HALF-YEARLY EXAMINATION - 2023
COMPUTER SCIENCE

//502

STD - XI

MARKS : 70

TIME : 3.00 Hrs

15 x 1 = 15

I. Answer all the questions.

1. Which is used to connect a monitor or any display device like LCD projector to a computer?

   a) SCSI Port   b) VGA Connector   c) USB Port   d) PS/2 Port

2. For 1010_2 the Hexadecimal equivalent is a) C   b) B   c) E   d) A

3. Which gate is called as the logical inverter?

   a) XNOR   b) AND   c) OR   d) NOT

4. File Manangement manages

   a) Folders   b) Directory systems   c) Files   d) All of the above

5. After the assignment what values will be stored in the variable m, n?

   1) m, n : = 10, 5   2) m, n : = m+3, n-2   3) m, n : = ? ?

   a) 3, 13   b) 13, 3   c) 10, 13   d) 10, 5

6. Which is the fastest memory?

   a) Cache memory   b) Hard disk   c) Main memory   d) Blue-Ray disc

7. The shortcut key used to rename a file in windows :   a) F6   b) F5   c) F2   d) F4

8. Which of the following statement is used to terminate the execution of the loop?

   a) break   b) goto   c) continue   d) while

9. for (int i = 0; i <= 10; i + 1). How many times will the loop be executed?

   a) 11   b) 10   c) 9   d) 0

10. In c++ which function is used to check whether a character is alphanumeric or not?

    a) islower()   b) isalpha()   c) isdigit()   d) isalnum()

11. Which of the following is the scope resolution operator?

    a) %   b) ::   c) >   d) &

12. cin>>n[4] ; to which element does the statement accept the value?

    a) 4   b) 2   c) 5   d) 3

13. The term used to describe a programming approach based on classes and objects is

    a) ADT   b) SOP   c) POP   d) OOP

14. Which of the following constructor is executed for the following prototype?

    add display (add & a) ;

    a) copy constructor   b) parameterized constructor

    c) default constructor   d) non-parameterized constructor

CamScanner

15. Commercial programs made available to the public illegally are known as :

    a) free software   b) freeware   c) warez   d) cookies

II. Answer any Six Questions. Q.No.24 is compulsory   6 x 2 = 12

16. What are the functions of an ALU?

17. What is a program counter?

18. Define a loop invariant.

19. What is meant by a token? Name the token available in c++.

20. What are the importance of void data type?

21. What is polymorphism?

22. Write a while loop that displays numbers 5, 10, 15, ... 50.

23. Write short note on cracking.

24. Initially j is 20 and P is 4, then what will be the value of $P = P*++j$; ?

III. Answer any Six Questions. Q.No.33 is compulsory   6 x 3 = 18

25. What are the characteristics of a computer?

26. Write the truth table of fundamental gates.

27. What are the advantages and disadvantages of Time-Sharing operating system.

28. Write note on recycle bin?

29. Write about strcmp() function.

30. Write short notes on class access specifiers of c++.

31. Write the syntax and purpose of switch statement.

32. What is an array? What are its types?

33. Write a c++ program to display numbers from 1 to 10. Except 5 using 'for' and 'continue' statement.

IV. Answer all the Questions.   5 x 5 = 25

34. a) Discuss the various Generations of Computers   (OR)

    b) Explain the types of ROM

35. a) Explain the process management algorithms in operating system (OR)

    b) Explain the versions of windows operating system.

36. a) Explain the types of errors in c++   (OR)

    b) Explain call by value method with example.

37. a) What are the restrictions on operator overloading?   (OR)

    b) Mention the difference between constructor and destructor.

38. a) i) Explain in the main features of oops

      ii) What ar the advantages of oops   (OR)

    b) Explain the different types of cyber attacks.