(6 pages)

Reg. No. : ....

Code No. : 10461 E   Sub. Code : CMCS 21/
CMSE 21

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2023.

Second Semester

Computer Science/Software Engineering – Core

OBJECT ORIENTED PROGRAMMING IN C++

(For those who joined in July 2021 onwards)

Time : Three hours   Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. ————————— refers to the act of representing essential features without including the background details.

    (a) Abstract data type   (b) Polymorphism

    (c) Conceptual data   (d) Abstraction

2. ————————— is names location in memory that is used to hold a value that may be modified by the program.

    (a) Pointer   (b) Expression

    (c) Variable   (d) Function

3. A ————————— is a special member function whose task is to initialize the objects of its class.

    (a) Destructor   (b) Operator

    (c) Initiator   (d) Constructor

4. A Constructor should be declared in the ————————— section.

    (a) Private   (b) Public

    (c) Protected   (d) Extern

5. A class can be derived from another derived class known as —————————inheritance.

    (a) Multiple   (b) Hierarchical

    (c) Multilevel   (d) Hybrid

6. —————————, overloaded by means of a member function, take no explicit arguments and return no explicit values.

    (a) Binary Operator

    (b) Unary Operator

    (c) Assignment Operator

    (d) Dot Operator

7. ———————— is a derived data type that refers to another data variable by storing variable's address.

    (a) Pointer   (b) Reference

    (c) Structure   (d) Union

8. The destination stream that receives data from the program is called the ————————

    (a) Output device   (b) Input device

    (c) Input stream   (d) Output stream

9. ———————— function is used to clear the flags specified.

    (a) clearflag ( )   (b) unsetf ( )

    (c) setf ( )   (d) resetiosflags ( )

10. The eof ( ) is the function used for ————————.

    (a) asserting no errors in a file

    (b) appending data to a file

    (c) counting the amount of data in a file

    (d) checking for end of file

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) Explain about nesting to member function in C++.

    Or

    (b) Discuss about arrays of objects.

12. (a) Explain about multiple constructor in a class.

    Or

    (b) Discuss about destructor with example.

13. (a) Illustrate about type conversions.

    Or

    (b) Elucidate about the virtual base classes with example.

14. (a) Explain about 'this' pointer.

    Or

    (b) Describe about C++ stream classes with example.

15. (a) Illustrate about end-of-file.

    Or

    (b) What is meant by class template? Explain.

[P.T.O.]

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b)
Each answer should not exceed 600 words.

16. (a) Discuss about the basic concept of the object oriented programming.

Or

(b) Illustrate about defining a member function with example

17. (a) Explain about parameterized constructor with example program.

Or

(b) Elucidate about dynamic constructor with example program.

18. (a) Analyze overloading unary operator with example.

Or

(b) Describe about multiple inheritance with example program.

19. (a) Explain briefly about pure virtual function with example.

Or

(b) Elucidate about unformatted I/O operators.

20. (a) Explain about opening and closing a file.

Or

(b) Discuss about function template with example.

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