

11 - STD

QUARTERLY EXAMINATION - 2023

COMPUTER SCIENCE

Reg. NO.

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MARKS : 70

TIME : 3.00 Hours

PART - A

15 X 1 = 15

Answer the all the questions:-

1. When a system restarts which type of booting is used?
 (A) Warm booting (B) Cold booting (C) Touch boot (D) Real boot
2. How many characters can be handled in Binary Coded Decimal (BCD) System?
 (A) 64 (B) 255 (C) 256 (D) 128
3. Which gate is called as the logical inverter?
 (A) AND (B) OR (C) NOT (D) XNOR
4. Which is the fastest memory?
 (A) Hard disk (B) Main memory (C) Cache memory (D) Blue-Ray disc
5. An example for single task operating system is
 (A) Linux (B) Windows (C) MS-DOS (D) Unix
6. The shortcut key used to rename a file in windows
 (A) F2 (B) F4 (C) F5 (D) F6
7. Ensuring the input-output relation is
 (A) the responsibility of the algorithm and the right of the user.
 (B) the responsibility of the user and the right of the algorithm.
 (C) the responsibility of the algorithm but not the right of the user.
 (D) the responsibility of both the user and the algorithm
8. How many times the loop is iterated?

```
i := 0
while i ≠ 5
i := i + 1
```

 (A) 4 (B) 5 (C) 6 (D) 0
9. A loop invariant need not be true
 (A) at the start of the loop. (B) at the start of each iteration
 (C) at the end of each iteration (D) at the start of the algorithm
10. Who coined C++?
 (A) Rick Mascitti (B) Rick Bjarne (C) Bill Gates (D) Dennis Ritchie
11. Which of the following is called as compile time operators?
 (A) sizeof. (B) pointer (C) virtual (D) this
12. Which of the character is used as suffix to indicate a floating point value?
 (A) F (B) C (C) L (D) D
13. This can be used as alternate to endl command
 (A) \t (B) \b (C) \0 (D) \n
14. The multi way branch statement
 (A) if (B) if ... else (C) switch. (D) for
15. A loop that contains another loop inside its body :
 (A) Nested loop, (B) Inner loop (C) Inline loop (D) Nesting of loop

Part - B

Write any 6 questions. (Compulsory Question No: 24)

6 X 2 = 12

16. Distinguish between primary and secondary memory.
17. List the encoding systems that represents characters in memory
18. What is HDMI.
19. What is GUI.
20. What is Abstraction?
21. Define Loop invariant. → Loop body, Property of the variables during loop execution.
22. Define operating system.
23. Write the syntax of while loop.
24. Add: (1011101)₂ + (1010110)₂

Part - C

Write any 6 questions (Compulsory Question No: 33)

6 X 3 = 18

25. Write the significant features of monitor.
26. Write a short note on XNOR Gate

Combination XOR gate followed by an inverter.
True - 1, false - 0

25. 1. display the information. looks like TV pixel.
2. High Definition Multimedia interface. Audio, video

18. Window based sys with a pointing device to direct I/O choose from menus selection of keyboard. vibrant color.

17. BCD - Binary Coded Decimal
EBCDIC - Extended Binary Coded Decimal Interchange Code.

ASCII - American Standard Code for Information Interchange
Unicode
ISCI - Indian Standard Code for Information Interchange

27. Explain RAM and its types. →
28. Write a short note on const keyword with an example.
29. What is the difference between an algorithm and a program?
30. Describe the differences between keywords and Identifiers.
31. Write a note on the elements of a window. →
32. Differentiate the operators = and ==
33. What is the output of the following code :

```
#include<iostream> using
namespace std;
int main( )
{
    int a=10, b=3, x;
    x = (a>b) ? a : b;
    cout<<"\n Result : "<<x;
}
```

Part - D

Answer All the Questions :-

34. Explain the basic components of a computer with a neat diagram.

(OR)

Explain the Derived gates with expression and truth table.

35. Explain in types of ROM.

(OR)

List out the points to be noted while creating a user interface for an Operating system.

36. Explain the versions of Windows Operating System.

(OR)

Write the specification of an algorithm hypotenuse whose inputs are the lengths of the two shorter sides of a right angled triangle, and the output is the length of the third side.

37. Explain briefly about Operators in C++

(OR)

Explain Switch Case statement with example.

38. Define loop? Explain any one of the looping statement with example.

(OR)

Find the Output:

```
#include <iostream>
using namespace std;
int main()
{
    int sales, commission;
    char grade;
    cout << "\n Enter Sales amount: ";
    cin >> sales;
    cout << "\n Enter Grade: ";
    cin >> grade;
    if (sales > 5000)
    {
        commission = sales * 0.10;
        cout << "\n Commission: " << commission;
    }
    else
    {
        commission = sales * 0.05;
        cout << "\n Commission: " << commission;
    }
    cout << "\n Good Job ..... "; return 0;
}
```