Q1 Create table employee,dept with following column and insert given data(3 Marks)

create table if not exists employee(emp\_id integer primary key,name varchar(30) not null, age integer not null,

hobbies varchar(30) not null,salary integer check(salary>0),address varchar(30) not null,

zip integer unique);

create table if not exists dept(dept\_id integer primary key,dept\_name varchar(30),

emp\_id integer references employee(emp\_id),manager varchar(30) );

Q2 INSERT FOLLOWING DATA TO EMPLOYEE ( 3 Marks)

insert into employee(emp\_id ,

name ,

age ,

hobbies ,

salary ,

address ,

zip) values(1,'mohit',23,'dancing', 10000, 'Mumbai',500049),

(2,'aniket',27,'painting', 20000, 'Mumbai',500149),

(3,'ajay',31,'singing', 35000, 'delhi',273008),

(4,'priyank',42,'dancing', 55000, 'delhi',123876),

(5,'deepika',26,'dancing', 10000, 'delhi',500786),

(6,'saloni',28,'singing', 50000, 'Mumbai',400149),

(7,'yash',34,'photography', 40000, 'Mumbai',450049),

(8,'vinay',45,'painting', 70000, 'Mumbai',273006);

insert into dept(dept\_id ,dept\_name ,emp\_id ,manager) values(1,'ec',8, 'virat'),

(2,'cs',7, 'sachin'),

(3,'it',6, 'rahul'),

(4,'it',5, 'rahul'),

(5,'cs',4, 'sachin'),

(6,'ec',3, 'virat'),

(7,'ec',2, 'virat'),

(8,'ec',1, 'virat');

Write Down Following Queries (14 Marks)

Write a Query to count No. of employees (2 Marks)

select count(emp\_id) from employee;

count

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8

Write a Query to get unique department of employees (2 Marks)

select distinct dept\_name from dept;

dept\_name

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cs

ec

it

Write a Query to get min,max,avg,sum of salary for all employees (2 Marks)

select max(salary),min(salary),avg(salary),sum(salary) from employee;

max | min | avg | sum

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70000 | 10000 | 36250.000000000000 | 290000

Write a Query to get highest salary of an individual based on hobbies (2 Marks)

select hobbies,max(salary) from employee group by hobbies;

hobbies | max

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dancing | 55000

painting | 70000

singing | 50000

photography | 40000

Write a Query for sum of salary where address starts with 'M' or 'd' (2 Marks)

select sum(salary) from employee where address like 'M%' or address like 'd%';

sum

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290000

(1 row)Write a Query to Get all employee details with their department details(2 Marks)

select \* from employee e join dept d on e.emp\_id=d.emp\_id;

emp\_id | name | age | hobbies | salary | address | zip | dept\_id | dept\_name | emp\_id | manager

--------+---------+-----+-------------+--------+---------+--------+---------+-----------+--------+---------

8 | vinay | 45 | painting | 70000 | Mumbai | 273006 | 1 | ec | 8 | virat

7 | yash | 34 | photography | 40000 | Mumbai | 450049 | 2 | cs | 7 | sachin

6 | saloni | 28 | singing | 50000 | Mumbai | 400149 | 3 | it | 6 | rahul

5 | deepika | 26 | dancing | 10000 | delhi | 500786 | 4 | it | 5 | rahul

4 | priyank | 42 | dancing | 55000 | delhi | 123876 | 5 | cs | 4 | sachin

3 | ajay | 31 | singing | 35000 | delhi | 273008 | 6 | ec | 3 | virat

2 | aniket | 27 | painting | 20000 | Mumbai | 500149 | 7 | ec | 2 | virat

1 | mohit | 23 | dancing | 10000 | Mumbai | 500049 | 8 | ec | 1 | virat

Write a QUERY TO FIND employees age between 20 and 30 (2 Marks)

select name,age from employee where age between 20 and 30;

name | age

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mohit | 23

aniket | 27

deepika | 26

saloni | 28

Q3 Write a function to return name,emp\_id,dept\_name,hobbies,age by passing manager name (10 Marks

create or replace function myfun(a varchar(30))

returns table(name varchar,emp\_id integer,

dept\_name varchar , hobbies varchar,age integer,manager varchar) as $$

begin

return query select e.name,e.emp-id,d.dept\_name,e.hobbies,e.age from employee e join dept d on e.emp\_id=d.emp\_id where d.manager=a;

end;

$$

language plpgsql;

select \* from myfun('sachin');

1. get assignment documents having tags = gray (2 Marks)

2. Get inventory details whose dim\_cm > 10 , sorted by qty descending order and print only 3 dcouments.( 2 Marks)

3. Create index on inventory in descending order of qty .( 2 Marks)

> db.inventory.createIndex({"qty":-1});

{

"numIndexesBefore" : 1,

"numIndexesAfter" : 2,

"createdCollectionAutomatically" : false,

"ok" : 1

}

>

4. Querty to aggregare sum of qty in inventory collection(2 Marks)