

## COMMON SECOND REVISION TEST – 2023

Standard XI

Reg.No. : 

## COMPUTER SCIENCE

Time: 3.00 hrs.

Part - I

Marks: 70

## I. Choose the correct answer:

15 x 1 = 15

1. \_\_\_\_\_ is an input device for signalling by hand, by way of pressing one or more switches.
    - a) Touch screen
    - b) Scanner
    - c) Mouse
    - d) Keyer
  2. \_\_\_\_\_ is the system of handling the character of Indian local languages.
    - a) ASCII
    - b) EBCDIC
    - c) ISCII
    - d) TSCII
  3. Expansion of FAT is .....
    - a) File Allotment Table
    - b) File Allocation Table
    - c) File Allocation Tab
    - d) Free Allocation Table
  4. Which windows version was designed to act as servers in network?
    - a) Windows NT
    - b) Windows 95
    - c) Windows 98
    - d) None of the above
  5. An \_\_\_\_\_ is a step-by-step sequence of statements to solve a problem.
    - a) Data
    - b) Variable
    - c) Coding
    - d) Algorithm
  6. \_\_\_\_\_ is a diagrammatic notation for representing algorithms.
    - a) Algorithm
    - b) Variable
    - c) Flowchart
    - d) Decomposition
  7. \_\_\_\_\_ must have at least one base case.
    - a) Iteration
    - b) Recursion
    - c) Variant
    - d) Decomposition
  8. Match the following and write the correct option.
 

Tokens	Examples
1. Keyword	- a) =
2. Identifier	- b) NOT
3. Logical operator	- c) total_marks
4. Assignment Operator	- d) while
- Answers:
- a) 1-d, 2-c, 3-b, 4-a
  - b) 1-c, 2-b, 3-a, 4-d
  - c) 1-b, 2-a, 3-d, 4-c
  - d) 1-a, 2-b, 3-c, 4-d
9. The literal meaning for void is..
    - a) Condition
    - b) Operators
    - c) Recursion
    - d) empty space
  10. \_\_\_\_\_ control statement is used to transfer the control from one place to another place.
    - a) break
    - b) continue
    - c) go to
    - d) None of the above
  11. The file scope variable is also called as \_\_\_\_\_ variable.
    - a) local
    - b) global
    - c) class
    - d) None of the above
  12. Structure is declared using the keyword.....
    - a) struct
    - b) class
    - c) array
    - d) void
  13. \_\_\_\_\_ is the good feature for data redundancy.
    - a) class
    - b) function
    - c) polymorphism
    - d) inheritance

14. A constructor having a reference to an already existing object of its own class is called \_\_\_\_\_ constructor.  
 a) file                      b) class                      c) copy                      d) none of the above
15. \_\_\_\_\_ is the familiar tamil keyboard layouts that works in Smart phone.  
 a) e-kalappai              b) sellinam              c) lippicor              d) none of the above

**Part-II**

**Answer any six questions. Question No.24 is compulsory.**

**6 x 2 = 12**

16. What is a computer?  
 17. Write a truth table for XNOR gate.  
 18. What are the building blocks of an algorithm.  
 19. Write about strlen() function.  
 20. What is polymorphism.  
 21. What is TSCII?  
 22. What is cybercrime?  
 23. What are the types of errors?  
 24. List the three levels of securities provided by an operating system?

**Part-III**

**Answer any six questions. Question No. 33 is compulsory.**

**6 x 3 = 18**

25. Define operating system and write the types of operating system?  
 26. Convert  $(25F)_{16}$  into its equivalent Binary number.  
 27. Find 2's Complement for  $(-24)_{10}$   
 28. Evaluate the following C++ expressions where x, y, z are integers and m, n are the floating point numbers. ( if  $x = 1$ ,  $y = 1$  and  $m = 1.0$ )  
 (i)  $n = x + y / x$ ;  
 (ii)  $z = m * x + y$ ;  
 (iii)  $z^* = x * m + x$ ;
29. Write the syntax of switch statement.  
 30. Write a notes on Implicit call and Explicit call.  
 31. What do you mean by Overriding/Shadowing?  
 32. Define data and information.  
 33. Write a C++ program to find the area of the rectangle. (area = 1 \* b)

**Part D**

**Answer all the questions...**

**5 x 5 = 25**

34. a) Explain the following.  
 (i) Inkjet Printer                      (ii) Multimedia Projector  
 (iii) Bar Code/QR Code Reader                      **(OR)**
- b) Arrange the memory devices in ascending order based on the access time.
35. a) What are the different forms of function return? Explain with example.  
**(OR)**
- b) A single-square-covered board is a board of  $2^n \times 2^n$  squares in which one square is covered with a single square tile. Show that it is possible to cover this board with triominoes without overlap.



(3)

XI Computer Science

36. a) Trace the step-by-step executes of the algorithm for factorial (4).  
factorial (n).

--inputs : n is an integer,  $n \geq 0$

--outputs :  $f = n!$

f, i := 1, 1

while  $i \leq n$

f, i :=  $f \times i$ ,  $i + 1$

(OR)

b) What are the rules for function and operator overloading?

37. a) Explain briefly about Class Access Specifiers.

(OR)

b) Write a C++ Program to find the difference between two Matrix.

38. a) Write the different types of Cyber Attacks.

(OR)

b) Write the output of the following C++ program.

```
#include<iostream>
using namespace std;
class add
{
    int a, b;
public:
    int sum;
    void getdata()
    {
        a = 5;
        b = 5;
        sum = a+b;
    }
}a1;
add a2;
int main()
{
    add a3;
    a1.getdata();
    a2.getdata();
    a3.getdata();
    cout<<a1.sum;
    cout<<a2.sum;
    cout<<a3.sum;
    return 0;
}
```