

PART – 2

1. (a) **SELECT Dname, COUNT(*) FROM DEPARTMENT, EMPLOYEE WHERE Dnumber = Dno GROUP BY Dname HAVING AVG(Salary)>30000;**

(b) **SELECT DName, COUNT(*) FROM DEPARTMENT, EMPLOYEE WHERE Dnumber = Dno AND Sex ='M' AND Dname IN(SELECT Dname FROM EMPLOYEE, DEPARTMENT WHERE Dno = Dnumber GROUP BY Dname HAVING AVG(SALARY)>30000) GROUP BY Dname;**

(c) **SELECT Fname, Lname FROM EMPLOYEE WHERE Dno = (SELECT Dno FROM EMPLOYEE WHERE Salary =(SELECT MAX(Salary) FROM EMPLOYEE));**

(d) **SELECT Fname, Lname FROM EMPLOYEE WHERE Salary > 10000 + (SELECT MIN(SALARY) FROM EMPLOYEE);**

(e) **SELECT Fname, Lname FROM EMPLOYEE e WHERE Salary = (SELECT MIN(Salary) FROM EMPLOYEE em WHERE e.Dno = em.Dno) AND Ssn IN (SELECT Ssn FROM EMPLOYEE, DEPENDENT WHERE Ssn = Essn GROUP BY Ssn HAVING COUNT(*) > 1);**
2. (a) **CREATE VIEW MANAGER_INFO AS SELECT Dname, Fname, Salary FROM EMPLOYEE , DEPARTMENT WHERE Mgr_ssn = Ssn;**

(b) **CREATE VIEW DEPT_PROJECT_INFO AS SELECT Dname, Fname, (SELECT COUNT(*) FROM EMPLOYEE ee WHERE ee.Dno = d1.Dnumber) AS number_of_emp, (SELECT COUNT (*) FROM PROJECT p WHERE p.Dnum = d1.Dnumber) AS number_of_projects FROM DEPARTMENT d1, EMPLOYEE e1 WHERE d1.Mgr_ssn = e1.Ssn;**

(c) **CREATE VIEW DEPT_HOURS_INFO AS SELECT Pname, Dname, (SELECT COUNT(*) FROM WORKS_ON w1 WHERE w1.Pno = p1.Pnumber) AS Num_Employees , (SELECT SUM(w2.Hours) FROM WORKS_ON w2 WHERE w2.Pno = p1.Pnumber GROUP BY Pno) AS Total_Hours FROM PROJECT p1, DEPARTMENT d1 WHERE p1.Dnum = d1.Dnumber ;**

(d) **CREATE VIEW PROJECT_INFO AS SELECT Pname, Dname, (SELECT COUNT(*) FROM WORKS_ON w1 WHERE w1.Pno = p1.Pnumber) AS num_employees, (SELECT SUM(w2.Hours) FROM WORKS_ON w2 WHERE w2.Pno = p1.Pnumber GROUP BY Pno) AS Total_hours FROM PROJECT p1, DEPARTMENT d1 WHERE p1.Dnum = d1.Dnumber AND (SELECT COUNT(*) FROM WORKS_ON w2 WHERE w2.Pno = p1.Pnumber GROUP BY w2.Pno) > 1**

(e) **CREATE VIEW EMP_INFO AS SELECT Fname, Lname, Salary, Dname, (SELECT Fname, Lname FROM EMPLOYEE e2 WHERE d1.Mgr_ssn = e2.Ssn) AS Mgr_name, (SELECT Salary FROM EMPLOYEE e3 WHERE d1.Mgr_ssn = e3.Ssn) AS Mgr_Salary, (SELECT AVG(Salary) FROM EMPLOYEE e4 WHERE e4.Dno = D1.Dnumber GROUP BY e4.Dno) AS Avg_Salary FROM EMPLOYEE e1, DEPARTMENT d1 WHERE e1.Dno = d1.Dnumber;**

