**1.1:DATA QUERY LANGUAGE**

1). select staff\_name,design\_code from staff\_master where hiredate<'01-jan-2003' and staff\_sal between 12000 and 25000;

2). select staff\_code ,staff\_name , dept\_code from staff\_master where ( sysdate-hiredate)/365 >= 18 order by hiredate desc;

3). select \* from staff\_master where mgr\_code is null;

4). select \* from book\_master where book\_pub\_year between 2001 and 2004 and book\_name like '%"&"%';

5). select staff\_name from staff\_master where staff\_name like '%\\_%' escape '\';

**2.1: SINGLE ROW FUNCTIONS**

1). select staff\_name, lpad(staff\_sal,15,'$') as Salary from staff\_master;

2). select student\_name,to\_char(student\_dob,'month dd yyyy') as student\_dob from student\_master where to\_char(student\_dob,'day') like ('%saturday%') or to\_char(student\_dob,'day') like ('%sunday%');

3). select staff\_name, round ((months\_between(sysdate,hiredate)),0) as Months\_Worked from staff\_master order by Months\_Worked;

4). SELECT \* FROM STAFF\_MASTER s WHERE TO\_NUMBER(TO\_CHAR(s.hiredate, 'DD')) <= 15;

5). alter table staff\_master add grade varchar2(20);

update staff\_master set grade='A' where staff\_sal>50000;

update staff\_master set grade='B' where staff\_sal>25000 and staff\_sal<50000;

update staff\_master set grade='C' where staff\_sal>10000 and staff\_sal<25000;

update staff\_master set grade='D' where staff\_sal<10000;

select staff\_name,staff\_sal,grade from staff\_master;

6). select staff\_name,to\_char(hiredate,'DD MONTH YYYY') AS hiredate,to\_char(hiredate,'DAY')AS DAY from STAFF\_MASTER ORDER BY TO\_CHAR(HIREDATE,'DAY') DESC;

7). select instr('Mississippi', 'i',2,3) from dual;

8). select to\_char(next\_day(last\_day(sysdate)-7,'friday','dd month,yyyy') as payday from dual;

9). select student\_code, student\_name, decode(dept\_code, 20, 'electronics', 30, 'electricals', 'others') department\_name from student\_master;

**2.2: GROUP FUNCTIONS**

1). select round(MAX(staff\_sal),0)"Maximum", round(MIN(staff\_sal),0)"minimun",round(SUM(staff\_sal),0)"sum",round(avg(staff\_sal),0)"average", dept\_code from staff\_master group by dept\_code;

2). SELECT Dept\_code,COUNT(dept\_code) AS Total\_Number\_of\_Managers FROM staff\_master WHERE JOB IN('mgr\_code') GROUP BY Dept\_code,staff\_job;

3). select staff\_sal, department\_master.dept\_code, department\_master.dept\_name from staff\_master, department\_master where staff\_sal>20000and mgr\_code=NULL;

**3.1: JOINS AND SUBQUERIES**

1). select staff\_name,staff\_salary,d.deptcode,d.deptname from staff\_master,dept\_master d where staff\_salary>20000;

2). SELECT S.STAFF\_CODE AS STAFF# ,S.STAFF\_NAME AS STAFF,D.DEPT\_NAME,S.MGR\_CODE AS MGR# FROM STAFFMASTER S,DEPARTMENT\_MASTER D WHERE S.DEPT\_CODE=D.DEPT\_CODE;

3). SELECT S.STUDENT\_CODE,S.STUDENT\_NAME,B.BOOK\_CODE,BB.BOOK\_NAME FROM STUDENT\_MASTER S,BOOK\_TRANSACTIONS B, BOOK\_MASTER BB WHERE S.STUDENT\_CODE=B.STUDENT\_CODE AND TO\_CHAR(B.BOOK\_EXPECTED\_RETURN\_DATE,'DD MM YYYY') LIKE TO\_CHAR(SYSDATE,'DD MM YYYY');

4). select s.staff\_code, s.staff\_name, b.book\_code, b.book\_name, bb.book\_issue\_date, d.design\_name, dm.dept\_name from staff\_master s, book\_master b, book\_transactions bb, designation\_master d, department\_master dm whee s.staff\_code=bb.staff\_code and b.book\_code=bb.book\_code and sysdate-30<= bb.ook\_issue\_date;

6). select staff code,staff name,staff sal from staff master where staff sal>(select avg(staff sal)from staff master);

7). select book\_pub\_author, book\_name from book\_master where book\_pub\_author in(select book\_pub\_author from book\_master group by book\_pub\_author having count(book\_pub\_author)>1);

8). SELECT S.Staff\_Code,D.Staff\_Name,D.DEPT\_NAME FROM STAFF\_MASTER S,BOOK\_TRANSACTIONS D GROUP BY S.STAFF\_NAME HAVING COUNT(D.STAFF\_NAME)>1;

9). SELECT S.STUDENT\_CODE,S.STUDENT\_NAME,D.DEPT\_NAME FROM STAFFMASTER S,DEPARTMENT\_MASTER D GROUP BY S.DEPT\_CODE HAVING MAX(S.DEPT\_CODE);

10). SELECT S.Staff\_Code,S.Staff\_Name,D.DEPT\_NAME,F.DESIGN\_NAME FROM STAFFMASTER S, DEPARTMENT\_MASTER D,DESIGNATION\_MASTER F WHERE MONTHS\_BETWEEN(TO\_CHAR(HIREDATE,'MM') ,TO\_CHAR(SYSDATE,'MM'))<3;

11). select b.ename, count(\*) from emp e join emp b on b.empno = e.mgr group by b.empno,b.ename;

13). SELECT DEPT\_CODE,DEPT\_NAME,COUNT(S.STAFF\_NAME) AS NUMBEROFPEOPLE FROM STAFF\_MASTER S,DEPARTMENT\_MASTER D GROUP BY DEPT\_CODE;

**4.1: DATABASE OBJECTS**

1). create table customer(Customerid, number(5), cust\_name varchar2(20), Address1 varchar2(30), Address2 varchar2(30));

2). alter table cust

modify cust\_name varchar2(30);

alter table cust rename column cust\_name to customername;

3).a). alter customer add age number(3);

alter customer add gender varchar2(10);

alter customer add phoneno number(10);

b). alter customer rename to cust\_table;

4). insert into cust values(1000,'Allen', '#115 Chicago', '#115 Chicago', 'M','25','7878776');

insert into cust values(1001,'George', '#116 France', '#116 France', 'M','25','434524');

insert into cust values(1002,'Becker', '#114 New York', '#114 New York', 'M','45','431525');

5). alter table cust\_table add constraint custid\_prim primary key(customerid);

6). insert into cust\_tables values(1002, 'John', '#114 chicago', '#114 Chicago', 'M' , 45, 439525);

error at line 1:

ora:00001 : unique constraint <system.custid\_prim> violated

7). alter table cust\_table disable constraint custid\_prim;

insert into cust\_table values (1022,'beckar', '#114 New york' , '# 114 New york", 'M',45,431525);

insert into cust\_table values (1003,'Nanapateker', '#115 India' , '# 114 India", 'M',45,431525);

8). Alter table cust\_table add constraints Custid\_prim PRIMARY KEY (customerid);

9). Alter table cust\_table drop PRIMARY KEY custid\_prim;

Insert into cust\_table(1002, Becker, #114 New York, #114 New york , M, 45,431525, 15000.50);

Insert into cust\_table(1003, Nanapatekar, #115 India, #115 India , M, 45, 431525,20000.50);

10). truncate table customer ;

11). alter table customer add email varchar2(20);

12). alter table customer drop column email;

13). create table Suppliers as select(customerid as suppid,customername as sname,adddress1 as addr1,address2 as addr2,phoneno as contactno) from cust\_table;

14). Drop table suppliers;

create table customerMaster(customerId number(5) primary key, customername varchar2(20) not null, address1 varchar2(20) not null, address2 varchar2(20), gender varchar2(1), age number(3), phoneNo number(10));

15). Create table Accoutnmaster(customerid number(5),Accountnumber number(10) primary key ,accounttype char(3),ledgerbalance number(10) Not Null);

Create sequence seq\_ano

MINVALUE 101

MAXVALUE 10000

START WITH 101

INCREMENT BY 1

CACHE 101;

16). Alter table Accountmaster ADD constraint ass\_fk FOREIGN KEY(customerid) REFERENCES customermaster(customerid);

17). insert into CustomerMaster values(1000,Allen,#115Chicago,#115Chicago,M,25,7878776);

insert into CustomerMaster values(1001,George,#116France,#116France,M,25,434524);

insert into CustomerMaster values(1002,Becker,#114New York,#114New York,M,45,4315250);

18). Alter table accountmaster and constraint ck\_ac check(accounttype = 'NRI' or accounttype = 'IND');

19). Alter table accountmaster and constraint balance\_check(ledger balance > 5000);

20). Delete from accountmaster,cust\_table where customerid=1001;

21). create table accountdetails as select \*from accountmaster;

22). create view acc\_view as select (customer\_id,customer\_name,accountnumber,accounttype,ledgerbalance) from accountmaster;

23). create view vAccs\_Dtls as select Accounttype,ledgerbalance from Accountmaster where where accounttype 'IND' and ledgerbalance < 10000;

24). create view accsvw10 as select \* from employee with READ ONLY;

25). create sequence seq\_dept minvalue 40 start with 40 increment by 10 maxvalue 200 cache 40;

26). create table department\_masters(dept\_no number, dept\_name varchar2(20)) ;

insert into department\_masters values (seq\_dept.NEXTVAL, 'cse');

insert into department\_masters values (seq\_dept.NEXTVAL, 'it');

insert into department\_masters values (seq\_dept.NEXTVAL, 'ece');

27). DROP sequence seq\_dept;

28). create index no\_name on emp(empno);

select \* from emp;

29). create synonym syn\_emp for emp;

30). select \* from user\_synonyms where SYNONYM\_NAME='SYNEMP';

31). CREATE INDEX IDX\_EMP\_HIREDATE on emp(HIREDATE);

32). create sequence Seq\_Emp start with 1000 increment by 1;

create table employee(empno number, ename varchar2(30));

insert into employee values(Seq\_Emp.nextval, '&ename');

**5.1: DATA MANIPULATION LANGUAGE**

1). create table employee as select \* from emp where 1=3;

desc employee;

2). select \* from employee;

3). update table employee set job = (select job from employee where empno = 7788), dept no = (select deptno from employee where empno = 7788) where empno = 7698;

4). delete from employee where dept\_name='sales';

5). update employee set deptno =(select deptno from employee where empno = 7698) where empno= 7788;

6). insert into employee values(&empno,'&ename','&job',&mgr,'&hiredate',&salary,&comm,&deptno);

**6.1: TRANSACTION CONTROL LANGUAGE STATEMENTS**

1). insert into customermaster values(&customerid, &customername, &gender, &age, &phoneno);

2). insert into customermaster (customerid,'customername','address1','address2','gender',age,'phoneno) values ( 6000, John, #115 Chicago, #115 Chicago, M, 25, 7878776, 10000 );

insert into customermaster (customerid,'customername','address1','address2','gender',age,'phoneno) values ( 6001, Jack, #116 France, #116 France, M, 25, 434524, 20000 );

insert into customermaster (customerid,'customername','address1','address2','gender',age,'phoneno) values ( 6002, James, #114 New York, #114 New York, M, 45, 431525, 15000.50);

savepoint p1;

3). insert into customer\_table values(6003, 'John', '#114 Chicago', '#114 Chicago ', 'M',45, 439525,1900.60');

4). rollback p1;