# Pseudo Code

## **Question 1**

What will be the output of the following C code

```
#include<stdio.h>
int main()
{
   char a='D';
   printf(" %d",a);
   return 0;
}
```

```
67
69
68 ans
error
```

# **Question 2**

```
#include<stdio.h>
int main()
{
   int a = 0,i = 0,b;
   for(i=0;i<5;i++)
   {
      a++;
      if(i == 3)</pre>
```

```
printf("Hello world");
    break;
}
printf("%d",a);
return 0;
}
```

2

hello world

1 ans

4

#### **Question 3**

What will be the output of the following C code

```
#include<stdio.h>
void main()
{
    int k=4;
    int *const p =&k;
    int r = 3;
    p = &r;
    printf("%d", p);
}
```

It will print address of r

It will print address of k + address of r

It will print address of k

Compile time error ans

#### **Question 4**

what is the maximum degree of any vertex in a simple graph with n vertices?

```
n+1
   2n-1
   n
   n-1 ans
Question 5
What will be the output for the pseudo-code for p=22, q=127
fun(int p,int q)
    if(p==0)
        return q;
    else
        return fun(p-1 , p-q)
   9
   6
   None of the mentioned above ans
   error
Question 6
find out the number of interchanges needed to convert the given array into a max-heap.
89,19,50,17,12,15,2,5,7,11,6,9,100
   5
   4
   3
      ans
Question 7
Which of the following statements is/are TRUE for undirected graphs?
P: Number of odd degree vertices is even.
Q: Sum of degree of all vertices is even.
   Both P and Q ans
```

```
Neither P nor Q
Q Only
P Only
Question 8
```

what will be the output of the following algorithm?

```
Start

Declare a, I and b

for I =0 to 4

Increment a by 1

if I = 3 then

print hello

get out of the loop

End if

End for

print a
```

4 1 hello4 ans hello

# **Question 9**

```
Input m =9,n = 6

m = m + 1

n = n + 1

m = m + n

if(m>n)
```

```
print m
else
    print n
   17
        ans
   5
   6
   10
Question 10
what will be the output of the following pseudocode?
Declare variable x, y and i
Set x = 0 and y = 1
for(int i=1; i<=4; i=i+1)
   print x
   x = x + y
   y = x / y
End of loop
   0124
             ans
   0123
   1024
   0138
Question 1
What will be the output of the following code?
#include <iostream>
using namespace std;
int main()
```

```
int x=1,y=1;
for(;y;cout<<xx<y<<" ")
{
    y=x++ <=5;
}
return 0;
}
31,71,41,60,21
22 23 44 55
21 31 51 61
21 31 41 51 61 70 ans
Question 2</pre>
```

No, compile error but it'll print Advance Five-time ans

No, compile error but it will run into an infinite loop printing Advance.

No, compile error but it'll print Advance Four-time.

Compile-time error.

#### **Question 3**

What will be the output of the following code?

```
#include<stdio.h>
int main()
{
   int x=4,y=0;
   int z;
   z=(y++,y);
   printf("%d\n",z);
   return 0;
}
```

```
1 ans
zero - '0'
compiler error
```

undefine behavior due to the order of evolution can be different

#### **Question 4**

```
#include <stdio.h>
int f(int n)
{
    static int a=0;
    if(n<=0)</pre>
```

```
{
    return 1;
}
if(n>3)
{
    a=n;
    return f(n-2)+2;
}
return f(n-1)+a;
}
int main()
{
    printf("Result:%d",f(5));
    return 0;
}
```

12 18 ans

19 9

## **Question 5**

```
#include <stdio.h>
#define LIMIT 500

void fun2(int n)
{
   if(n<=0)
   {</pre>
```

```
return;
}
if(n>LIMIT)
{
    return;
}
printf(" %d ",n);
fun2(2*n);
printf(" %d ",n);
}
int main()
{
    fun2(17);
    return 0;
}
```

```
17 34 68 136 272 272 136 68 34
17 34 68 136 272 272 136
17 34 68 136 272 272 136 68 34 17 ans
17 34 68 136 272 272
```

```
#include <stdio.h>
int main()
{
   int x=9,y=2,z=6;
   int a=x&y|z;
   printf("%d",a);
   return 0;
```

```
Error
2
6 ans
3
Question 7
```

What will be the output of the following C code?

```
#include <stdio.h>
union Sti
{
    int nu;
    char m;
};
int main()
{
    union Sti m;
    printf("%d",sizeof(m));
    return 0;
}
```

# **Question 8**

What will be the output for the pseudocode for x=11, y=57

```
fun(int x,int y)
```

```
if(x==0)
       return y;
   else
       return fun(x-1 , x-y)
   6
   None of the above ans
   0(Zero)
Question 9
What will be the output of the following algorithm?
#include<stdio.h>
int main()
 int no=8125, temp, digit, sum = 0;
   temp = no;
   while (no > 0)
   {
       digit = no % 10;
       sum = sum + digit;
       no /= 10;
   }
   printf("%d\n",sum);
 return 0;
   17
   16
        ans
   15
```

error

# **Question 10**

What will be the output of the following C code

```
#include<stdio.h>
int main()
{
   int x=2,y=0,z=3;
   x>y ?( printf("%d", z)):( return z);
}
```

```
error ans
2
3
0(Zero)
```

## **Question 1**

```
integer a, b, c, a1, b1, c1, a2, b2, c2;

Set a1 = 2 b1 = 45 c1 = 36;

Set a2 = 11 b2 = 26 c2 = 30;

    c = c1 + c2;

    b = c / 60;

    c = c % 60;

    b = b + b1 + b2;

    a = b / 60;

    b = b % 60;

    a = a + a1 + a2;

Print a:b:c
```

```
5:10:15
10:15:60
14:12:6 ans
```

#### 20:22:26 **Question 2**

What will be the output of the following pseudocode if n=40 and LIMIT=100?

```
Integer fun2(Integer n);
if(n <+ 0)
    return 1;
if(n > LIMIT)
    return 2;
Print ,n
fun2(2*n);
Print n
End function fun2()
    10 20 20 10
    20 40 40 20
   40 80 80 40 ans
    80 120 120 80
Question 3
For which of the following sets of input, the following pseudocode will print Q?
integer a=32,b=69,c=68;
if(a+c>b)
    if(b<c)
        printf("P");
    else
        printf("Q");
    Ρ
    Q
        ans
    R
    S
```

What will be the output of the following pseudocode for x=3 and y=4?

```
integer fun(int x, int y)
if(x>0)
    fun(x-1,y+1);
End if
Print y
End function fun()

    8542
    7654
    5214
    2034
```

#### **Question 5**

What will the output of the following pseudocode for i=140?

```
integer fun(int i)
if((i%2)!=0)
    return i;
else
    return fun(fun(i=1));
End function fun()
```

```
1 ans
2
3
```

0(Zero)

#### **Question 6**

What will be the output of the following pseudo-code for a given array a[5]=3,4,6,1,2 and pos=2 [note: n= size of the array i.e. 5 and starting array index is 0]

```
Declare i,j,n,pos

Repeat for j=pos to n-1

Set a[j]=a[j+1] [end of loop]

n=n-1;

Display the new array

End

3615

34215

3412 ans

324615

Question 7
```

What will be the necessary condition to get the desired element from a given array by using the following algorithms?

```
If LOC = -1 do ITEM NOT FOUND
Do_Something(DATA, N, ITEM,LOC)
initialize Counter set LOC=0, LOW=0, HI= N-1
[Search for item]
Repeat while LOWs HI
    MID = (LOW+HI)/2
IF ITEM = DATA[MID] do
    LOC+MID
    Return LOC
IF ITEM = DATA [MID)
    HI = MID-1
ELSE
    LOW = MID+1
```

the elements should contain more than one element

.the array should contain more than one element

The elements is an array should be in the sorted form. ans

No pre-condition is required for the algorithm to work

# **Question 8**

What will be the output of the following C code?

```
#include<stdio.h>
int main()
{
    int x = 2, y = 0, z = 3;
    x>y ? printf("%d", z);;
}
```

3

No Output

Error ans

#### **Question 9**

What will be the output of the following C code?

```
Set a=3; b=5;c=1;
a=a+b+c-8;
b=a+c-8;
if(a>b)
    Print fine
else
    Printf Thank you
```

Fine ans

Thank you

Error

None of the above

## **Question 10**

consider the following given code and predict its output.

```
main()
int num[ ]={1,4,8,12,16};
int *a,*b;
int i;
    a=num;
    b=num+2;
    i=*a++;
    printf("%d, %d, %d\n",i,*a,*b);

1,4,8    ans
4,1,8
2,1,8
4,4,8
```



```
integer a, b, c;

Set a = 3;

b = 5;

c = 1;

a = a + b + c - 8;
```

```
b = a + c - 8;
if (a > b)
Print fine
else
Printf Thank you
    Fine
            ans
    Thank You
    Error
    None of the above
Question 2
What will be the output of the following pseudocode if n=5 and element of the array are
24,20,60,100,200?
#include <stdio.h>
integer
fun (int a[], int n)
integer x;
if (n is equal to 1)
```

return a[0];

else

```
x = fun (a, n - 1);
if (x == a[n - 1])
return x;
else
return a[n - 1];
End the function fun ()
    100
    200
                     ans
    300
    400
Question 3
What will be the output of the following pseudocode?
```

```
integer a = 1, b = 2;

for (int i = 0; i <= 6; i = i + 2)

a = a + b + i;

a = a + b;</pre>
```

```
b = a - b;

Print b End for

30 10 27 70

3 10 27 70 ans

13 10 47 70

13 10 27 70
```

```
Integer a, b, c, v;

Set a = 5;

b = 6;

v = 90;

while (v > 8)

a = a + v;

c = (a + b) % 10;

while (c > 9)

b = b - a;
```

```
c = c - 1;
End while
v = v/2
End while
Print b, c
   69
             ans
   5 7
   17
    35
Question 5
What will be the output of the following code ?
for (i = 1; i <= 6; i++)
 for (j = i; j < 6; j++)
Print blank space
for (k = 1; k < (i * 2); k++)
```

```
Print *
End for
  Line break
End for
   None of the mentioned
                        ans
   Error
   * ** *** ***
Question 6
What will be the output of the following pseudocode?
integer a, b, c;
Set a = 6;
b = 84;
while (b > 0)
```

```
b = b / 2;
a = a + 6;
c = a + b;
while (c > 40)
if (c mode 2 is equal to 0)
Print a
else
Print b c = c / 10;
End while Print c
    12 1 4 48
   12 1 48 4
              ans
    1 12 48 4
    10 12 4 48
Question 7
what will be the output of the following pseudocode?
```

```
Integer n, rev, rem, orig;
Set n=63206; rev=0;
Set orig=n;
Repeat while n Not Equals 0
rem=n%10;
rev=rev*10+rem;
n=n/10;
End while
if(orig is Equal to rev)
Print rev
else
Print (orig-rev)/6
End if
```

```
120
110
495 ans
105
```

80

What will be the output of the pseudocode?

```
Integer i,j,sum,n;

Set sum=0, n=7;

Repeat for i=1 to n

Repeat for j=1 to i

sum=sum+j

End loop

End loop

Print sum
```

```
84 ans
75
90
```

For what value of a b and c the following pseudocode will execute both the print statements?

```
integer a,b,c;
set a = 5, b = 4, c = 7;
if(a>b OR a>c)
Print a
if(a+b>c AND b<c)
Print b
   54 ans
   3 2
   4 5
   5 9
Question 10
```

```
integer a,b;
Set a=2; b=50;
while(b>0)
a = b%2 + a;
if( a MOD 2 Is Equal To 0)
Printf a
else
Print b-1
b = b/5
a=a+1
End while
   123
   458
   2 9 4 ans
```

What will be the output of the pseudocode?

```
Integer x, y, z

Set x=10,y=12,z=12

z=(x+y)/4

if(z IS EQUAL TO 12)

Print successful

Else

Print unsuccessful
```

successful

unsuccessful ans

Error

None of the above

## **Question 2**

```
Integer a,b,count,count1
Set a=1, b=1
while(a<=5)
b=1</pre>
```

what will be the output

```
#include<stdio.h>
int main()
{
   int number = 10, expo = 2,temp = 1;
   while (expo is not equals to 0)
   {
      temp = temp * number;
      --expo;
   }
   printf("%d, %d",number, temp);
```

```
return 0;
    10,100
                   ans
    100,10
    Error
    None of the above
Question 4
What will be the output of following pseudo code?
Integer i,j,sum,n
Set sum=0,n=7
Repeat for i=1to n
sum=sum +(i*i)
End loop
Print sum
    100
    120
    140
               ans
    160
Question 5
What will be the output of the following:
```

```
Integer a,b,c
Set a=10,b=20
for(c=a;c<=b;c=c+2)
a=a+c
b=b-a+c
if(a>10)
Print a
else
Print b
End if
End for
    10
    20
               ans
    30
    40
Question 6
What will be the output of the following c code?
#include
int main()
int a = 45;
```

```
int i=sizeof(a);
printf("%d",i);
}

1

6

2

4    ans

Question 7

what will be output of following c code?
```

```
#include<stdio.h>
int f(int n)
{
    static int a =0;
    if(n<=0)
    {
        return 1;
    }
    if(n>3)
    {
        a=n;
        return f(n-2) +2;
    }
    return f(n-1) + a;
}
int main()
```

```
{
printf("Result: %d",f(5));
return 0;
}
19
2
18 ans
```

What will be the output of the following pseudo-code for input 7?

```
Read the value of N.

Set m=1,T=0

If m >N

Go to line No. 9

Else

T= T+m

m=m+1

Go to line no.3
```

```
Display the value of T
Stop
   28
               ans
    32
   56
    76
```

what will be the output of the following algorithm for Num=10?

```
Start
Declare variable I,J and Num
Enter value of Num
Repeat for I=1 to Num
Declare static variable sap and set sap =0
sap=sap+I
J=sap
End loop
Print J
    55
               ans
    85
    75
    65
```

## **Question 10**

Consider the following pseudocode.

```
a=1;
b=1;
while(a<=500)

Begin
a=2^a;
b=b+1;
End</pre>
```

What is the value of b at the end of the pseudocode?

4

5 ans

6

7

# **Question 1**

Q1- below is a pseudocode

```
Set x to 0;

Set n to 1;

while (n <= 100)

    x = x + n;

    n = n + 1;</pre>
```

```
end write x
```

What is the output of the above pseudocode?

```
5050 ans
100
4950
5151
```

#### Question 2

Q2-Below is a pseudo-code

```
Set x to 1;
Set x1 to 0;
Set x2 to 0;
Set x3 to 1;
While (x < 10)
Set x1 = x1 + x2 + x3;
Set x2 = x2 + x1 + x3;
Set x3 = x3 + x2 + x1;
Write x1;
write x2;
write x3;
x = x + 1;</pre>
```

In which series is the output

Tribonacci series ans

Fibonacci series

Triangular series

Arithmetic series

## **Question 3**

```
Integer a,b,c
Set a=6,b=84
while(b>0)
b=b/2
a=a+6
c=a+b
while(c>40)
if(c mod 2 IS EQUAL TO 0)
Print a
else
Print b
c=c/10
End while
End while
Print c
   48, 4
   12, 4
   12, 1, 4
    12, 1, 48, 4
                      ans
Question 4
```

What will be the output of the following pseudocode for i=140?

```
Integer fun(integer i)
if((i MOD 2) NOT EQUALS 0)
Return i
Else
Return fun(fun(i-1))
End function fun()
```

None of the mentioned options

138

140

139 ans

## **Question 5**

Consider the following the given algorithm and identify the task performed by this

```
bstree(*tree)
{
    while((tree->left !=null)&&(tree->right !=null))
    {
        if(tree-> root)
            bstree(tree->left);
        else
            return (1);
```

**Bubble sort** 

Tests whether a binary tree is a Binary Search Tree ans

Prim's algorithm

None of the mentioned options.

## **Question 6**

```
Integer a,b

Set a=2, b=50

while(b>0)

a = b MOD 2 +a

if( a MOD 3 IS EQUAL TO 0)

Print (a)

else

Print(b-1)

b=b/5

a=a+1

end while

3,3,3
```

```
49,3,1 ans
50, 10, 2
50, 3, 2
```

What will be the output of the following pseudocode?

```
Integer a, b, c, d, e

Set a=50 , b=3, c=3
while(c>0)
d=a mod b
e= e + d + a
c= c - 1
End while
Print e
```

```
52
100
156 ans
153
```

## **Question 8**

```
Integer array1[10] = {2, 3, 56, 34}
Integer k, a, j, n
```

```
Set a = 3, n = 4
for(each k from 0 to n-1)
Set array1[n] = array1[0]
for(each j from 0 to n-1)
Set array1[j] = array1[j+1]
End for
End for
for(each k from 0 to n-1)
Print array1[k]
End for
    56 34 3 2
```

2 3 34 56

34 2 3 56

None of the mentioned options ans

#### **Question 9**

```
Integer j,i,count,num
Set j=31, count=0, num=64
while(num NOT EQUALS 0)
    if((num&1) is EQUAL to 1)
        Jump out of the loop
    else
        count=count+1
    num = num >> 1
    End while
```

# Print count 6 ans 95 12

## **Question 10**

What will be the output of the following pseudocode for a given set of input?

```
integer a
if((a mod 10) IS EQUAL TO 0)
a=a*2
else if((a mod 5 ) IS EQUAL TO 0)
a=a/5
else
a=a-1
end if
```

```
input: a=25, a=16

a=5,a=15 ans

a=15,a=20

a=25,a=15

a=35,a=25
```