

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

Integer a,b,c

Set a=5, b= 10, c = 10

c = a

a = (a ^ a) + b

b = (b & 3) + c

print a + b + c

- ☐ 33
☐ 17
☐ 26
☒ 22

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

Integer a,b,c

Set a=5, b=3, c=12

a=5+a

if (4 + 4) ^ c

 a=6&c

end if

print a+b+c

- ☒ 19
☐ 25
☐ 35
☐ 4

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

1. Integer a = 5, b = 4, c = 3

2. a = b + c

3. c = a - b

4. c = c + a

5. b = b + c

6. Print a, b, c

- ☒ 7 14 10
☐ 7 14 7
☐ 7 12 14
☐ 7 14 18

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

1. Integer a, b, c

2. Set a = 5, b = 10, c = 10

3. c = a

4. a = (a ^ a) + b

5. b = (b & 3) + c

6. Print a + b + c

[Note- &: bitwise AND - The bitwise AND operator (&) compares each bit of the first operand to the corresponding bit of the second operand. If both bits are 1, the corresponding result bit is set to 1. Otherwise, the corresponding result bit is set to 0.

^ 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.]

- ☐ 17
- ☒ 22
- ☐ 26
- ☐ 33

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

1. String str1 = "Qoq", str2 = "OqO"

2. Print (countVowel(lower(lower(str1)+lower(str2)+lower(str1))))

[Note: countVowel(string) returns the numbers of vowels in the string, e.g., countVowel("okay") returns 2.

lower(string) converts all the letters of the strings to lower case, e.g., lower("OKaY") returns "okay".]

- ☐ 0
- ☒ 4
- ☐ 12
- ☐ 7

6. What will be the output when following program is executed?

Set copper_percentage = 100

Set UNS = 66099

if(copper_percentage < 90 and UNS > 70000 and UNS < 79999) then
display "Cast"

end-if

if(copper_percentage >= 90 and UNS > 64700 and UNS < 70000) then
display "Wrought"

end-if

if(copper_percentage > 90 and UNS > 66999 and UNS < 70000) then
display "Rod"

end-if

- ☐ Cast
- ☒ Wrought
- ☐ Rod
- ☐ Error

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

Set length = 5

Set breadth = 7

```
Set area = length * breadth
Set perimeter = 2 * (length + breadth)
if area > perimeter then
display "Area is greater than perimeter."
else
display "Area is lesser than perimeter."
end-if
```

- ☐ Area is lesser than perimeter
- ☒ Area is greater than perimeter
- ☐ Error
- ☐ Not answered

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

```
Integer p,q,r
Set p=2,q=7,r=-1
p=p+q+r-q
q=p+r-q
if(p>q)
    print "good bye"
else
    print "take care"
```

- ☐ good bye take care
- ☒ good bye
- ☐ take care
- ☐ None

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

```
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
```

- ☒ 8 10 6
- ☐ 0

☐

6

☐

4

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

```
int i = 5, j = 7
```

```
if(i + j > 5)
```

```
    j = i + 2
```

```
    if(j < 5)
```

```
        print i
```

```
    else
```

```
        print j
```

```
else
```

```
    print i + 1
```

☐ 12

☐ 5

☒ 7

☐ 6

11. 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
```

☐ 2

☒ 13

☐ 26

☐ 5

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

```
Integer a, b, c
```

```
Set b = 1, c = 1
```

```
for(each a from 1 to 3)
```

```
    b = b >> 1
```

```
    c = c << b
```

```
End for
```

```
Print b + c
```

[Note: >> - Bitwise right shift operator, it takes two numbers, right shifts the bits of the first

operand, the second operand decides the number of places to shift, << - is left shift operator, it takes two numbers, left shifts the bits of the first operand, the second operand decides the number of places to shift]

- ☐ 0
- ☐ 2
- ☐ None of the mentioned options
- ☒ 1

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

Integer a, b, c

Set b = 10, a = 1

for(each c from 1 to 2)

 a = (a+c) * c

 b = b - c

End for

if(0)

 b=a-1

 a=a-1

 a=b+1

Else

 a=b+1

 b=a-1

 a=a-1

End if

Print a + b + c

[Note: If(x) gets executed if the value inside if(), i.e., x is not zero]

- ☐ 20
- ☐ 25
- ☐ 10
- ☒ 17

14. How many times the following pseudocode will print "btech"?

Integer a,b

for(each a from 0 to 3)

for(each b from 0 to a)

print "btech"

end for

end for

- ☐ 8 times
- ☐ 9 times
- ☒ 10 times
- ☐ 11 times

15.

What will be the output for below pseudocode for $x = 5$ and $y = 6$

READ x and y

SET $ans = 0$

WHILE $y \neq 0$

$ans = ans + x$

$y = y - 1$

EndWHILE

PRINT ans

☐ 11

☐ 21

☐ 15

☒ 30

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

Set integer $sm = 0$

Set integer $p = 10$

for $a = 1$ to p step up 1 do

$sm = sm + a$

display sm

☐ 10

☐ 46

☐ 35

☒ 55

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

Set integer $value = 56$

Set integer $res = 0$

while($value \neq 0$) do

$m = value \% 10$

$res = res * 10 + m$

$value = value / 10$

display res

☐ 55

☐ 105

☒ 65

☐ 85

18. What will be the output of the following pseudo code 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()

- ☒ 7 6 5 4
- ☐ 8 5 4 2
- ☐ 5 2 1 4
- ☐ 2 0 3 4