1. What will be the output of the following code snippet?

```
#include<stdio.h>
void main(){
    int a[] = {2, 9, 8, 6, 4};
    int b[5];
    int len = 5;
    int c, d;
    for(c=len-1, d=0;c>=0 && d<=len-1;c--,d++){
        b[d] = a[c];
    }
    int i;
    for(i=0;i<len;i++){
        printf("%d ", b[i]);
    }
}
```

- ○ 4 2 9 8 6
- ○ 2 9 8 6 4
- ○ 2 4 6 8 9
- ◉ 4 6 8 9 2

2. What will be the output of the following code snippet?

```
#include<stdio.h>
int main()
{
    int a[5] = {5, 1, 15, 20, 25};
    int i, j, m;
    i = ++a[1];
    j = a[1]++;
    m = a[i++];
    printf("%d, %d, %d", i, j, m);
    return 0;
}
```

- ◉ 3, 2, 15
- ○ 3, 2, 1
- ○ 2, 2, 15
- ○ 2, 2, 1

3.

Predict the output if 1 2 3 4 5 is given as input.

```
#include<stdio.h>
int main()
{
    int a[10],i;
    for(i=0;i<5;i++)
    {
        scanf("%d",&a[i]);
    }
    printf("%d",a[6]);
    return 0;
}
```

- 5
- 4
- Garbage value
- 6

4. What will be the output of the following code snippet?

```
#include<stdio.h>
void fun(int a[],int size)
{
    printf("%d",*a);
}

int main()
{
    int a[]={1,2,3,4,5},i;
    fun(a,5);
    return 0;
}
```

- 1
- No output
- Compilation Error
- 2

5.

What will be the output of the following code snippet?

```
#include<stdio.h>
void fun(int a[],int size)
{
    int i=0;
    for(;i<size;i++)
        a[i]=a[i]+1;
}
int main()
{
    int a[]={1,2,3,4,5},i;
    fun(a,5);
    for(i=0;i<5;i++)
    {
        printf("%d ",a[i]);
    }
    return 0;
}
```

- ○ 6 5 4 3 2
- ○ 1 2 3 4 5
- ◉ 2 3 4 5 6
- ○ None of the mentioned

6. Predict the output.

```
#include<stdio.h>
int main()
{
    int arr[]={2, 3, 4, 1, 6},i;
    for(i=0;i<5;i++)
    {
        printf("%d ",*(arr+i));
    }
    return 0;
}
```

- ○ 6 1 4 3 2
- ○ 2 3 4 5 6
- ◉ 2 3 4 1 6
- ○ None of the mentioned

7. 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;
```

- ○ 3
- ○ 4
- ○ 2
- ◉ 1

8. What will be the output of the following pseudocode?

```
input n = 1234
integer q, r and rn
set q = n and rn = 0
while(q>0)
r = q mod 10
rn = rn + r ^ 3
q = q/10
end while loop
print rn
```

- ◉ 100
- ○ 36
- ○ 321
- ○ 10

9. What will be the values of t if a=56 , b=876?

```
read a,b
function mul(a,b)
   t=0
   while (b!=0)
      t=t+a
      b=b-1
   end while
   return t;
end function
```

- ○ 490561
- ○ 490563
- ○ 490562
- ◉ 49056

10. What will be the output of the following pseudocode for p = 2, q = 5?

```
Integer funn (integer p, integer q)
   Integer r
```

```
   Set r = 2 + 5
   q = 2 + 5 – q
   p = p + 2 + 5 – r
   return p + q
end function funn()
```

- ○ 1
- ◉ 4
- ○ 6
- ○ 14

11. What will be the output of the following pseudocode for a = 1, b = 1?

```
1. Integer funn(Integer a, Integer b)
2.        a = b - ((a + b + a) - (a - b - a))
3.        b = a - ((a + b + a) - (a - b - a))
4.        return 100 + a + b
5.  End function funn()
```

- ○ 107
- ○ 97
- ◉ 98
- ○ 100

12. What will be the output of the following pseudocode for a = 1, b = 2?

```
1. Integer funn(Integer a, Integer b)
2.        a = a + b
3.        if(a > b)
4.                return a + b + b + a + b
5.        Else
6.                a = a - b
7.                return a + b + b + a + b
8.        End if

End function funn()
```

- ○ 1
- ◉ 12
- ○ 8
- ○ 9

13. What will be the output of the following pseudocode for a = 3, b = 2?

```
1. Integer funn(Integer a, Integer b)
2.        Integer s
3.        Set s = 2
4.        a = a + s
5.        b = b + a
6.        if(a > b && 1)
```

```
7.              if(a)
8.                      return 0
9.              End if
10.         Else
11.             if(b)
12.                     return b
13.             End if
14.         End if
15.         return a
16. End function funn()
```

[Note-&&: Logical AND - The logical AND operator (&&) returns the Boolean value true (or 1) if both operands are true and return false (or 0) otherwise.
If(x) gets executed if the value inside if(), i.e., x is not zero.]

- ○ 3
- ○ 9
- ○ 8
- ◉ 7

14. What will be the output of the following pseudocode for a = 5, b = 3?

```
1. Integer funn(Integer a, Integer b)
2.          if((b mod a > a mod b) || (a ^ b >  a))
3.                  a = a ^ b
4.                  if(a)
5.                          b = 1
6.                          return 4 ^ 5 ^ 6
7.                  End if
8.                  return 1 ^ 2 ^ 3
9.          End if
10.         return a + b
11. End function funn()
```

[Note: mod finds the remainder after the division of one number by another. for example, the "5 mod 2" would evaluate to 1 because 5 divided by 2 leaves a quotient of 2 and a remainder of 1
^ is the bitwise exclusive OR operator that compares each bit of its first operand to the corresponding bits of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.
||: Logical OR - The logical OR operator (||) returns the Boolean value TRUE (or 1) if either or both operands are true and return FALSE (or 0) otherwise.
If(x) gets executed if the value inside if(), i.e., x is not zero.]

- ○ 9
- ○ 16
- ○ 3
- ◉ 7

15. What will be the output of the following pseudocode for a = 5, b = 1?

```
1. Integer funn(Integer a, Integer b)
```

```
2.      if((b + a || a - b) && (b > a) && 1)
3.          a = a + b + b - 2
4.          return 3 - a
5.      Else
6.          return a - b + 1
7.      End if
8.          return a + b
9. End function funn()
```

[Note-&&: Logical AND - The logical AND operator (&&) returns the Boolean value true (or 1) if both operands are true and return false (or 0) otherwise.
||: Logical OR - The logical OR operator (||) returns the Boolean value TRUE (or 1) if either or both operands are true and return FALSE (or 0) otherwise.
If(x) gets executed if the value inside if(), i.e., x is not zero.]

- ○ 11
- ○ 16
- ○ 0
- ◉ 5

16. What will be the output of the following pseudocode for a = 99, b = 2?

```
1. Integer funn(Integer a, Integer b)
2.      Integer s
3.      Set s = 2
4.      a = a + s
5.      b = b + a
6.      a = 0
7.      if(a)
8.          return a
9.      Else
10.         a = a + s
11.         b = b + a
12.     End if
13.     return a
14. End function funn()
```

- ○ 8
- ○ 3
- ○ 6
- ◉ 2

17. What will be the output of the following pseudocode for a = 9, b = 7?

```
1. Integer funn(Integer a, Integer b)
2.      if(3 > 2)
3.          a = 3 ^ 2
4.      End if
5.      if(1 > 2)
```

```
6.              b = 1 ^ 2
7.          End if
8.          return a + b
9. End function funn()
```

[Note: ^ is the bitwise exclusive OR operator that compares each bit of its first operand to the corresponding bits of its second operand. If one bit is 0 and the other bit is 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.]

- ○ 4
- ○ 17
- ◉ 8
- ○ 11

18. What will be the output of the following pseudo code for a=9, b=7,c=7?

```
Integer funn(Integer a , integer b, Integer c)
if((a-b-c)<(5+a))
   C=(c^9)+b
   a=(c+3)+b
end if
return a+b+c
```

- ○ 76
- ○ 64
- ○ 58
- ◉ 59

19. What will be the output of the following pseudocode?

```
Integer arr1[10], n, ctr, p, q, r
Set arr[] = {1,2,3,4,5,2,6,5,9}, n=9, ctr = 0
for(each p from 0 to n-1)
   ctr = 0
   for(each q from 0 to p-2)
      if(arr1[p] = arr1[q])
         ctr = ctr + 1
   end for
   for (each r from p+1 to n-1)
      if(arr1[p] = arr1[r])
         ctr = ctr + 1
      end if
   end for
   if (ctr EQUALS 0)
      print arr1[p]
   end if
end for
```

- ○ 2 5

- ○ 1 2 3 4 5 6 9
- ◉ 1 3 4 6 9
- ○ None of the mentioned options

20. What will be the output of the following pseudocode?

```
Integer a, b, v, c
Set a = 9, v = 27
While (v > 5)
   a = a + v
   c = a – 10
   while (c >7)
      b = v + c
      c = c – 60
   end while
   v = v/3
end while
print a, c, v
```

- ○ 45 25 3
- ○ 89 -41 4
- ○ None of the mentioned options
- ◉ 45 -25 3