Q1. What will be the output of the following pseudocode?

```
Integer i
Set i = 3
do
print i + 3
i = i - 1
while(i not equals 0)
end while
```

[Note: A do-while loop is a control flow statement that executes a block of code at least once, and then repeatedly executes the given Boolean condition at the end of the block]

- A) 666
- **B)** 656
- C) 555
- **D)** 6 5 4

Ans: D

2. What would be the output of the following pseudocode?

```
Integer a
String str1
Set str1 = "goose"
a = stringLength(str1)
Print (a ^ 1)
```

[Note- string-length(): string-length() function counts the number of characters in a given string and return the integer value.

^ is the bitwise exclusive OR operator that compares each bit of its first operand to the corresponding bit of its equal 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]

- **A)** 0
- **B)** 4
- **C)** 5
- **D)** 3

Ans: B

Q3. What would be the output of the following pseudocode?

```
Integer a, b, c
Set a = 8, b = 51, c = 2
c = (a ^ c)^ (a)
b = b mod 4
Print a + b + c
```

[Note- mod finds the remainder after the division of one number by another. For example, the expression "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 bit of its equal 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]

- A. 13
- B. 17

C. 26

D. 16

Ans: A

Q4. What would be the output of the following pseudocode?

```
Integer i, j, k
Set k = 8
for(each i from 1 to 1)
         for(each j from the value of i to 1)
             print k+1
            end for
```

A. 2

B. 9

C. 7

D. 8

Ans: B

Q5.What will be the output of the following pseudocode?

```
Integer a, b
Set a = 15, b = 7
a = a mod (a - 3)
b = b mod (b - 3)
a = a mod 1
b = b mod 1
Print a + b
```

- **A)** 15
- **B)** 7
- **C)** 2
- **D)** 0

[Note-mod finds the remainder after the division of one number by another. For example, the expression "5 mod 2" leaves a quotient of 2 and a remainder of 1]

Answer: 0

Q6. What will be the output of the following pseudocode?

```
Integer a, b, c
Set b = 5, a = 2, c = 2
if(b>a && a>c && c>b)
b = a + 1
Else
a = b + 1
End if
Print a + b + c
```

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

- **A)** 2
- **B)** 13
- **C)** 26
- **D)** 5

Ans: B

Q13. What will be the output of the following pseudocode?

```
Integer arr[]={10, 20, 30, 40, 5}
Integer a, s
Set s = 0
Set a = arr[1] + arr[2]
Print a
```

- **A)** 25
- **B)** 5
- **C)** 50
- **D)** 40

Ans: C

Q7. What will be the output of the following pseudocode?

```
Integer a, b, c
Set b = 2, a = 2
c = a ^ b
Print c
```

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

- **A)** 6
- **B)** 4
- **C)** 0
- **D)** 2

Ans: C

Q8. What will be the output of the following pseudocode?

```
Integer arr[]={10, 20, 30, 40, 5}
Integer a, s
Set s = 0
Set a = arr[1] + arr[2]
Print a
```

- **A)** 25
- **B)** 5
- **C)** 50
- **D)** 40

Ans: C

Q9. Which of the following series will be printed by the given pseudocode?

```
Integer i, j, k, n
Set j=1, k=1
for(each i from 1 to 5)
  print k
  j=j+1
  k=k+j
end for
```

- A) 1 3 6 10 15
- **B)** 1 2 3 4 5
- **C)** 2 4 6 8 10
- **D)** 1 1 2 3 5

Ans: A

Q10. Find the output of the following pseudo-code:

```
Integer x,y,z;
x=0
y=1
x = y = z = 8
Print x
```

Options:

- **A)** 0
- **B)** 8
- **C)** 1
- D) None of the above

Correct Answer: Option B

Q11. Find the output of the following pseudo-code:

```
Integer value, n
Set value = 1, n = 45
while(value less than equal to n)
value = value << 1
end loop
Print value</pre>
```

Options:

- **A)** 64
- **B)** 32
- **C)** 45
- **D)** None of the above

Correct Answer: Option A

Q12. Find the output of the following pseudo-code:

```
Integer c, d
Set c = 15, d = 12
d = c - 1
Print c //line
c = d + (c - 2)
if(c < 40)
   Goto line
end if</pre>
```

Options:

- **A)** 14 26 38
- **B)** 27 39
- **C)** 15 27 39
- **D)** None of the above

Correct Answer: Option C

Q13. Find the output of the following pseudo-code if x=4 and y=5:

```
Integer fun(int x, int y)
  if(x > 1)
   fun(x - 2, y + 2)
  end if
  print y
End function fun()
```

Options:

A) 4 5 6

- **B)** 765
- **C)** 9 7 5
- **D)** None of the above

Correct Answer: Option C

Q14. How many times will the print statement be executed:

```
Integer a, b, c
Set a = 8, b = 10, c = 6
If(a > c AND (b + c) > a)
    Print a
end if
if(c > b OR (a + c) > b)
    Print b
end if
if((b+c) MOD a EQUALS 0)
    Print c
end if
```

Options:

- **A)** 2
- **B)** 3
- **C)** 1
- **D)** 0

Correct Answer: Option B

Q15. What will be the output if the following pseudocode if a=10 and b=6:

```
Integer func (Integer a, Integer b)
Integer temp
while(b)
```

```
temp = a MOD b
a = b
b = temp
end while
return a
End function func()
```

Options:

- **A)** 2
- **B)** 4
- **C)** 3
- **D)** 1

Correct Answer: Option A

Q16. What will be the output of the following pseudo-code?

```
Integer x, y, z
Set x=24, y=8
x = x/y
z = y<<x
Print z</pre>
```

[Note: << is left shift operator, it takes two numbers, left shifts the bits of the first operand, the second operand decodes the number of ...]

Options:

- **A)** 1
- **B)** 8
- **C)** 0
- **D)** 64

Ans: D

Q17. What will be the output of the following pseudocode?

```
Integer x, y, z, a
Set x = 2, y = 1, z = 5
a = (x AND y) OR (z + 1)
Print a
```

Options:

- **A)** 5
- **B)** 3
- **C)** 2
- **D)** 1

Ans: D

Q18. What will be the output of the following pseudocode?

```
Integer a=5, b=4, c=3
a = b + c
c = a - b
c = c + a
c = b + c
b = b + c
Print a, b, c
```

Options:

- **A)** 7 14 7
- **B)** 7 14 10
- **C)** 7 8 14
- **D)** 7 18 14

Correct answer: Option D

Q19. What will be the output of the following pseudocode?

Options:

A) 5 3 9

B) 6 14 17

C) 6 4 14

D) 6 4 16

Correct Answer: Option D

Q20. How many times will the print statement be executed:

```
Integer a, b, c

Set a = 8, b = 10, c = 6

If(a > c AND (b + c) > a)

Print a

end if

if(c > b OR (a + c) > b)
```



Options:

- A) 2
- B) 3
- C) 1
- D) 0

Correct Answer: Option B

Q21. What will be the output of the following pseudocode?

Integer x, y, z, a

Set x = 2, y = 1, z = 5

a = (x AND y) OR (z + 1)

Print a

Options:

A) 5

B) 3		
C) 2		
D) 1		
Correct Answer: Option D		
Q22. Find the output of the following pseudo-code:		
Integer c, d		
Set c = 15, d = 12		
d = c - 1		
Print c //line		
c = d + (c - 2)		
if(c <40)		
Goto line		
end if		
Options:		
A) 14 26 38		
B) 27 39		
C) 15 27 39		
D) None of the above		

Q23 . Find the output of the following pseudo-code:

Integer value, n

Correct Answer: Option C

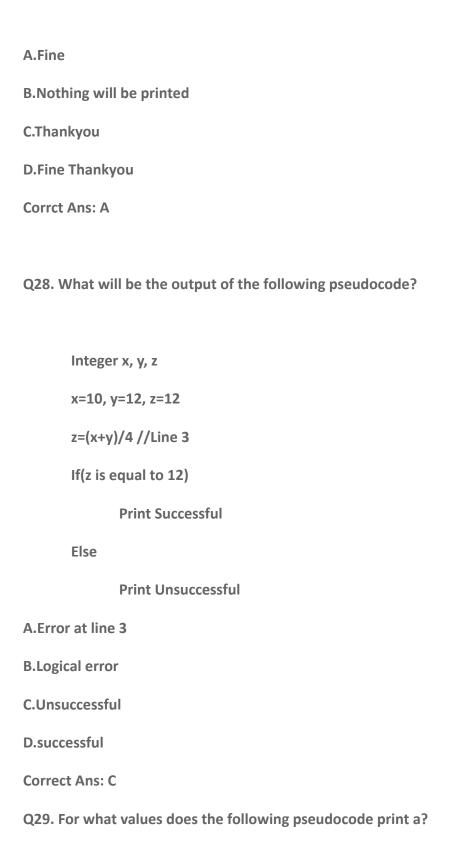
```
Set value = 1, n = 45
       while(value less than equal to n)
       value = value <&lt; 1
       end loop
Print value
Options:
A) 64
B) 32
C) 45
D) None of the above
Correct Answer: Option A
Q24. What will be the output if the following pseudocode
       if a=10 and b=6:
       Integer func (Integer a, Integer b)
       Integer temp
       while(b)
```

```
temp = a MOD b
       a = b
      b = temp
       end while
       return a
      End function func()
Options:
A) 2
B) 4
C) 3
D) 1
Correct Answer: Option A
Q25. What will be the output of the following C code?
      #include<stdio.h&gt;
      void main()
      {
```

```
long double a;
       signed char b;
      int arr[sizeof(!a+b)];
       printf("%d", sizeof(arr));
       }
[Consider the size of a is 16 and size of b is 1]
A. 16
B. 0
C. 6
D. 4
Correct ANS: A
Q26. What will be the output of the following pseudocode?
       Integer i,j,sum,n
       Set sum=0,n=7
       Repeat for i=1 to n
       sum=sum+(i*i)
       End loop
```

Print Sum
A.204
B.140
C.8
D.64
Correct Ans: B
Q27. What will be the output of the following pseudocode?
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

Print Thankyou



```
Integer a,b,c

If(a>b OR a>c)

Print a

If(a+b>c AND b<c)

Print b

A. a=5,b=3,c=6
B. a=5,b=4,c=3
C. a=3,b=4,c=5
D. All the mentioned options
```

Correct Ans: B

Q30. What will be the output of the following pseudocode?

```
Integer i, f, num

Set f=1, num=8

Repeat for i=1 to num

f=f*i

End loop

Print f

A. 0

B. 40320
C. 1
D. 8
```

Correct Ans: B

Q31. For what values does the following pseudocode print Q?

```
Integer a, b, c

If(a+c>b)

If(b<c)

Print P

Else

Print Q

Else

Print R
```

Correct Ans: D

Q32. 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

b=a-b

Print b

End For
```

- A. 392370
- B. 3 10 27 71
- C. 3 10 27 70
- D. 3710

Correct Ans: C

```
Q33. What will be the output of the following pseudocode?
```

```
Integer num,x,y,count
Set num=85,count=0
x=num<<1
y=y+1
While((y/2) not equal 0)
       if(y mod 2 not equal 0)
              count=count+1
       Else
             y=y/2
       end if
End while
If(count)
       Print 0
       Print y
Else
       Print 1
       Print x
end if
If(count)
       Print 0
       Print y
```

```
Else
             Print 1
             Print x
       end if
       Note: 1. ^: Bitwise XOR operator
            2. << : Left-shift operator
   A. 0 170
   B. 1170
   C. 1125
   D. None of the mentioned options
Ans: B
Q34. What will be the output of the following pseudocode?
      Integer a=10,b=7
      For(int i=1;i<=5;i++)
             a=a+i+b
             while(a>6)
                    a=a+b
                    b=b-1
                    a=a-1
             end while
             Print a
       End for
   A. 3210-3
   B. 3-3-8-15
   C. -6 -13 -19 -24 -28
   D. 3-3-8-12-15
```

```
Ans: D
```

Q35. What will be the output of the following pseudocode?

Integer i,j,sum,n

Set sum=0,n=7

Repeat for i=1 to n

Repeat for j=1 to i-1

sum=sum+j

End loop

End loop

Print sum

- A. 84
- B. 147
- C. 35
- D. 56

Ans: D

Q36. What will be the output of the following pseudocode

Integer x,y,z,a

Set x=2,y=1,z=5

a=(x AND y)OR(z+1)

Print a

- A. 2
- B. 3
- C. 5
- D. 1

Ans: D

Q37. What will be the output of the following pseudocode

```
Integer a,n,sum,q,r
      Set a=123,n=0,sum=0
      Set q=a
      While(q mod 10 not equals 0)
             n=n+1
             q=q/10
      End while
      Print n
      While a greater than 0
             r=a mod 10
             sum=sum+r
             a=a/power(10,n-1)
      End While
      Print sum
   A. 64
   B. 32
   C. 65
   D. 34
Ans: D
Q38. What will be the output of the following pseudocode
```

Integer x

Set x=259

```
Print 0
             Otherwise if (x mod 9 equals 0)
                    Print 9
             Otherwise
                    Print x mod 9
             End if
   A. 7
   B. 8
   C. None of the mentioned
   D. 16
Ans: A
Q39. What will be the output of the following pseudocode
      Integer a,b,c,d
      Set a=8,b=7,c=4,d=6
       a=b+c-d
       b=a+d-c
       d=a+b+d
```

If(x equals 0)

Print d

- A. 18
- B. 3
- C. 8
- D. 12

Ans: A

Q40. What will be the output of the following pseudocode?

Integer a, b, c, d

a = b - c

for(each c from 1 to a - 1)

$$b = b + c + 12$$

$$b = b / 5$$

$$d = b + a$$

end for

$$c = a + b + c$$

Print a b c

- A. 7513
- B. 5311
- C. 4126
- D. 6412

Ans:D

Q41. For which of the following conditions "B" will be printed?

if
$$(x > z)$$

```
print A
       else
              print B
       end if
       Else if (y > z)
              print C
       else
              Print D
       end if
       end if
   A. z > x
   B. x > z > y
   C. x > y > z
   D. y > z
Ans: B
Q42. Consider the following pseudocode for which of the following inputs, the pseudocode
will
print Successful
   1. num=6
   2. num=4
   3. num=7
Integer num,t,f
t=num
f=0
While(t not equals 1)
```

```
If(t mod 2 not equals 0)
              f=1
              Jump out of the loop
       End if
       t=t/2
End While
If (f equals 0)
       Print "Successful"
Else
       Print "Unsuccessful"
End if
   A. Only 2
   B. Only 1 and 2
   C. Only 1 and 3
   D. All 1,2,3
Ans: A
Q43. Integer a, i, b
Set a=0, i=0
For(each i from 0 to 4)
       i=i+1
       if i equals 3
              Print Inside
              Jump out of loop
```

```
End for
Print i
End
   A. 1
   B. Inside 3
   C. 4
   D. 2
Ans: B
Q44. In which of the following Pseudocode the loop will run maximum times
   A. Integer a,b=1,c
       While (b<=3)
       For(each a from 1 to 4)
              End for
       b=b+1
       End While
   B. Integer a,b,c
       For(each a from 1 to 5)
              For(each b from 1 to 6) increment b by 2 in each loop
              End for
       End for
   C. The loop will run an equal number of times in each code
   D. Integer a,b,c
       For(each a from 1 to 18)
       End for
```

Ans: D

Q45. What will be the output of the following pseudocode

Declare x,y,z,i

Set x=4, y=7

z=(x+y)-4

For i=0 to z

x=x-i

z=z+x

End for

Print z

- A. 7
- B. 4
- C. -13
- D. -4

Ans: D

Q46. What will be the output of the following pseudocode

Integer p, q, r, a

Set p=2, q=1, r=5

a=(p AND q) OR (r+1)

Print a

- A. 2
- B. 3
- C. 5
- D. 1

Ans: D

Q47. What will be the output of the following pseudocode for input a = 30, b = 60, c = 90?

```
Integer a, b, c, sum
       Read a, b, c.
       Set sum = a + b + c.
       if ((sum EQUALS 180) and (a NOT EQUALS 0) and (b NOT EQUALS 0) and (c NOT EQUALS
       0))
              print "Success"
       Otherwise
              print "Fail"
       End if
   A. Fail
   B. None of the mentioned options
   C. Error in the logic of the pseudocode
   D. Success
Ans: D
Q48. What will be the output of the following pseudocode?
       Integer a = 2, b = 6, C, i
       C = (a + b) - 3
       for(each i from 0 to C - 1)
              a = a-i
              C = C+a
       end for
```

Print c

```
A. -3
B. 0
C. 3
D. 2
```

Ans: C

Q49. What will be the output of the following pseudocode?

```
Integer rows = 4, k, 1, number = 1
   for(each k = 1 to rows)
          for(each I = 1 to k)
                Print number
                Print space
                number=number+
          end for
          Move to next line
   end for
A. 1
   23
   456
   78910
B. 1234
   123
```

12

1

```
C. 1
      1 1
      121
      1331
Ans: A
Q50. What will be the output of the following pseudocode?
      Integer a, n, sum, q, r
      Set a=123, n=0, sum=0
      Set q = a
      while ( q mod 10 NOT EQUALS 0)
             n = n + 1
             q = /10
      End while
      Print n
      while (a greater than 0)
             r= a mod 10
             sum sum +r
             a = a / power(10, n-1)
      End while
      Print sum
A. 64
```

л. о -

B. 32

```
C. 65
D. 34
Ans: D
Q51. Consider the pseudocode mentioned bellow. How many print statements will be
executed
       in the code?
              Integer a,b,c
              Set a=8, b=10, c=6
              If(a>c AND (b+c)>a)
                     Print a
              End if
              If(c>b OR (a+c>b))
                     Print b
              End if
              If((b+c) MOD a Equals 0)
                     Print c
              End if
       A.3
       B.0
       C.2
       D.1
```

```
Q52. What will be the output of the following pseudocode for a=2?
       Integer fun(Integer a)
              Integer x,y
              Set y=3
              for (each x from 0 to y-1)
                     a=a+y
              end for
              return a
       End function fun()
A. 4
B. 9
C. 12
D. 11
Ans: D
Q53. What will be the output of the following pseudocode
       main()
              inc(); inc(); inc();
       End main
       Fun inc()
              static int x;
```

printf("%d",++x);

Ans: A

- A. It will print 123
- B. It will print 3 consecutive, but unpredictable numbers
- C. It will print 012
- D. It will print 111

Ans: A

Q54. What will be the output of the following pseudocode

```
main() {

Integer a=10

If(printf("%d",a>=10)-10)

For(;;)

break;

Else;

End main
```

- A. Infinite loop
- **B.** Compilation Error
- C. 1
- D. 0

Ans: C

Q55. What will be the output of the following pseudocode?

```
Main
while(printf("%d",printf("az")))
    printf("by");
End main
```

- A. None of these
- B. It gives syntax error
- C. It will print azbyazbyazby

```
D. It will print azbybyby...
Ans: A
Q56. What will be the output of the following pseudocode?
       Integer a=0,i=0,b
       For i from 0 to 4
              increment a
              if i is equal to 3
                     print "Hello world"
              break;
       end for
       print a
   A. 4
   B. 2
   C. 1
   D. Hello world
Ans: C
```