**Advanced Database Management System**

**Lab Quiz**

1. Write a PL/SQL procedure to count number of employees in a specific department which will take as a parameter and check whether this department have any vacancies or not. If any vacancies, how many vacancies are in that department. We assume that department can have maximum 10 employees
2. Write a package which will contain the following following procedures and functions:

* Write a PL/SQL procedure to retrieve the employee name, join\_date, and designation from employee database of an employee whose number is input by the user receive in the paremeter. Use Exception block to handle the runtime time exception
* Write a PL/SQL private function that accepts department number and returns the total salary of the department. Also write a procedure to call the function.

1. Suppose XYZ company has a rule stating that a employee’s salary cannot be changed by more than 20 % of the original salary. Create a trigge ‘salary\_change\_monitoring’ to enforce this constraint. The trigger fires whenever there is an update to the emp table and outputs a suitable error message when the rule is violated.

**Ans:**

1.

create or replace trigger salary\_change\_monitoring

before update or delete or insert on emp

for each row

declare

exp number;

begin

exp:=(sysdate-:old.hiredate)/365;

if

exp<100 and :new.sal>(:old.sal+(:old.sal\*.20))

then

raise\_application\_error(-20201,'errorSal');

end if;

end;

2.

create or replace trigger qty\_on\_hnd

before update or insert on product\_master

for each row

begin

if :new.qty <0

then

raise\_application\_error(-20202,'negQOH');

end if;

end;

3.

create or replace trigger bookself\_op

before update or insert on bookself

for each row

begin

insert into bookself\_audit values(:new.Title,:new.publisher,:new.rating,:new.rating,sysdate);

end;

4.

create or replace trigger LAB7\_RES\_TRG

before

insert on LAB7\_RESERVATIONS

begin

select count(\*) into c where flight\_id=:new.flight\_id;

select Seats into s where flight\_id=:new.flight\_id;

if c<0 then

raise\_application\_error(-20208,'Invalid flight id');

end if;

if c>0 and s=0 then

raise\_application\_error(-20208,CONCAT('Flight ',new.flight\_id,' has no seats left'));

end if;

end;