10 marks)
6. Explain in brief, Functions of Database. (10 marks)

SECTION-C

1. Identify the errors in the following queries and write the correct queries. (5 marks)

```
CREATE TABLE department
(dept_id VARCHAR (20),
building (15),
budget Integer,
PRIMARY KEY (dept_name));

CREATE TABLE course
(course_id VARCHAR (7),
title VARCHAR (50),
dept_name VARCHAR (20),
credits double (2),
PRIMARY KEY (course_id),
FOREIGN KEY(deptID)department);

CREATE TABLE teaches
(ID VARCHAR (5),
course_id VARCHAR (8),
sec_id VARCHAR (8),
semester VARCHAR (6),
DATE(0),
PRIMARY KEY (ID, course_id, dept_id),
FOREIGN KEY (course_id) REFERENCES,
FOREIGN KEY (ID);
```

2. Sample Table – Worker (20 marks)

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
001	Monika	Arora	100000	2014-02-20 09:00:00	HR
002	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
003	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
004	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
005	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
006	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
007	Satish	Kumar	75000	2014-01-20 09:00:00	Account
008	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

a) Write the query to Create the above table in MYSQL.
b) Write the query to select all records who are in Account department.
c) Write the query to select unique values of department.
d) Write the query to select all the records who's name starts with 'A'.
e) Write the query to add another attribute GENDER between LAST_NAME and SALARY.
f) Write the query to delete attribute JOINING_DATE.
g) Create a VIEW selecting FIRST_NAME, LAST_NAME, SALARY, of all records whose salary is 6 digit.
h) Write the query to count the number of people in HR department.
i) Write the query to select FIRST_NAME and LAST_NAME as FULL_NAME.
j) Write the query to update SALARY of Monika to 200000.

---**END OF PAPER**---