

# 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 $\leftarrow$ 0

Counter $\leftarrow$ 0

Average $\leftarrow$ 0

Input(number)

While number <>999

Sum $\leftarrow$ sum+number

Counter $\leftarrow$ counter+1

Input(number)

Endwhile

Average $\leftarrow$ 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( $n3 < \text{min}$ )

SET min to n3

If( $n4 < \text{min}$ )

SET min to n4

If( $n5 < \text{min}$ )

SET min to n5

Write min

If( $\text{max} < \text{min}$ )

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%10**

**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;
};

```

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
l=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

Identify 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. knowledge knowledge s
- B. knowledge knowledge is
- C. knowledge knowledge 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
end
```

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

- (A)  $\{r = qx + y \wedge r < y\}$
- (B)  $\{x = qy + r \wedge r < y\}$
- (C)  $\{y = qx + r \wedge 0 < r < y\}$
- (D)  $\{q + 1 \leq 0\}$

**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.



