**PRACTICALS TERM 2 – SQL QUESTIONS**

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| **QUESTION**  **NO.** | | **OBJECTIVE & SOLUTIONS** |
|  | | Table : **Employee**      Table : **Department** |
| **1.** | | Write SQL Commands for questions (1) to (v) based on the tables Employee &  Department  I. Create tables Employee & Department  II. Insert the first record into the tables Employee & Department  III. Display the various department numbersfrom the table Employee. A department  number should be displayed only once.  IV. Display the employee number, name and salary ofthose employees whose salary is  between 35000 and 40000.  V. Display the names and salaries of all the employees who are working neither in West  zone nor in Centre zone. |
| **SOURCE**  **CODE:** | | 1. create table Employee(EmpNo int, EmpName varchar(20), Salary int, Zone varchar(10), Age int, Grade char(1), DeptId int);   create table Department(Deptid int, DeptName varchar(15),  MinSal int, MaxSal int, HOD int);   1. insert into Employee values(1001, ‘R Jain’, 30000, West, 28, ‘A’, 10);   insert into Department values(10, ‘Sales’, 25000, 35000, 1);   1. select distinct DeptId from Employee; 2. select EmpNo, EmpName, Salary from Employee where 35000<Salary<40000; 3. select EmpName, Salary from Employee where Zone not in (‘West’,’Centre’); |
| **OUTPUT:** | |  |
| **QUESTION**  **NO.** | **OBJECTIVE & SOLUTIONS** | |
| **2.** | Write SQL Commands for questions (1) to (viii) based on the tables Employee & Department.  I. To get the name of the column Deptid to D\_id.  II. Display the name of those employees whose names starts with ‘H’.  III. List the name of employees not having any Grade.  IV. Display the list of employees in descending order of employee code.  V. Find the average salary at each department.  VI. Find maximum salary of each department and display the name of that department which has maximum salary more than 37000.  VII. To delete the records whose grade is not entered.  VIII. Display the name and salary of those employees whose grade is A and from the sales department after incrementing by10% | |
| **SOURCE**  **CODE:** | 1. alter table Department change column Deptid D\_id int;   alter table Employee change column Deptid D\_id int;   1. select EmpName from Employee where EmpName like ‘H%’; 2. select EmpName from Employee where Grade=Null; 3. select \* from Employee order by EmpNo desc; 4. select avg(Salary) from Employee group by D\_id; 5. select max(Salary), DeptName from Employee, Department where Employee.D\_id=Department.D\_id group by DeptName; 6. delete from Employee where Grade is Null; 7. select EmpName, Salary\*1.1 as Salary from Employee where D\_id=10; | |
| **OUTPUT:** | 1. 1     1           1. 1 2. 1      1. 1      1. 1 | |
| **QUESTION**  **NO.** | | **OBJECTIVE & SOLUTIONS** |
| **3.** | | Write SQL Commands for questions 1 to 5 based on the table TEACHER  1) To show all information about the teachers whose salary is greater than 20000.  2) To list all female teachers who are from History department.  3) To list all names of all teachers beginning with ‘M’ sorted by Name in descending order.  4) To count number of teachers with age less than 32.  5) To display the maximum salary . |
| **SOURCE**  **CODE:** | | 1. Select \* from TEACHER where SALARY>20000; 2. Select NAME from TEACHER where SEX=’F’; 3. Select NAME from TEACHER where NAME like ‘M%’ order by NAME desc; 4. Select Count(\*) from TEACHER where AGE>32; 5. Select max(SALARY) from TEACHER; |
| **OUTPUT:** | | 1. 1 2. 1 3. 1 4. 1 5. 1 |

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| **4.** | Write SQL Commands for questions 1 to 3 on the basis of table ADMIN and give the output for queries 4 and 5.    1) To alter the table to add new column EXPERIENCE.  2) To update table ADMIN by giving all staff 10 yrs experience.  3) To display the records in the descending order of staff name .  4) To display the number of staff names beginning with letter ‘R’.  5) To display the number of teachers in each subject |
| **SOURCE**  **CODE:** | 1. Alter table ADMIN add EXPERIENCE int; 2. Update ADMIN set EXPERIENCE=10; 3. Select \* from ADMIN order by TNAME; 4. Select count(TNAME) from ADMIN where TNAME like ‘R%’; 5. Select count(\*), SUBJECT from ADMIN group by SUBJECT; |
| **OUTPUT:** | 1. 1      1. 1      1. 1 2. 1 |

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| **QUESTION**  **NO.** | **OBJECTIVE & SOLUTIONS** |
| **5.** | Write queries for (i) to (v) based on the table STUDENT    1) To get the SUBJECT and the average marks scored by the students in that subject from the table STUDENT.  2) To change the name of the column ST\_CODE to ADMN\_NO.  3) To get the student names sorted by marks in the descending order.  4) To get the number of students who secured more than 80% marks from the table student.  5) To get the student names that start with "a" and are at least 5 characters in length |
| **SOURCE**  **CODE:** | 1. Select SUBJECT, avg(MARKS) from STUDENT group by SUBJECT; 2. Alter table STUDENT change ST\_CODE ADMN\_NO int; 3. Select ST\_NAME from STUDENT order by MARKS desc; 4. Select count(\*) from STUDENT where MARKS>80; 5. Select ST\_NAME from STUDENT where ST\_NAME like ‘A%’ and length(ST\_NAME)>4; |
| **OUTPUT:** | 1. 1      1. 1 2. 1 3. 1 |