

COMMON FIRST REVISION EXAMINATION - JAN. 2025**Standard - XI**

Reg.No.

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Time: 3.00 hrs.

COMPUTER SCIENCE

Marks: 70

PART - I**Choose the correct answer:****15×1=15**

Which one of the following is used to in ATM machines.

- a) Touch Screen b) Speaker c) Monitor d) Printer

A nibble is a collection of

- a) 2 bits b) 2 bytes c) 4 bits d) 4 bytes

The basic logical operation OR is symbolically represented by

- a) dot b) plus c) over bar d) single apostrophe

Which one is RISC processor?

- a) Intel 386 & 486 b) Pentium II c) Pentium III d) Pentium IV

Which of the following is said to be the brain of a computer?

- a) Input devices b) Output devices c) Memory device d) Microprocessor

The File management system used by Linux is

- a) ext2 b) NTFS c) FAT d) NFTS

You can move to the Desktop any time by pressing the Winkey +

- a) D b) T c) S d) F1

From the options given below, choose the operations managed by the operating system

- a) Memory b) Processes c) Disks and I/O devices d) all of the above

Which of the following activities is not algorithmic in nature?

- a) Multiply two numbers b) Draw a kolam
c) Walk in the park d) Swapping of two numbers

If C is false just before the loop, the control flows through

1 S1

2 While C

3 S2

4 S3

- a) S1 ; S3 b) S1 ; S2 ; S3
c) S1 ; S2 ; S2 ; S3 d) S1 ; S2 ; S2 ; S2 ; S3

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

Symbol for conditional operator is

- a) : b) :: c) ?: d) :?

What is the output of the following snippet?

char ch = 'B';

ch = ch + 1;

- a) A b) A1 c) C d) 1C

The looping statement is

- a) if b) if ...else c) switch d) for

A loop that contains another loop inside its body

- a) Nested loop b) Inner loop c) Inline loop d) Nesting of loop

PART - II**Answer any 6 questions. Question No.24 is compulsory.****6×2=12**

5. What is the functions of memory?

7. Convert $(11110101110)_2$ into Hexadecimal number.

8. What is an Instruction?

9. What are the different Operating Systems used in computer?

20. Write the specific features of Windows 95.
21. Distinguish between an algorithm and a process.
22. What is meant by a token? Name the token available in C++.
23. Determine which of the following are valid constant? And specify their type.
i) 0.5 ii) 'Name' iii) '\t' d) iv) 27,822
24. Write any two rules for using which statement in C++.

PART - III**III. Answer any 6 questions. Question No.33 is compulsory.****6×3=18**

25. Write short note on impact printer.
26. What is radix of a number system? Give example.
27. How will you differentiate a flash memory and an EEPROM?
28. Write a note on Multiprocessing.
29. Write a note on the elements of a window.
30. How is state represented in algorithms?
31. How relational operators and logical operators are related to one another?
32. Write a C++ program to print multiplication table of a given number.
33. What are the four important steps to follow for creating and executing a C++ program?

PART - IV**IV. Answer in detail.****5×5=25**

34. a) Explain the basic components of a computer with a neat diagram. (OR)
b) a) Add $(1101010)_2 + (101101)_2$ b) Subtract $(1101011)_2 - (111010)_2$
35. a) Explain the types of ROM. (OR)
b) Explain the concept of a Distributed Operating system along with its advantages
36. a) Write the procedure to create shortcut in Windows OS. (OR)
b) Exchange the contents: Given two glasses marked A and B. Glass A is full of apple drink and glass B is full of grape drink. For exchanging the contents of glasses A and B, represent the state by suitable variables, and write the specification of the algorithm.
37. a) Assume an 8×8 chess board with the usual coloring, "Recoloring" operation changes the color of all squares of a row or a column. You can recolor re-peatedly. The goal is to attain just one black square. Show that you cannot achieve the goal. (Hint: if a row or column has b black squares, it changes by $(|8 - b) - b|$) (OR)
b) Explain the types of errors in C++
38. a) Debug the errors in the following program:

```

$ include < iostream >
Using name space std;
int main ();
{
int num1; num2; sum ;
cout << "Enter a value";
cin >> num1 >> num2
num + num2 = sum;
cout >> "\n The Sum = " >> sum;
return ;
};

```

(OR)
b) Write a program to find sum of the series
 $S = 1 + x + x^2 + \dots + x^n$.