Sample Questions

Computer Programming

1. A 8-bit signed integer has the following range

   a. 0 to 255
   b. -128 to 127
   c. -255 to 254
   d. 0 to 509

2. What will the output of the following code statements be?
Integer x = 34.54, y = 20, z = -5 print (y > 50 AND z > 10 or x > 30)

   a. 0
   b. 1
   c. -1
   d. 10

3. Annie makes a program to print the product of cubes of the first 10 whole numbers. She writes the following program

```
integer x = 0 // statement 1 integer sum = 0 // statement 2 while ( x < 10 ) // statement 3
    {
        sum = x*x*x // statement 4 x = x + 1 // statement 5
    }
print sum // statement 6
```

Is her program correct? If not, which statement will you modify to correct it?

   a. No error, the program is correct.
   b. Statement 1
   c. Statement 4
   d. statement 6

4. I have a problem to solve that takes n as an input number. The problem has a property that given the solution for (n-1), I can easily solve the problem for n. Which programming technique will I use to solve such a problem?

    a. Iteration
    b. Decision-making
    c. Object Oriented Programming
    d. Recursion

5. Given Integer x = 40, y = 35, z = 20, w = 10
   Comment on the output of the following two statements
   print x * y / z - w print x * y / (z - w)

    a. Differ by 80
    b. Same
    c. Differ by 50
    d. Differ by 160

6. In which area of a class are data and function directly accessible outside the class?

    a. Public
    b. Private
    c. Protected
    d. None of these

7. Here is an infix notation ((A+B)*C-(D-E))^(F+G) Choose the correct postfix notation of the above from the given options.

    a. AB+CD*E--FG+^
    b. AB+C*DE--FG+^
    c. AB+C*DE-FG-+^
    d. A+BC*DE-FG-+^

8. If the depth of a tree is 3 levels, then what is the size of the tree?

a. 2
b. 4
c. 6
d. 8

9. One of the following options is a form of access used to add and remove nodes from a queue.

a. LIFO
b. FIFO
c. Both LIFO and FIFO
d. None of these

10. What is the time complexity of adding three matrices of size NXN cell-by-cell?

a. O(N)
b. O(N^2)
c. O(N^3)
d. None of these