HALF YEARLY EXAMINATION - 2024

STD : XI COMPUTER SCIENCE

TIME: 3.00 HRS TOTAL MARKS : 70

Note:(1) Answer all the questions (ii)choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.

PART I

15 * 1 = 15

1. Which one of the following is used to in ATM machines
   (a) Touch Screen (b) speaker (c) Monitor (d) Printer
2. How many bytes does 1 KiloByte contain?
   (a) 1000 (b) 8 (c) 4 (d) 1024
3. Which of the following OS is a Commercially licensed Operating system?
   (a)Windows (b)UBUNTU (c)FEDORA (d)REDHAT
4. The shortcut key used to rename a file in windows
   (a) F2 (b)F4 (c)F5 (d) F6
5. Omitting details inessential to the task and representing only the essential features of the task is known as
   (a) specification (b) abstraction (c) composition (d) decomposition
6. Who developed C++?
   (a) Charles Babbage (b) BjarneStroustrup (c) Bill Gates (d) Sundar Pichai
7. The multi way branch statement:
   (a) if (b) if ... else (c) switch (d) for
8. Which function is used to check whether a character is alphanumeric or not.
   (a) isalpha() (b) isdigit() (c) isalnum() (d) islower()
9. By default, a string ends with which character?
   (a)\0 (b) \t (c) \n (d) \b
10. "Write once and use it multiple time" can be achieved by
    (a) redundancy (b) reusability (c) modification (d) composition
11. The member function defined within the class behave like..... functions
    (a) inline (b) Non inline (c) Outline (d) Data
12. Which of the following reduces the number of comparisons in a program?
    (a) Operator overloading (b) Operations overloading
    (c) Function Overloading (d) Member overloading
13. Which amongst the following is executed in the order of inheritance?
    (a) Destructor (b) Member function (c) Constructor (d) Object
14. Which one of the following are self-repeating and do not require a computer program to attach themselves?
    (a)viruses (b) worms (c) spyware (d) Trojans
15. What is the capacity of 12cm diameter DVD with single sided and single layer?
    (a) 4.7 GB (b) 5.5 GB (c) 7.8GB (d) 2.2 GB

PART II

Answer any 6 questions. Question no 24 is compulsory. 6X2 = 12

16. What are the components of a CPU?
17. What is an instruction?

18. What is multi-processing?
19. Differentiate Save and save As option.
20. What is meant by a token? Name the token available in C++.
21. Compare an if and a ? : operator
22. What is importance of void data type?
23. List the operators that cannot be overloaded.
24. Write a short note on cracking.

PART III

Answer any 6 questions. Question no 33 is compulsory. **6X3 = 18**

25. Write a note on Recycle bin.
26. Why is main function special?
27. Write the syntax and purpose of switch statement.
28. What are the information the prototype provides to the compiler?
29. Define an Array? What are the types?
30. What are the rules for function overloading?
31. What are the points to be noted while deriving a new class?
32. Write about encryption and decryption.
33. Write the output of the following c++ program

```
#include <iostream>
using namespace std;
int x=45;
int main()
{
int x = 10;
cout<< "\nValue of global x is " << ::x;
cout<< "\nValue of local x is " << x;
return 0;
}
```

PART IV

Answer all the questions. **5x5=25**

34. Discuss the various generations of computers. (OR)
    Convert the following number:
    (i) $(126)_{10}$=( )$_2$ (ii) (11010110)2 =( )$_8$
    (iii)(111011)2 = ( )$_{10}$
    (iv) (6213)8=( )$_2$ (v)(25F)16 = ( )$_{10}$
35. Explain the characteristics of a microprocessor *(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)*
    What is an entry control loop? Explain any one of the entry controlled loop with suitable example.
37. Explain scope of variable with example. *(OR)*
    Write a note on the basic concepts that support OOPs?
38. Mention the differences between constructor and destructor *(OR)*
    Explain the different types of inheritance.