

**KONGU ENGINEERING COLLEGE, PERUNDURAI – 638060**  
**DEPARTMENT OF INFORMATION TECHNOLOGY**  
**DATABASE MANAGEMENT SYSTEM**  
**TUTORIAL – 2**

**Date: 29.3.23**

**Max. Marks:20**

1. Choose the correct statement/s related to database languages.

- a) **The output of DDL is placed in the data dictionary which contains meta-data.**
- b) DML helps in alteration to the table.
- c) **DML enables the users to manipulate the data.**
- d) DDL helps in insertion of records to the table.

2. Which of the following is NOT a superkey in a relational schema with attributes V, W, X, Y, Z and primary key VY?

- (A) VXYZ                      **(B) VWXZ**                      (C) VWXY                      (D) VWXYZ

3. Drop Table cannot be used to drop a Table referenced by \_\_\_\_\_ constraint. (UGC NET CS 2015)

- (a) Primary key (b) Sub key (c) Super key (d) Foreign key  
A.(a)                      B.(a), (b) and (c)                      **C.(d)**                      D.(a) and (d)

4. Identify the valid primary key attribute for the below mentioned table.

Account			
Account_number	Name	Branch_name	Balance
114587932	ROHAN	NEW DELHI	25000
558479321	KARTIKA	CHENNAI	28000
321101125	PINAKI	KOLKATA	30000
102287655	ROHAN	BANGALORE	25000
225487001	ABHINASH	NEW DELHI	26000

- a) **Account Number**    b) Name                      c) Balance                      d) Branch Name

5. Which of the following statements is correct about E-R data Model?

- a) E-R Model is a way of structuring data using relations.
  - b) E-R Model consists of set of entities and relation among these entities.
  - c) E-R Model consists of a collection of records connected to one another.
  - d) E-R Model consists of collection of data, organized into a tree-like structure.
- A.A    **B.B**    C.C    D.D

6. Which of the following statement(s) is/are FALSE in the context of Relational DBMS ?

- I. Views in a database system are important because they help with access control by allowing users to see only a particular subset of the data in the database.
- II. E-R diagrams are useful to logically model concepts.
- III. An update anomaly is when it is not possible to store information unless some other, unrelated information is stored as well.
- IV. SQL is a procedural language. (UGC NET CS 2016)

- A.I and IV only                      **B.III and IV only**                      C.I, II and III only                      D.II, III and IV only

7. The attribute name could be structured as an attribute consisting of first name, middle initial, and last name. This type of attribute is called

- a) Simple attribute                      **b) Composite attribute**                      c) Multivalued attribute                      d) Derived attribute

8. Which of the following is a single valued attribute?

- a) **Register\_number**                      b) Phone#                      c) SUBJECT\_TAKEN                      d) Areas of interest

9. Consider the following relational database (8Marks)

emp (empname, street, city)

works(empname, compname, salary)

company(compname, city)

manager (empname, managername)

Give an expression in SQL for each of the following queries

i) Modify the database so that Ram now lives in Delhi. (1Mark)

**update emp set city = ' Delhi' where empname= ' Ram';**

ii) Find the names and cities of residence of all employees who work for First Bank Corporation. (2Marks)

**select empname,city from emp natural join works where compname= 'First Bank Corporation';**

iii) Find all employees in the database who earn more than every employee of small bank corporation. (2Marks)

**select empname from works where salary >all (select salary from works where compname= 'small Bank Corporation');**

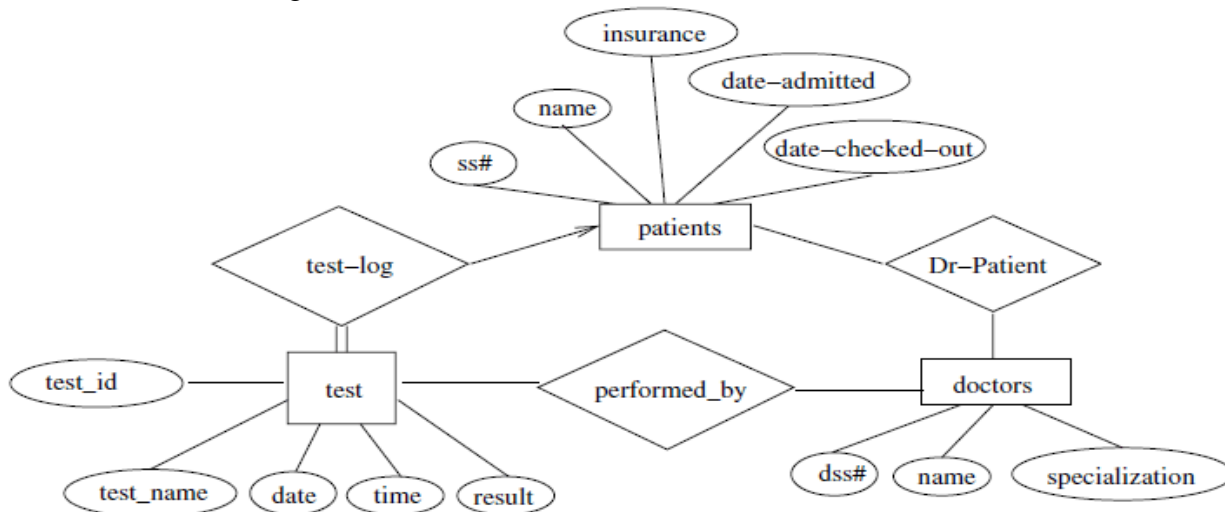
iv) Find all employees who earn more than the average salary of all employees of their company. (2Marks)

**select empname from works T where salary > ( select avg(salary) from works where compname = T.compname);**

v) Remove the company relation from the database. (1Mark)

**drop table company;**

11. Convert the ER diagram into Relational Model. (4Marks)



E-R diagram for a hospital.

**Patient(SS#, name, insurance, date-admitted, date-checked-out)**

**Doctor (dss#, name, specialization)**

**Test( test\_id, test-name, date, time, result, SS#)**

**Doctor-patient (dss#, SS#)**

**Performed\_by(dss#, test\_id)**