Set

1. a) SQRT()

```
select sqrt(64) from dual
```

b) last_day()

```
select last_day('17-june-2010') from dual
```

last_day('17-june-2010')
30-JUN-10

2. Employees reporting to president

```
select e1.ename subordinates, e2.ename president
from employee e1, employee e2, job j
where e1.mgr_no = e2.empno and
e2.job = j.jcode and
j.name = 'president';
```

3. Display the names of employees whose names have second alphabet A in their names.

```
select ename
from Employee
where ename like '_A%';
```

4. Find names of sailors who have reserved both blue and red boats

Intersect

```
select s.sname
from sailors S, Reserves R, Boats B
where s.sid = R.sid and R.bid = B.bid and B.color
                                    = 'red'
```

INTERSECT

```
select S2.sname
from sailors S2, Boats B2, Reserves R2
where S2.sid = R2.sid and R2.bid = B2.bid and
  B2.color = 'blue'
```

5. Names of sailors having min age at each level

6. PL/SQL program to display a sailor details with sid=31.

```
Declare
    v_sid sailors.sid%type:=31;
    v_sname sailors.sname%type;
    v_rating sailors.rating%type;
    v_age sailors.age%type;
begin
    select sname, rating, age into v_sname, v_rating,
v_age. from sailors where sid = v_sid;
dbms_output.put_line('sailor name is '||v_sname);
dbms_output.put_line('sailor rating is '||v_rating);
dbms_output.put_line('sailor age is :'||v_age);
end;
/
```

Set-3

1. Sysdate:

```
select sysdate from dual;
```

sysdate
01-DEC-2020

2. Employee name whose name ends with alphabet 's'.

```
SELECT ename;
FROM Employee
WHERE ename Like '%s';
```

3. Employee names of accounting department:

```
Select ename
from Employee e, Dept d.
Where e.deptno = d.deptno AND
      d.name = 'accounting'
```

No Data found.

4. Sailors name reserved boat no: 103.

```
Select s.sname
from Sailors s, Reserves r
Where s.sid = r.sid and r.bid = 103.
```

5. Color of boats reserved by sailor name 'rusty'.

```
select b.color
From Reserves r, Sailors s, Boats b.
Where s.sid = r.sid and b.bid = r.bid and s.sname
                                = 'rusty'.
```

6. pl/sql program for sailor using %rowtype data type.

```
Declare
        v_id sailors.sid%type;
        srow sailors%rowtype;
begin
        v_id := &v_id;
        select * into srow from sailors where sid = v_id;
    dbms_output.put_line ('sailor name is:' || srow.sname);
    dbms_output.put_line ('sailors rating is:' ||srow.rating);
    dbms_output.put_line ('sailors age is:' || srow.age);
exception
    when no_data_found then
    dbms_output.put_line ('No sailors with given sid');
end;
/
```

Op: sailors name is: Dustin
sailors rating is: 7
Sailors age is: 45.

Set 5 :-

1. a) CONCAT ( ).

Select concat ('Andhra.', 'Pradesh') from dual.

b) Next_Day ( )

Select next_day ('15-Sept-12', 'mon') from Dual

NEXT_DAY('15-SEPT-12','MON')
17-Sept-12

2. Display the employee number and name who do not earn any commision

Select ename, empno
from Employee
Where commission is null

3. Write the job functions of all the employees who are managers of other employees

Select distinct e2.ename managers, j.jname jobs
from Employee e1 = Employee e2, job j
Where e1.mgr_no = e2.empno and
e2.job = j.jcode

4. Find sid of sailors who reserved red boat

Select s.sid
From Sailors s, Boats b, Reserves r
Where b.bid = r.bid and b.color = 'red'

5. Find age of youngest sailor for each rating level

Select s.rating, MIN(s.age)
From sailors S
Group By s.rating.

6. PL/SQL to find factorial of a given number by using function.

```
Declare
  a number;
function fact(n in number)
  return number
  is
  z number;.
Begin
   if n<0 then
      z:=1;
   else if n=1 or n=0 then
      z:=1;
   else
      z:=1;
      for i in 1..n loop
         z:=(z*i);
      end loop;
   end if;
return z;
Begin
   a:=&a;
   dbms_output.put_line(a||'factorial is:'||fact(a));
   end;
   /
```

Set -6:

1. a) sysdate

b) RPAD()

select rpad ('rahini', 10, '@');

rpad ('RAHINI', 10, '@')
rahini@@@@

2. Display the names of all employees who are working in depart number 10.

select ename
from Employee
where deptno = 10.

3.

4. Find colors of boats reserved by Lubber

select b.color
from Sailors S, Reserves R, Boats B
where S.sid = R.sid and R.bid = B.bid and
S.sname = 'Lubber'.

5. Names of sailors reserved atleast one boat

select S.sname
from Sailors S, Reserves R
where S.sid = R.sid

6. PL/SQL program to handle divide by zero exception

```
Declare
    a number := &a;
    b number := 0;
    c number;
Begin
    c:=a/b;
Exception
    When zero_divide then
        dbms_output.put_line ("Attempt to divide by zero");
    When others then
        dbms_output.put_line ("An exception is raised
in program");
end;
/
```