1. **SIMPLE PL/SQL BLOCK CONSTRUCTION**.

**(a) Displaying message on terminal.**

Declare

Begin

Dbms\_output.put\_line(‘ Hemchandracharya North Gujarat University’);

End;

/

**(b) Calculation on given data & prepare the result for display**.

Declare

A number:=10;

B number:=20;

Sum1 number:=0;

Begin

Sum1:=A+B;

Dbms\_output.put\_line(“Sum of 2 nos is ===>” ||Sum1);

End;

/

**(c) Accept the value from user & do according to it;**

Declare

A number;

B number;

S number;

Begin

A:=&a;

B:=&b;

S:=a+b;

Dbms\_output.put\_line(‘answer=’||s);

End;

/

**2. DECISION MAKING & LOOPING**.

**(a) if..then,if..then..else,else..if ladder & nested if.**

**(i)if..then**

Declare

A number;

B number;

Begin

A:=&a;

B:=&b;

If(a>b) then

Dbms\_output.put\_line(‘a is greater’);

End if;

End;

/

**(ii) if..then..else**

Declare

A number;

B number;

Begin

A:=&a;

B:=&b;

If(a>b) then

Dbms\_output.put\_line(‘a is greater’);

Else

Dbms\_output.put\_line(‘b is greater’);

End if;

End;

/

**(iii)else..if ladder**

Declare

Sub1 number;

Sub2 number;

Sub3 number;

Tot number;

Per number(5,2);

C varchar2(30);

Begin

Sub1:=&sub1;

Sub2:=&sub2;

Sub3:=&sub3;

Tot:=sub1+sub2+sub3;

Per:=tot/3;

If(per>70) then

C:=’distinction’;

Else if(per>=60 and per<70) then

C:=’first’;

Else if(per>=50 and per<60) then

C:=’second’;

Else if(per>=35 and per<50) then

C:=’pass’;

Else

C:=’fail’;

End if;

End if;

End if;

End if;

Dbms\_output.put\_line(‘total=’||tot);

Dbms\_output.put\_line(‘percentage=’||per);

Dbms\_output.put\_line(‘class=’||c);

End;

/

**(iv)nested if..else**

Declare

A number;

B number;

C number;

Begin

A:=&a;

B:=&b;

C:=&c;

If(a>b) then

If(a>c) then

Dbms\_output.put\_line(‘a is greater’);

Else

Dbms\_output.put\_line(‘c is greater’);

End if;

Else

If(b>c) then

Dbms\_output.put\_line(‘b is greater’);

Else

Dbms\_output.put\_line(‘c is greater’);

End if;

End if;

End;

/

**(b) looping concept like loop..end loop,while,for.**

**(i) loop..end loop**

Declare

A number;

Begin

A:=&A;

Loop

Dbms\_output.put\_line(A);

A:=A+1;

Exit when A>10;

End loop;

End;

/

**(ii)while**

Declare

a number;

fact number:=1;

I number:=1;

Begin

a:=&a;

While(a>0)

loop

fact:=fact\*(i\*a);

a:=a-1;

End loop;

Dbms\_output.put\_line(‘the factorial is ’||’ ‘||fact);

End ;

/

**(iii) For**

DECLARE

N number:=10;

Sum1 number:=0;

I number;

BEGIN

I:=&I;

For I in 1..n

Loop

Sum1:=sum1+I;

End loop;

Dbms\_output.put\_line(‘ the answer is= ‘ || sum1);

End;

/

**© nested looping**

Declare

I number:=1;

J number:=0;

tot number:=0;

Begin

While(I>=5)

Loop

J:=0;

For J in 1..I

Loop

If( J mod 2 = 0) then

tot:=tot+J;

End if;

End loop;

I:=I+1;

End loop;

Dbms\_output.put\_line(‘the answer is=’||tot);

End ;

/

**(d) use of go to clause**

Declare

n number:=0;

S number:=0;

Begin

n:=&n;

<<S1>>

S:=S+n;

n:=n+1;

If(n<10) then

Goto S1;

End if;

Dbms\_output.put\_line(‘the answer is=’||S);

End ;

/