PSEUDOCODE

1.

```
#include<stdio.h>
int main()
{
long double a;
long double b;
int arr[sizeof(!a+b)];
printf("%d",sizeof(arr));
}
```

A. Run time Error
B. 32
C. 64
D. No output

Ans. C

2.

```
READ x =4, y = 0;
READ z;
z = (y++, y);
WRITE z
```

A. 1
B. 0
C. Undefined Behavior due to order of evaluation can be different.
D. Compilation Error

Ans.A

3.

```
READ ch value between 1 & 2
switch(ch, ch+1)
case 1 :
WRITE "1"
break;
case 2 :
WRITE "2"
```

```
break;
default :
WRITE “3”
```

A. 1
3
B. Error : Undefined condition in switch
C. 1
D. No output

Ans. C

4.

What is the output of given code for input 134 :

```
FUNCTION fun1(INPUT num)
{
static int a =0;
IF (num>0)
a=a+1;
fun1(num/10);
ELSE
return a;

END FUNCTION
```

A. 2
B. 3
C. Runtime Error
D. None of these

Ans. B

5.

What will be output of given pseudo code for input 7 :

```
1. read the value of n
2. set m=1,t=0
3. if m >= n
4. go to line 9
```

5. else
6. t=t+m
7. m+=1
8. go to line 3
9. display T
10. stop

A. 32
B. 76
C. 28
D. 21

Ans. D

6.

READ n=2

FUNCTION fun(int n)
IF(n == 4)
return n;
ELSE
return 2*fun(n+1);

A. 4
B. 8
C. 16
D. Error

Ans. C

7.

What will be output of given pseudo code :

int i=5, j=7;
if (i+j> 5)
j = i+2;
if (j<5)
print(i)
else
print(j)

```
else
print(i+1)
```

A. 12
B. 5
C. 7
D. 6

Ans. C

8.

What will be output of given pseudo code :

```
READ INTEGER j=41, k= 37
j=j+1
k=k-1
j=j/k
k=k/j
print(k,j)
```

A. 42 36
B. 36 1
C. 1 1
D. 1 36

Ans. **B**

9.

```
#include<stdio.h>
using namespace std;
int main()
{
int a =0,b=1,c=2;
*( ( a+1==1) ? &b : &a)= a? b : c;
printf("%d, %d, %d \n", a , b, c );
return 0;
}
```

A. 0 1 2
B. 0 2 0
C. 0 2 2
D. Error

Ans. C

10.

What will be the output of the given pseudocode for s1=3 and e1=6?

```
READ s1,e1
FUNCTION num(INT s1,INT e1)
IF(s1==e1)
RETURN s1
ELSE
RETURN s1+num(s1+1,e1)
ENDIF
END FUNCTION
```

A.12

B.15

C.18

D.6

Ans. C

11. world=181

```
FUNCTION hello(int world)
 INITIALIZE integer zero=0, integer remindme
    WHILE world <>0
          remindme=world%10;
          zero=zero*10+remindme
          hello(world/10)
    ENDWHILE
 WRITE zero
```

```
    ENDFUNCTION
```

A.zero

B.181

C.18

D.1

Ans.B

12. consider the following pseudocode: number=122,567,789,543,536,999

```
Sum←0
Counter←0
Average←0
Input(number)
While number <>999
        Sum←sum+number
        Counter←counter+1
        Input(number)
Endwhile
Average←sum/counter
Output('The average of the numbers is',average:6:2)
```

A. 592.66

B. 511.40

C. 999.08

D. 3556.66

Ans.B

13.

Set x to 1

Set y to 1

while(x<20)

write ‘x ‘

x=x+5

y=y+5

End while

A. 1 1 6 6 11 11 16 16

B. 1 5 10 15

C. 1 6 11 16

D. None of these

Ans.C

14. n1=9,n2=322,n3=798,n4=789,n5=987

READ n1,n2,n3,n4,n5

SET avg to (n1+n2+n3+n4+n5)/5

If(n1<n2)

SET max to n2

Else

SET max to n1

If(n3>max)

SET max to n3

If(n4>max)

SET max to n4

If(n5>max)

SET max to n5

Write max

If(n1>n2)

SET min to n2

Else

SET min to n1

If(n3<min)

SET min to n3

If(n4<min)

SET min to n4

If(n5<min)

SET min to n5

Write min

If(max<min)

Write max

Else

Write min

A.9 9 9

B.987 9 987

C.987 9 9

D.987 9 798

Ans.C

15.

While<><>7

WRITE “HEY”

End While

A. HEY
B. HEYHEY
C. Infinite loop
D. None of these

Ans. C

16.

READ integer i to 1
switch(i)
case i:
WRITE “case 1 executed”;
break
case i + 1;
WRITE“case 2 executed”;
break

case i + 2;
WRITE“case 3 executed”;
break
default:
WRITE“default block executed”;
break

A. case 1 executed
B. case 2 executed

C. case 3 executed
C. default block executed
E. Error : i is not usable

Ans.E

17.

switch(3/3)
case 1:
WRITE“case 1 executed “

case 2:
WRITE“case 2 executed “
break;

case 3:

WRITE”case 3 executed “

break;
default:
WRITE“Default block executed”

A.Default block executed

B.case 1 executed

C.case 1 executed case 2 executed

D.Error:switch statements cannot hold

Ans.C

18.

READ i equals to 25
if i is equals to 25
    i = 50
if i is equals to 25
    add 1 to i

if i is equals to 25

    add 1 to i

else

    add 1 to i
else
    add 2 to i

else

    add 2 to i
WRITE i

A.26

B.27

C.52

D.55

Ans. 52

19.

INITIALIZE false -1
INITIALIZE NULL 0
INITIALIZE true 1
if(NULL)
WRITE “NULL”
ELSEIF(false)
WRITE “TRUE”
ENDIF

ELSE
WRITE “FALSE”

ENDIF

A. TRUE
B. FALSE
C. NULL
D. Error

Ans. A

20.

What will be the value of sum if num=187?

Read num

iter=0,sum=0

Function Star(int num)

while(num>0)

rem=num%l0

po=8^iter

sum=sum+po*rem

iter++

num=num/10

End While

Return sum;

End Function

A.187

B.87

C.135

D.71

Ans.135

21.

```
Integer n
for (n = 6; n <> 0; n--)
        Print n
        n = n-1
end for
```

a) 6 4 2

b) 6 5 4 3 2 1

c) 6

d) Infinite Loop

Ans: a

22.

READ INTEGER input a = 10 & b = 7.

```
Function(input a, input b)
If(a < b)
return function(b, a)
elseif(b != 0)
return (a + function(a,b-1))
else
```

return 0

A.17

B.107

C.70

D.701

Ans.C

23.

What will be the value of even_counter if number = 2630?

Read number

Function divisible(number)

even_counter = 0, num_remainder = number;

while (num_remainder)

digit = num_remainder % 10;

if digit != 0 AND number % digit == 0

even_counter= even_counter+1

End If

num_remainder= num_remainder / 10;

End While

return even_counter;

A) 3

B) 4

C) 2

D) 1

Ans. A

24.

What will be the value of t if first=0 ,second= 999?

READ first & second

Function Hello(first,second)

hey = 0

while (second!= 0)

temporary = temporary + first

second=second-1

End While

return temporary;

End Function

A.999

B.Infinite Loop

C.0

D.333

Ans.C

25.

Input m=6,n=9

n=n+1

m=m-1

n=n-m

if (m>n)

print m

else

print n

A.6

B.5

C.55

D.9

Ans.B

26.

Input fib=20,gn=24 and set sum=0

Integer num

if(gn>fib)

for(num=fib ;num<=gn;num=num+1)

sum=sum+num

End for loop

else

print error message

print sum

A.110

B.21

C.011

D.error message

Ans. A

27.

FUNCTION s(input x,input y)

Input x=5 & y=3

Input m=0

m=x

x=y

y=m

m=x

x=y+2

y=m+2

m=x

x=y

y=m

print(x,y)

A. 3 5

B. 5 3

C. 5 7

D. 7 5

Ans. C

28.

```
Function fun(input x,input y)
initialize m=0
m+=b
if((m%a==0 && m%b==0)
        return m
else
        return fun(x,y)
Endif
EndFunction
Function main(input a,input b)
Input a=8,b=9
If(a>b)
        ans=fun(b,a)
Else
        ans=fun(a,b)
Endif
Write ans
EnfFunction
```

A.17

B.72

C.81

D.63

Ans.B

29) What is the output of the given pseudocode for a=100?

```
START
Function cont(int a)
 if(a==0)
 return 0;
 else
 return (a%10+2*cont(a/10));
Endif
```

EndFunction

End

A.2

B.4

C.6

D.1

Ans.B

30.

```
FUNCTION ch(input num){

   INITIALIZE r_num=0, r

   if(num!=0)
      r=num%10
      r_num=r_num*10+r
      ch(num/10)
ENDIF
   return r_num
ENDFUNCTION

FUNCTION main()
   int num, r_num;

   READ num equals to 142

   r_num = ch(num);

   if(num==r_num)
      WRITE ”YES”;
   else
      WRITE “NO”;
```

A.NO

B.YES

C.141

D.241

Ans.A

31.

Input array elements 1,2,3,4,5,6,7,8

Initialize n as number of elements

Initialize sum equals 0

```
i=n-1
Function SUM(array,i,sum)
If(i<0)
Write sum
if((ar[i]%2==1)
        sum+=(ar[i])
SUM(array,i-1,sum)
ENDIF
ENDFUNCTION
```

A.36

B.20

C.16

D.10

Ans.C

32.input a=8,b=16

```
int fun(int a,int b)
{
        int n=0
         if(b<1)
                return n
        else
                return fun(a+b+2,b-2)
}
```

A.33

B.88

C.0

D.128

Ans.C

33.

```
Integer a,b,c,d
Set a=14,b=15,c=16
```

```
If(a>6)
        b=c-a
        if(a>c)
                d=b+c
        else
                d=b-c
else
        d=a+b+c-3
print d
```

A.29

B.-14

C.31

D.18

Ans.B

34.Find output of given pseudocode for n=5?

```
Function Sum(int num)                (<> not equals to)
        If(num<>0)
                Return num+num*sum(num-1)
        Else
                Return num
        Endif
Endfunction
```

A.325

B.188

C.64

D.320

Ans.A

35.

```
Integer n,beg,end
Set beg=5,end=7,sum=0
If(beg>end)
```

Print sum+1

Else

For(n=end;n>=beg;n=n-1)

Sum=sum+n

N=n-1

End for loop

Print n

A.6

B.4

C.9

D.3

Ans.D

36. Assume that objects of the type short,float and long occupy 2 bytes,4 bytes and 8 bytes respectively.The memory required for variable t,ignoring alignments considerations,is:

```
struct{
    short s[5]
    union{
        float y;
        long z;
    }u;
}t;
```

A.22

B.24

C.18

D.10

Ans.C

37. bin1=1010 bin2=1000

READ input bin1,input bin2

INITIALIZE i equals 0,rem equals 0

INITIALIZE array ar of size 20

While(bin1!=0 or bin2!=0)

sum[i++]=(bin1%10+bin2%10+rem)%2

rem=(bin1%10+bin2%10+rem)/2

bin1=bin1/10

bin2=bin2/10

EndWhile

If(rem!=0)

sum[i++]=rem
--i

Endif

While(i>=0)

Print sum[i--]

EndWhile

A.10011

B.10010

C.0010

D.1000

Ans.B

38. num=12

FUNCTION factor(input num)

int i,j,primeno;

for(i=2;i<=num;i++)

if(num%i==0)

SET primeno as TRUE

Endif

Endfor

for(j=2;j<=i/2;j++)

if(i%j==0)

SET primeno as FALSE

Break

Endif

Endfor

If primeno is TRUE

WRITE i

A.2 3 4 6 12

B. 4 6 12

C. 2 3

D. 12

E. 1 2 3

Ans. C

39.

Read array a[5]={5,1,15,20,25}

Initialize i, j, m

i=++a[1]

j=a[1]++

m=a[i++]

Write i, j, m

A.2, 1, 15

B.1, 2, 5

C.3, 2, 15

D.2, 3, 20

Ans.C

40. Integer i=0,j

While(i<2)

{

```
j=0;
while(j<=3*i)
{
print j
print blank space
j=j+3
}
Print end-of-line
I=i+1
}
```

A.0

0 3

B.0 3

0 3 6

C.0

0 3 6

0 3 6 9

D.0 3 6

0 3 6 9

0 3 6 9 12

Ans.A

41.

1

1 2

1 2 3

Pseudocode:

integer i=1 **//STATEMENT 1**

while(i<=3)

{

int j **//STATEMENT 2**

while (j<=i) **//STATEMENT 3**

{

print j

print blank space

j=j+1 **//STATEMENT 4**

}

Print end-of-line

i=i+1

}

Identify the incorrect statement.

A.STATEMENT 4

B.STATEMENT 3

C.STATEMENT 2

D.STATEMENT 1

E.NO ERROR

Ans.C

42.Sum of the first 10 multiples of 10.

Integer i=0 **//Statement 1**

Integer sum=0 **//Statement 2**

While(i<=1000){ **//Statement 3**

sum=sum+i //**Statement 4**

---MISSING STATEMENT---

}

Print sum

I**dentify the missing statement and the incorrect statement.**

A. i=5

Statement 1

B.i=10*i

Statement 2

C.i=i+10

Statement 3

D.i=i+1

Statement 4

Ans.C

43.

Function fun(){

Input num=40

Return num - -

}

Function main()

{

for(fun() ; fun() ; fun()) {

print fun();

}

Predict the output.

Ans. 38 35 32 29 26 23 20 17 14 11 8 5 2

44.

Function `main()`

```
char *s[] = { "knowledge","is","power"}
char **p
p = s
print ++*p
print *p++
print ++*p
```

A. nowledge nowledge s
B. knowledge knowledge is
C. knowledge nowledge s
D. is power

Ans.A

45. How many times the loop will execute?
for X=5 to 1
for Y=1 to X
print Y

A.12
B.13
C.14
D.15

Ans.D

46.

```
Function foo(int* a, int* b)
```

```
    sum = *a + *b
    *b = *a
    RETURN *a = sum - *b

Function main()

    int i = 0, j = 1, k = 2, l;
    l = i++ OR foo(&j, &k)
    print(i, j, k, l)
```

A.1 2 1 1

B.1 1 2 1

C.1 2 2 1

D.1 2 2 2

Ans.A

47. Read count=5

Set x to 0;

While(x < count)

Set even to even + 2

x = x + 1

write even

A.2 4 6 8 10

B.0 2 4 6 8

C.2 4 6 8

D.0 2 4 6

Ans.B

```
48. begin
   q := 0  // q is going to contain floor(x/y)
   r := x  // r is going to contain x % y

// Repeatedly subtract y from x.
while r >= y do
   begin
      r := r - y
      q := q + 1
   end
end
```

The post condition that needs to be satisfied after the program terminates is

(A) {r = qx + y ∧ r < y}

(B) {x = qy + r ∧ r < y}

(C) {y = qx + r ∧ 0 < r < y}

(D) { q + 1 0}

Ans.B

```
49.
          READ m = 10
          Initialize n & n1
          n = m++
          n1 = ++m
          n--
          --n1
          n -= n1
          Write n
```

(A) 0

(B) 1

(C) -2

(D) None of these.

Ans. C

50.

```
Function f(int* p, int m)
        m = m - 5
        *p = *p - m
        return;
EndFunction

Function main()
        Input i=10, j=5
        f(&i, j)
        print i+j
```

A)5
B) 25
C) 15
D) 30

Ans.C

51.what will be the output when entered 1?

```
Function main()
        Input ch
        Write"Enter value between 1 to 2:"
        Read ch
        switch(ch,ch+1)
        Case 1:
```

Write “1”

Case 2:

Write “2”

break

Default:

Write “3”

A.1 2

B.2

C.3

D. 2 3

Ans.B

52. input num=134

Function fun1(int num)

Static int a=0

If(num>0)

a=a+1

fun1(num/10)

else

return a

A.8

B.3

C.2

D.431

Ans.B

53. n=2

int fun(int n)

if(n equals 5)

return n

else

return 2*fun(n+1)

A.20

B.16

C.5

D.40

Ans.D

54.

IF LOC=-1 do ITEM NOT FOUND

Do_(DATA,N,ITEM,LOC)

1.Initialize counter set LOC=0,LOW=0,HI=N-1

2.[Search for item]Repeat while LOW<=HI

2.1 MID=(LOW+HI)/2

2.2 IF ITEM=DATA[MID] do

2.3LOC=MID

2.4Return LOC

2.5IF ITEM<DATA[MID]

2.5.1HI=MID-1

2.6ELSE

2.6.1LOW=MID+1

A.The elements in an array should be in the sorted form

B.The array should contain more than one element

C.The elements in an array should be in unsorted form.

D.No pre-condition is required for the algorithm to follow.