Program 1

FACTORIAL OF A NUMBER USING FUNCTION

```
SET  SERVEROUTPUT ON;
CREATE  OR REPLACE  FUNCTION factorial (n IN NUMBER)
RETURN  NUMBER
IS
      result NUMBER :=1;
BEGIN
      IF  n=0 THEN
           RETURN 1;
      ELSE
            FOR i  IN 1..n LOOP
                 result := result *i;
            END LOOP;
            RETURN result;
      END IF;
END ;
/


DECLARE
      num  NUMBER := &Enter.Number;
      fact NUMBER;
BEGIN
      fact := factorial (num);
      DBMS.OUTPUT.PUT.LINE ('Factorial of ' || num || ' is ' || fact);
END ;
/
```

Program 2

Write a PL/SQL program using Procedures IN,INOUT,OUT parameters to retrieve the corresponding book information in library

```sql
CREATE OR REPLACE PROCEDURE get_book_info (
        p_book_id     IN NUMBER,
        p_title       OUT VARCHAR2,
        p_author      OUT VARCHAR2,
        p_price       IN OUT NUMBER
)
IS
BEGIN
    SELECT title, author, price
    INTO p_title, p_author, p_price
    FROM library_books
    WHERE book_id = p_book_id;
    p_price := p_price + (p_price * 0.10);
EXCEPTION
    WHEN NO_DATA_FOUND THEN
        DBMS_OUTPUT.PUT_LINE ('No book found with ID!' || p_book_id);
END;
```

```sql
SET SERVEROUTPUT ON;

DECLARE
    v_title    VARCHAR2(50);
    v_author   VARCHAR2(50);
    v_price    NUMBER := 0;
BEGIN
    get_book_info (102, v_title,
          v_author, v_price);
    DBMS_OUTPUT.PUT_LINE ('Book Title :' || v_title);
    DBMS_OUTPUT.PUT_LINE ('Author    :' || v_author);
    DBMS_OUTPUT.PUT_LINE ('Updated Price :' || v_price);
END;
```

Evaluation Procedure	Marks awarded
PL/SQL Procedure(5)	5
Program/Execution (5)	5
Viva(5)	5
Total (15)	15
Faculty Signature	