Class : 11

Register Number [ ][ ][ ][ ][ ][ ]

SECOND REVISION EXAMINATION - 2025

COMPUTER SCIENCE

Time Allowed : 3.00 Hours]

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[Max. Marks : 70

Instructions : (1) Check the question paper for fairness of printing. If there is any lack of fairness, inform the Hall Supervisor immediately.

(2) Use Blue or Black ink to write and underline and pencil to draw diagrams.

PART - I

Note : i) Answer All the questions.   15X1=15

ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer.

1. Which one of the following is the main memory?
   - (a) ROM
   - (b) RAM
   - (c) Flash drive
   - (d) Hard disk

2. A + A = ?
   - (a) A
   - (b) 0
   - (c) 1
   - (d) Ā

3. Which is the fastest memory?
   - (a) Hard disk
   - (b) Main memory
   - (c) Cache memory
   - (d) Blue-Ray disc

4. The shortcut key used to rename a file in windows
   - (a) F2
   - (b) F4
   - (c) F5
   - (d) F6

5. Which of the following activities is not algorithmic in nature?
   - (a) Multiply two numbers
   - (b) Draw a kolam
   - (c) Walk in the park
   - (d) Swaping of two numbers

6. 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

7. This can be used as alternate to endl command:
   - (a) \t
   - (b) \b
   - (c) \0
   - (c) \n

8. How many times the following loop will execute? for (int i=0; i<10; i++)
   - (a) 0
   - (b) 10
   - (c) 9
   - (d) 11

9. Which function begins the program execution?
   - (a) isalpha( )
   - (b) isdigit( )
   - (c) main( )
   - (d) islower( )

10. int age[ ]={6,90,20,18,2}; How many elements are there in this array?
    - (a) 2
    - (b) 5
    - (c) 6
    - (d) 4

11. The term is used to describe a programming approach based on classes and objects is
    - (a) OOP
    - (b) POP
    - (c) ADT
    - (d) SOP

12. The member function defined within the class behave like .... functions
    - (a) inline
    - (b) Non inline
    - (c) Outline
    - (d) Data

13. Which of the following is not true with respect to function overloading?
    - (a) The overloaded functions must differ in their signature.
    - (b) The return type is also considered for overloading a function.
    - (c) The default arguments of overloaded functions are not considered for Overloading.
    - (d) Destructor function cannot be overloaded.

14. Which of the following derives a class student from the base class school
    (a) school : student   (b) class student : public school
    (c) student : public school   (d) class school : public student
15. Which one of the following are self-repeating and do not require a computer program to attach themselves? akwaacademy.blogspot.com
    (a) viruses   (b) worms   (c) spyware   (d) Trojans

PART - II

II. Answer the following questions. (Q.No: 24 is Compulsory)   6X2=12

16. What are the components of a CPU?
17. Draw the truth table for XOR gate
18. What are the different Operating Systems used in computer?
19. Differentiate Save and save As option
20. Define a loop invariant.
21. Assume n=10; what will be result of n++ and --n;?
22. Consider the following C++ statement. Are they equivalent? char ch = 67; char ch = 'C';
23. What is the syntax to declare two – dimensional array.
24. List the operators that cannot be overloaded

PART – III

III. Answer any six questions. Question No. 33 is compulsory.   6x3=18

25. Add (a) $-22_{10}+15_{10}$ (b) $20_{10}+25_{10}$
26. List out the key features of Operating system
27. What is the format of the specification of an algorithm?
28. Differentiate "=" and "==".
29. Define an Array? What are the types?
30. What are advantages of declaring constructors and destructor under public accessibility?
31. Write about encryption and decryption.
32. What is Recursion?
33. Convert the following if-else to a single conditional statement:

    if (x >= 10)

             a = m + 5:

      else

            a = m:

PART - IV

IV. Answer the following question.   5X5=25

34. a) Explain the basic components of a computer with a neat diagram. **(OR)**
    b) Explain the fundamental gates with expression and truth table.
35. a) Arrange the memory devices in ascending order based on the access time. **(OR)**
    b) Explain the different ways of finding a file or Folder
36. a) Write about Binary operators used in C++. **(OR)**
    b) Explain Call by value method with suitable example
37. a) Write the differences between Object Oriented Programming and procedural programming. **(OR)**
    b) Mention the differences between constructor and destructor
38. a) What are the rules for operator overloading? **(OR)**
    b) Explain the different types of inheritance