Using the default table of Oracle given above. Write SQL queries for the following:

- (a) List the names and code of all employees.
 - 1(a)>>SELECT ENAME, EMPNO FROM EMP;
- (b)List the names, employee code and department code of all clerks.
 - 1(b)>>SELECT ENAME, EMPNO, DEPTNO FROM EMP WHERE JOB='CLERK';
- (c)List the names, employee code and salary of all managers.
 - 1(c)>>SELECT ENAME, EMPNO, SAL FROM EMP WHERE JOB='MANAGER':
- (d)List the names, employee code and hiredate of all analysts.
 - 1(d)>>SELECT ENAME, EMPNO, HIREDATE FROM EMP WHERE JOB='ANALYST';
- (e) List the employees whose salary lies between 2000 and 3000.
 - 1(e)>>SELECT *FROM EMP WHERE SAL BETWEEN 2000 AND 3000;
- (f) List the employees whose salary less than 1000.
 - 1(f)>>SELECT *FROM EMP WHERE SAL <1000;
- (g)List the employees whose salary greater than 4000.
 - 1(g)>>SELECT *FROM EMP WHERE SAL >4000;
- (h) List the employees whose salaries are 800, 1600 or 2450.
 - 1(h)>>SELECT *FROM EMP WHERE SAL=800 OR SAL=1600 OR SAL=2450;
 - >>SELECT *FROM EMP WHERE SAL IN (800,1600,2450);
- (i) List the names of all employees who are either clerks or salesman or analyst.
 - 1(i)>>SELECT *FROM EMP WHERE JOB='CLERK' OR JOB='SALESMAN' OR JOB='ANALYST';
- (j) List the employee those who are not getting commission.

- (k) List the employee those who are getting commission.
 - 1(k)>>SELECT *FROM EMP WHERE COMM IS NULL;
- (1) List the employee name starts with 'F'.
- 1(1)>>SELECT ENAME FROM EMP WHERE ENAME LIKE 'F%';

- a. List the names and job of all employees who have names exactly 5 characters in length.
- a. >>SELECT ENAME, JOB FROM EMP WHERE LENGTH (ENAME) = 5;
- b. List all employees whose names start with 'G'.

b.>>SELECT ENAME, JOB FROM EMP WHERE ENAME LIKE 'G%';

- c. List all employees who name ends with 'N'.c. >>SELECT ENAME, JOB FROM EMP WHERE ENAME LIKE '%N';
- d. List the names and job of all employees who have names exactly 5 characters in length and ends with 'S'.
- d. >>SELECT ENAME, JOB FROM EMP WHERE LENGTH (ENAME) = 5
 AND ENAME LIKE '%S';
- e. List all employees who have not joined between 1/1/81 and 31/12/81.
- e. >>SELECT ENAME,HIREDATE FROM EMP
 WHERE TO_DATE(HIREDATE,'DD-MM-YY')<'01-JAN-81'
 OR
 TO_DATE(HIREDATE,'DD-MM-YY')>'31-DEC-81';
 IT Department PAGE No:2

- f. List all employees whose job does not start will "CL".
- f. >>SELECT ENAME, JOB FROM EMP WHERE JOB NOT LIKE 'CL%';
- g. List all managers who earn more than Rs. 4000/-.
- g. >>SELECT ENAME,SAL FROM EMP WHERE JOB='MANAGER' AND SAL>4000;
- h. List all clerks and salesman who earn more than Rs. 1600/-
- h. >>SELECT ENAME, JOB, SAL FROM EMP WHERE SAL >1000 AND JOB IN ('CLERK', 'SALESMAN');
- i. List the names and salaries of all employees who were joined as manager during 1981.
- i. >>SELECT ENAME,SAL,HIREDATE,JOB FROM EMP WHERE TO_DATE(HIREDATE,'DD-MM-YY')>'01-JAN-81'
 AND
 TO_DATE(HIREDATE,'DD-MM-YY') <'31-DEC-81' AND JOB='MANAGER';

For the EMP relation, frame the following queries using SQL.

- (a) Calculate the average salary of all employees.
 - A) SELECT AVG(SAL) "AVERAGE SAL" FROM EMP;
- (b) Calculate the average salary of all Managers.
- B) SELECT AVG(SAL) "AVERAGE SAL" FROM EMP WHERE JOB='MANAGER'; (c)Calculate the total salary of all employees.
 - C) SELECT SUM(SAL) "TOTAL SAL" FROM EMP;
- (d) Calculate the total salary of all managers.

- D) SELECT SUM(SAL) "TOTAL SAL" FROM EMP WHERE JOB='MANAGER';
- (e) Find the minimum salaries earned by the employees.
 - E) SELECT MIN(SAL) "MINIMUM SAL" FROM EMP';
- (f) Find the maximum salaries earned by the employees.
 - F) SELECT MAX(SAL) "MAXIMUM SAL" FROM EMP;
- (g) Find the minimum salaries earned by a clerks.
- G)SELECT MAX(SAL) "MAXIMUM SAL" FROM EMP WHERE JOB='CLERK'
- (h) Find the maximum salaries earned by a salesman.
- H)SELECT MAX(SAL) "MAXIMUM SAL" FROM EMP WHERE JOB='SALESMAN'
- (i) Find the minimum and maximum and average salaries earned by a employees.
 - I) SELECT MAX(SAL) "MAXIMUM SAL",MIN(SAL) "MINIMUM SAL",AVG(SAL) "AVERAGE SAL" FROM EMP
- (j) Find the minimum and maximum and average salaries earned by a clerks.
- J) SELECT MAX(SAL) "MAXIMUM SAL",MIN(SAL) "MINIMUM SAL",AVG(SAL) "AVERAGE SAL" FROM EMP WHERE JOB
- (k) List the total number of employees and the average salaries of the different departments.
- K) SELECT DEPTNO,COUNT(*), AVG(SAL) "AVARAGE SAL" FROM EMP GROUP BY DEPTNO
- (l) Calculate total number of employees.
- L)SELECT COUNT(*) "NO OF EMPLOYEES" FROM EMP
- (m) Calculate total number of managers.
- M) SELECT COUNT(*) "NO OF EMPLOYEES" FROM EMP WHERE JOB='MANAGER'
- (n) Calculate the number of employees who are not getting any commission.

N)SELECT COUNT(*) "NO OF EMPLOYEES" FROM EMP WHERE COMM IS NULL

(o) Calculate the number of employees who are getting any commission.

O)SELECT COUNT(*) "NO OF EMPLOYEES" FROM EMP WHERE COMM IS NOT NULL

(p) List the details of all managers in ascending order of joining dates.

P)SELECT * FROM EMP WHERE JOB='MANAGER' ORDER BY HIREDATE

- (q) List the average salaries for each different job.
- Q) SELECT AVG(SAL) "AVERAGE SALARY" FROM EMP GROUP BY JOB (r)Display the average salary for each different job.
- R) SELECT AVG(SAL) "AVERAGE SALARY" FROM EMP GROUP BY JOB
- (s)Display the minimum, maximum, and average salaries for each job group.

S)SELECT JOB,MAX(SAL) "MAXIMUM SAL",MIN(SAL) "MINIMUM SAL",AVG(SAL) "AVERAGE SAL" FROM EMP GROUP BY JOB

(t) Find all departments which have less than 3 employees.

T)SELECT DEPTNO,COUNT(*) "NO OF EMPLOYEE" FROM EMP GROUP BY DEPTNO HAVING COUNT(*)<4

(u) List the details of the employees in ascending order of department number, and within each department, in descending order of salary.

U)SELECT * FROM EMP ORDER BY DEPTNO, SAL DESC

(v) Display the name, deptno and annual salary of each employee in order salary and deptno

V) SELECT ENAME, DEPTNO, SAL FROM EMP ORDER BY DEPTNO (w) Display the name of employee who earns maximum salary.

W)SELECT ENAME,SAL FROM EMP WHERE SAL= (SELECT MAX(SAL) FROM EMP)

(x) Display the name of employee who earns minimum salary.

X)SELECT ENAME,SAL FROM EMP WHERE SAL=(SELECT MIN(SAL) FROM EMP)

(y)Display the name of employee who earns maximum salary whose job is salesman.

Y)SELECT ENAME,SAL,JOB FROM EMP
WHERE SAL=(SELECT MAX(SAL)
FROM EMP
WHERE JOB='SALESMAN')

(z) Display the name of employee who earns minimum salary whose job is clerk.

Z)SELECT ENAME,SAL,JOB
FROM EMP WHERE SAL
=(SELECT MIN(SAL)
FROM EMP
WHERE JOB='CLERK')

aa) Display the department number whose average salary is maximum.

AA)SELECT DEPTNO,AVG(SAL) FROM EMP

GROUP BY DEPTNO

HAVING AVG(SAL)=(SELECT MAX(AVG(SAL))

FROM EMP

GROUP BY DEPT NO)

Using the default table of Oracle, such as Emp and Dept.

(a) List all employee names, dept name and the city, in department name order.

A)SELECT ENAME, DNAME ,LOC FROM EMP, DEPT WHERE EMP.DEPTNO= DEPT.DEPTNO ORDER BY DNAME

(b) List all employee name, dept number, dept name and salary.

B)SELECT ENAME, DNAME ,DEPT.DEPTNO,SAL FROM EMP, DEPT WHERE EMP.DEPTNO= DEPT.DEPTNO

- (c)List all employees working in Dallas in descending order of salary.
- C) SELECT ENAME ,LOC,SAL FROM EMP, DEPT WHERE EMP.DEPTNO= DEPT.DEPTNO AND LOC='DALLAS' ORDER BY SAL
- (d) List all employees' name, job, salary and department name for everyone in the company except clerks. Sort the report with respect to job and salary.
- D) SELECT ENAME ,JOB,SAL,DNAME
 FROM EMP, DEPT
 WHERE EMP.DEPTNO= DEPT.DEPTNO AND JOB
 NOT LIKE 'CL%'
 ORDER BY SAL,JOB
- (e) List all employee names who work in the same city as an employee named 'FORD'
- E) SELECT ENAME, LOC FROM EMP, DEPT
 WHERE EMP.DEPTNO= DEPT.DEPTNO
 AND LOC=(SELECT LOC
 FROM EMP, DEPT
 WHERE EMP.DEPTNO= DEPT.DEPTNO
 AND
 ENAME='FORD')
 IT Department PAGE No:7

(f) Display the name of the dept that has no employee.

F)SELECT DNAME FROM DEPT

WHERE DEPTNO= ANY (SELECT DEPTNO
FROM DEPT

MINUS
SELECT DEPTNO
FROM EMP)

Assignment No: -05

- (a) List the employees belonging to the department 20.
- a) SELECT ENAME FROM EMP WHERE DEPTNO=20
- b) List the name and salary of the employees whose salary is more than 1000.
- b) SELECT ENAME, SAL FROM EMP WHERE SAL>1000
- c) List the employee number and the name of the manager.
- c) SELECT ENAME, EMPNO FROM EMP WHERE JOB='MANAGER'
- d) List the names of the clerks working in the department 20.
- d) SELECT JOB FROM EMP WHERE DEPTNO=20
- e) List the name of the analysts and salesman.
- e) SELECT ENAME, JOB FROM EMP
 WHERE JOB IN ('SALESMAN', 'ANALYST')
- f) List the details of the employees who have joined before the end of September 81.

f)SELECT * FROM EMP WHERE TO_DATE(HIREDATE,'DD-MM-YY') < '30-SEP-81'

- (g) List the names of the employees who are not managers.
- g) SELECT ENAME FROM EMP WHERE JOB NOT LIKE 'MANAGER'
- h) List the name of the employees whose employee numbers 7369,7521,7839,7934,7788.
 - h) SELECT ENAME,EMPNO FROM EMP

WHERE EMPNO IN (7369,7521,7839,7934,7788)

- i) List the employee details not belonging to the department 10,30 and 40.
 - i) SELECT *FROM EMP WHERE DEPTNO NOT IN (10,30,40)
- j) List the employee names who have joined before 30th June'81 and after December '81.
 - j) SELECT ENAME

FROM EMP

WHERE TO_DATE(HIREDATE,'DD-MM-YY')<'30-JAN-81' OR TO_DATE(HIREDATE,'DD-MM-YY')>'31-DEC-81'

- k) List the name of the employee and designation (job) of the employee who does not report to anybody (who doesn't have manager).
 - k) SELECT ENAME, JOB FROM EMP WHERE MGR IS NULL
- l) List the different jobs (designations) available in the emp table.
- 1) SELECT DISTINCT JOB FROM EMP
- m) List the employees not assigned to any department.

- n) List the details of the employees whose salary is greater than 2000 and not eligible for commission.
- N) SELECT * FROM EMP WHERE SAL>2000 AND COMM IS NULL
- o) List the employee names having 'I' as the second character.
- O) SELECT ENAME FROM EMP WHERE ENAME LIKE '_I%'
- p) List the name, salary and PF amount of all the employees (PF is calculated as 10% of salary).
- P) SELECT ENAME, 0.1*SAL "PF" FROM EMP
- q) List the employee number, name and salary in ascending order of salary.
- Q) SELECT ENAME,EMPNO,SAL FROM EMP ORDER BY SAL
- r) Lists the employee name and hiredate in descending order of hiredate.
 - R) SELECT ENAME, HIREDATE FROM EMP ORDER BY HIREDATE DESC
- s) List the employee name, salary, PF, HRA, DA and gross salary; order the result in ascending order of gross. HRA is 50% of salary and DA is 30% of salary.
 - S) SELECT ENAME,SAL,0.1*SAL "PF",0.5*SAL "HRA",0.3*SAL "DA",SAL+ 0.1*SAL+0.5*SAL+0.3*SAL "GROSS" FROM EMP ORDER BY JOB

t) List the department number and the total salary payable in each department. List the jobs and number of employees in each job. The result should be in descending order of the number of employees.

T) SELECT DEPTNO,SUM(SAL) "TOTAL SAL" FROM EMP GROUP BY DEPTNO

SELECT JOB,COUNT(*) "EMPNO"
FROM EMP
GROUP BY JOB
ORDER BY COUNT(*) DESC

- u) List the total salary, maximum, minimum and average salary of the employee's job wise.
 - U) SELECT JOB,SUM(SAL) "TOTAL SAL", MAX(SAL) "MAX", MIN(SAL)
 "MIN",AVG(SAL) "AVERAGE"
 FROM EMP
 GROUP BY JOB
- v) List the average salary from each job excluding manager.
 - V) SELECT AVG(SAL) "AVERAGE", JOB FROM EMP GROUP BY JOB HAVING JOB NOT LIKE 'MANAGER'
- w) List the average monthly salary for each job type within department.
 - W) SELECT AVG(SAL) "MONTHLY", JOB, DEPTNO FROM EMP GROUP BY DEPTNO, JOB
- x) List average salary for all departments employing more than five people.
 - X) SELECT DEPTNO, COUNT(*) "NO OF EMP", AVG(SAL) "AVERAGE" FROM EMP

 GROUP BY DEPTNO

 HAVING COUNT(*)>5

- Y) List job of all the employees where maximum salary is greater than or equal to 3000.
- Y) SQL> SELECT JOB FROM EMP GROUP BY JOB HAVING MAX(SAL)>=3000;
- Z) List the total salary, maximum and minimum salary and the average salary of employees job wise for department number 20 and display only those rows having average salary greater than 1000.

Assignment No: -6

(a) List the employees earns more than any employee in CHICAGO.

```
A> SELECT ENAME ,SAL
FROM EMP,DEPT
WHERE EMP.DEPTNO=DEPT.DEPTNO
AND
SAL>(SELECT MAX(SAL)
FROM EMP,DEPT
WHERE EMP.DEPTNO=DEPT.DEPTNO
AND
LOC='CHICAGO' GROUP BY LOC)
```

SQL>/

| ENAME | SAL |
|-------|------|
| | |
| JONES | 2975 |
| SCOTT | 3000 |
| KING | 5000 |
| FORD | 3000 |

(b) List the name of the employee who works in the same department as SMITH.

(c)List the name, employee number ,their manager name and manager number.

C> SELECT E1.ENAME,E1.EMPNO,E2.ENAME,E2.MGR FROM EMP E1, EMP E2 WHERE E1.MGR=E2.EMPNO

SQL>/

| ENAME | EMPNO ENAME | MGR |
|--------|-------------|------|
| | | |
| SMITH | 7369 FORD | 7566 |
| ALLEN | 7499 BLAKE | 7839 |
| | | |
| MILLER | 7934 CLARK | 7839 |

13 rows selected.

(d) List the name of the employee job is same as 'CLARK'.

```
D> SELECT ENAME,JOB
    FROM EMP
    WHERE JOB=(SELECT JOB
    FROM EMP
    WHERE ENAME='CLARK')
SQL> /
```

```
ENAME
        JOB
IONES MANAGER
BLAKE MANAGER
CLARK
       MANAGER
 (e) List the name of employee whose salary is more than 'TURNER'.
E> SELECT ENAME
FROM EMP
WHERE SAL>(SELECT SAL
          FROM EMP
              WHERE ENAME='TURNER')
SQL>/
ENAME
-----
ALLEN
FORD
  6 rows selected.
f) List the name of employee who joined after 'ALLEN'.
F> SELECT ENAME, HIREDATE
          FROM EMP
                   WHERE HIREDATE>(SELECT HIREDATE
                            FROM EMP
                                  WHERE ENAME='ALLEN')
SQL>/
ENAME
       HIREDATE
WARD 22-FEB-81
.....
MILLER 23-JAN-82
  11 rows selected.
```

g) Display the name of the department whose job is 'SALESMAN'.

```
FROM EMP, DEPT
          WHERE EMP.DEPTNO=DEPT.DEPTNO
              AND
              JOB='SALESMAN'
SQL>/
          IOB
DNAME
SALES
         SALESMAN
     Z) Display the name of the department in which 'FORD' works.
H> SELECT DNAME, JOB
     FROM EMP, DEPT
         WHERE EMP.DEPTNO=DEPT.DEPTNO
         AND
          ENAME='FORD'
SQL> /
DNAME
          IOB
RESEARCH ANALYST
    AA) Display the name of the department whose salary is maximum.
       SELECT DNAME
  I>
         FROM EMP, DEPT
            WHERE EMP.DEPTNO=DEPT.DEPTNO
               AND
                   SAL=(SELECT MAX(SAL)
                         FROM EMP)
SQL>/
DNAME
_____
ACCOUNTING
       Display the name of the city(location) in which 'SMITH' works.
BB)
I> SELECT LOC
```

G> SELECT DISTINCT DNAME, JOB

```
FROM EMP, DEPT
               WHERE EMP.DEPTNO=DEPT.DEPTNO
                    AND
                         ENAME='SMITH'
SQL>/
LOC
DALLAS
       Display the name of the city in which the manager works.
CC)
K> SELECT LOC
     FROM EMP, DEPT
         WHERE EMP.DEPTNO=DEPT.DEPTNO
               AND
          JOB='MANAGER'
SQL>/
LOC
DALLAS
CHICAGO
NEW YORK
 (f) Display the grade of the employee named 'MARTIN'.
m)List the employees earns more than every employee in 'DALLAS'.
M > SELECT ENAME, SAL
     FROM EMP, DEPT
         WHERE EMP.DEPTNO=DEPT.DEPTNO
               AND
               SAL>(SELECT MAX(SAL)
                    FROM EMP, DEPT
                         WHERE EMP.DEPTNO=DEPT.DEPTNO
                         AND
```

LOC='DALLAS')

SQL>/

```
ENAME
           SAL
KING
         5000
n) Display the name of the department which has no employee.
N> SELECT DISTINCT DNAME
     FROM DEPT
         WHERE DEPTNO=ANY(SELECT DEPTNO
               FROM DEPT
                 MINUS
                   SELECT DEPTNO
                    FROM EMP)
SQL>/
DNAME
OPERATIONS
o) List name, employee number and the name, employee number of their
   managers' manager
p) list the name of the employee who joined in the same year of 'ADAMS'.
P> SELECT ENAME
     FROM EMP
        WHERE TO_CHAR(HIREDATE,'YY')=(SELECT
           TO_CHAR(HIREDATE,'YY')
              FROM EMP
              WHERE ENAME='ADAMS'
SQL>/
ENAME
```

SCOTT ADAMS

'BLAKE'. O> SELECT ENAME FROM EMP WHERE TO_CHAR(HIREDATE,'MM')=(SELECT TO_CHAR(HIREDATE,'MM') FROM EMP WHERE ENAME='BLAKE' SQL> / **ENAME** _____ **BLAKE ADAMS** list the name of the employee who joined in the same year of 'ADAMS'. r) R> SELECT ENAME FROM EMP WHERE TO_CHAR(HIREDATE,'DD')=(SELECT TO_CHAR(HIREDATE,'DD') FROM EMP WHERE ENAME='ADAMS' SQL>/ **ENAME ADAMS MILLER** s) List the name of the department who gets commissions s) SELECT DISTINCT DNAME FROM EMP, DEPT WHERE EMP.DEPTNO=DEPT.DEPTNO AND **COMM IS NOT NULL** SQL>/ **DNAME**

q) list the name of the employee who joined in the same month of

SALES

Assignmet no: 07

1) Create Table Clientmaster

1(a)>> create table Clientmaster

2) Describe the Table Clientmaster SQL> desc clientmaster

| Name | Null? | Туре |
|---|-------|--|
| CLIENT_NO C_NAME ADD1 ADD2 PINCODE STATE CITY BAL DUE | | VARCHAR2(6) VARCHAR2(20) VARCHAR2(30) VARCHAR2(15) NUMBER(8) VARCHAR2(15) VARCHAR2(15) VARCHAR2(15) NUMBER(10,2) |
| - | | - · · · = = - · (= · · · -) |

3. create table Salesmaster

SQL> create table Salesmaster

```
(salesman_no varchar2(6) primary key, s_name varchar2(20) NOT NULL, add1 varchar2(15), add2 varchar2(15), pincode number(8), state varchar2(20), city varchar2(15), samount number(8,2) NOT NULL, quantity number(8,2) NOT NULL, ytd_sales number (8,2) NOT NULL, constraint ck_slno check(salesman_no like 's%'), constraint ck_smt check (samount <>0), constraint ck_qty check (quantity <>0) );
```

4. Describe the Table salesmaster

SQL> desc salesmaster;

| Name | Null? | Type |
|-------------|----------|--------------|
| SALESMAN_NO | NOT NULL | VARCHAR2(6) |
| S_NAME | NOT NULL | VARCHAR2(20) |
| ADD1 | | VARCHAR2(15) |
| ADD2 | | VARCHAR2(15) |
| PINCODE | | NUMBER(8) |
| STATE | | VARCHAR2(20) |
| CITY | | VARCHAR2(15) |
| SAMOUNT | NOT NULL | NUMBER(8,2) |
| QUANTITY | NOT NULL | NUMBER(8,2) |
| YTD_SALES | NOT NULL | NUMBER(8,2) |

5. CREATE TABLE Salesorder

SQL>CREATE TABLE Salesorder

(order_no VARCHAR2(6) PRIMARY KEY, order_date DATE , client_no VARCHAR2(6) REFERENCES Clientmaster, del_add VARCHAR2(25) , salesman_no VARCHAR2(6) REFERENCES Salesmaster, del_type char(1) DEFAULT 'f', del_date DATE, CONSTRAINT ck_orno check(order_no like 'o%'), CONSTRAINT ck_dtype check (del_type in ('f','p')), CONSTRAINT ck_ddate check (del_date >order_date));

6. DESCRIBE TABLE Salesorder SQL> desc Salesorder;

| Name | Null? | Type |
|-------------|----------|--------------|
| ORDER_NO | NOT NULL | VARCHAR2(6) |
| ORDER_DATE | | DATE |
| CLIENT_NO | | VARCHAR2(6) |
| DEL_ADD | | VARCHAR2(25) |
| SALESMAN_NO | | VARCHAR2(6) |
| DEL_TYPE | | CHAR(1) |
| DEL_DATE | | DATE |

7. Insert value in Clientmaster Table

SQL>INSERT INTO Clientmaster VALUES ('&client_no','&c_name','&add1','&add2','&pincode','&state','&city','&bal_du e') SQL> select * from Clientmaster; SQL> commit; Commit complete. 8. Insert value in Salesorder Table 2(c)>> INSERT INTO Salesorder VALUES('&order_no','&order_date','&client_no','&del_add','&salesman_no','&del_t ype','&del_date'); SQL> select * from Salesorder; ORDER NO ORDER DATE CLIENT NO DEL ADD SALESMAN_NO DEL_TYPE DEL DATE 10-MAR-17 c02 station road,ranchi s01 15-MARo01 F 17 09-FEB-17 c01 club road doranda 002s01 13-MARp 17 10 rows selected. SQL> commit; Commit complete.