

EXAMINATION QUESTION PAPER

PG-DAC 0322

EXAM Type : Main

Module Name : DBT

Set : __

DATE: 03-04-22

Duration: 2 hours

Max. Marks: 40

Instructions:

1. Enable the camera when asked for and share your screen as well – WHEN ASKED for it during the exam.

<https://us02web.zoom.us/join/9tZ0kfu2tpjMtGd0kjJ29E1-PcreLjNwMJra>

2. Create a folder with your PRN number and **add a word file in it named as your PRN itself.**

3. **Paste all the queries in the word file and the output's screenshots as well.**

4. Upload the WORD FILE on the provided Google form link

***** PLEASE TRY TO USE THE BELOW DATABASE IF WHILE CREATING THE DATABASE SOME ISSUE CAME TRY TO USE SIMILAR COLUMNS TABLES WHICH IS PRESENT ON LOCAL ****

```
CREATE DATABASE ORG;
SHOW DATABASES;
USE ORG;
```

```
CREATE TABLE Worker (
    WORKER_ID INT NOT NULL PRIMARY KEY AUTO_INCREMENT,
    FIRST_NAME CHAR(25),
    LAST_NAME CHAR(25),
    SALARY INT(15),
    JOINING_DATE DATETIME,
    DEPARTMENT CHAR(25)
);
```

```
INSERT INTO Worker
(WORKER_ID, FIRST_NAME, LAST_NAME, SALARY, JOINING_DATE, DEPARTMENT) VALUES
(001, 'Monika', 'Arora', 100000, '14-02-20 09.00.00', 'HR'),
(002, 'Niharika', 'Verma', 80000, '14-06-11 09.00.00', 'Admin'),
(003, 'Vishal', 'Singhal', 300000, '14-02-20 09.00.00', 'HR'),
(004, 'Amitabh', 'Singh', 500000, '14-02-20 09.00.00', 'Admin'),
(005, 'Vivek', 'Bhati', 500000, '14-06-11 09.00.00', 'Admin'),
(006, 'Vipul', 'Diwan', 200000, '14-06-11 09.00.00', 'Account'),
(007, 'Satish', 'Kumar', 75000, '14-01-20 09.00.00', 'Account'),
(008, 'Geetika', 'Chauhan', 90000, '14-04-11 09.00.00', 'Admin');
```

```
CREATE TABLE Bonus (
    WORKER_REF_ID INT,
    BONUS_AMOUNT INT(10),
    BONUS_DATE DATETIME,
    FOREIGN KEY (WORKER_REF_ID)
        REFERENCES Worker(WORKER_ID)
    ON DELETE CASCADE
);
```

```
INSERT INTO Bonus
(WORKER_REF_ID, BONUS_AMOUNT, BONUS_DATE) VALUES
(001, 5000, '16-02-20'),
(002, 3000, '16-06-11'),
(003, 4000, '16-02-20'),
(001, 4500, '16-02-20'),
(002, 3500, '16-06-11');
```

```
CREATE TABLE Title (
    WORKER_REF_ID INT,
    WORKER_TITLE CHAR(25),
    AFFECTED_FROM DATETIME,
    FOREIGN KEY (WORKER_REF_ID)
        REFERENCES Worker(WORKER_ID)
    ON DELETE CASCADE
);
```

```
INSERT INTO Title
(WORKER_REF_ID, WORKER_TITLE, AFFECTED_FROM) VALUES
(001, 'Manager', '2016-02-20 00:00:00'),
(002, 'Executive', '2016-06-11 00:00:00'),
(008, 'Executive', '2016-06-11 00:00:00'),
(005, 'Manager', '2016-06-11 00:00:00'),
(004, 'Asst. Manager', '2016-06-11 00:00:00'),
(007, 'Executive', '2016-06-11 00:00:00'),
(006, 'Lead', '2016-06-11 00:00:00'),
(003, 'Lead', '2016-06-11 00:00:00');
```

QUESTIONS

1 SOLVE THE BELOW QUESTIONS **EACH QUESTION OF 2 MARKS**

- i. WRITE AN SQL QUERY TO FETCH FULLNAME , SALARY , JOINING_DATE AND DEPARTMENT FROM WORKER TABLE.
- ii. WRITE AN SQL QUERY TO FETCH ID , FULLNAME , SALARY AND DEPARTMENT WHOSE DEPARTMENT IS HR OR ADMIN
- iii. WRITE AN SQL QUERY TO FETCH ID , FULLNAME , SALARY WHOSE FIRST_NAME ENDS WITH 'a'
- iv. WRITE AN SQL QUERY TO FEACH ALL RECORDS OF WORKER TABLE WHO HAVE JOIN IN FEB 2020
- V. WRITE AN SQL QUERY TO FEACH ALL RECORDS OF WORKER TABLE WHO HAVE SALARY >=50000 AND <=100000.

2 SOLVE THE BELOW QUESTIONS **EACH QUESTION OF 3 MARKS**

- i. WRITE AN SQL QUERY TO DISPLAY NUMBER OF WORKER IN EACH DEPARTMENT ALONG WITH UNIQUE DEPARTMENT NAME
- ii. WRITE AN SQL QUERY TO DISPLAY DEPARTMENT NAME AND TOTAL BONUS AMOUNT TO BE PAID IN EACH DEPARTMENT
- iii. WRITE AN SQL QUERY TO DISPALY THE FULLNAME , SALARY , TOTAL YEARS OF EXPERIANCE OF EACH WORKER
- iv. WRITE AN SQL QUERY TO DISPALY THE DETAILS OF THE WORKER WHO IS MANAGER

3 SOLVE THE BELOW QUESTIONS EACH QUESTION OF 4 MARKS**i. CREATE SAMPLE_DB IN MONGO DATABASE**

-CREATE COLLECTION IN SIMPLE_DB AS MY_COL
INSERT THE BELOW DATA

```
db.mycol.insert([
{
  title: "MongoDB Overview",
  description: "MongoDB is no SQL database",
  by: "tutorials point",
  url: "http://www.tutorialspoint.com",
  tags: ["mongodb", "database", "NoSQL"],
  likes: 100
},
{
  title: "NoSQL Database",
  description: "NoSQL database doesn't have tables",
  by: "tutorials point",
  url: "http://www.tutorialspoint.com",
  tags: ["mongodb", "database", "NoSQL"],
  likes: 20,
  comments: [
    {
      user: "user1",
      message: "My first comment",
      dateCreated: new Date(2013,11,10,2,35),
      like: 0
    }
  ]
}
])
```

1.SHOW THE DOCUMENTS THAT HAS LIKES GREATER THAN 10

2.SHOW THE DOCUMENTS THAT HAS USER NAME AS 'user1'

ii. CREATE A FUNCTION IN MYSQL THAT WILL ACCEPT THE ONE INPUT PARAMETER AS WORKER ID AND BASED ON THE ID

RETURN THE TOTAL SALARY IN EACH DEPARTMENTS

4 CREATE A CURSOR IN MYSQL, BY USING THE CURSOR RETURN THE COMMA SEPRATED LIST OF WORKER NAMES**5 MARKS**

eg. Monika , Vishal , Satish , Vipul

5 CREATE A AFTER INSERT TRIGGER IN MYSQL ..**5 MARKS**

CREATE AN EMP_DETAILS TABLES AS FOLLOWS

ID , FIRST_NAME , LAST_NAME , DEPARTMENT_ID ,SALARY

WHEN AN INSERT HAPPEN INTO THE EMP_DETAILS TABLE INSERT THE FIRST_NAME , LAST_NAME AND SALARY INTO THE

EMP_LOG_DETAILS TABLE

***** ALL THE BEST! *****