

(6 pages)

Reg. No. : .....

Code No.: 10476 E      Sub. Code: CMCA 21

B.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2023.

Second Semester

Computer Applications – 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. The language that is specially designed to support OOP concepts is.  
(a) Fortran                      (b) COBOL  
(c) Pascal                        (d) C++
2. C++ is a superset of \_\_\_\_\_ language  
(a) English                      (b) C  
(c) Pascal                        (d) Java

3. Which of the following is an advantage of functions?  
(a) unstructured programming  
(b) Exception handling  
(c) Bottom-up approach  
(d) Reduces the size of a program
4. Which is a way to bind data and associated functions together?  
(a) Method  
(b) Class  
(c) attribute  
(d) binder
5. Which operator is used to allocate memory dynamically?  
(a) alloc                              (b) mem  
(c) new                                (d) malloc
6. Which of the following operator cannot be overloaded?  
(a) ?: conditional  
(b) [ ] subscript  
(c) + plus  
(d) – minus



7. A derived class with only one base class is called \_\_\_\_\_ inheritance
- (a) Hierarchal
  - (b) Private
  - (c) Single
  - (d) public
8. If a class contains objects of other classes, then it is called \_\_\_\_\_
- (a) Container
  - (b) Containership
  - (c) Condenser
  - (d) controller
9. Which of the following is a sequence of bytes?
- (a) Bridge
  - (b) Container
  - (c) stream
  - (d) Interface
10. Which class supports functions for managing errors?
- (a) ftell
  - (b) fail
  - (c) ferror
  - (d) ios

PART B — (5 × 5 = 25 marks)

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

11. (a) Write notes on benefits of OOP.
- Or
- (b) Write a note on scope resolution operator.
12. (a) Illustrate call by reference in C++.
- Or
- (b) Write notes on array of objects.
13. (a) Write a note on copy constructors.
- Or
- (b) Give the rules for overloading operators.
14. (a) Write a note on making a private member inheritable.
- Or
- (b) Write a note on virtual base classes.



15. (a) List out C++ stream classes.

Or

(b) Discuss about file pointers and their manipulators.

PART C — (5 × 8 = 40 marks)

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

16. (a) Explain the basic concepts of OOP.

Or

(b) Write a C++ program to input your name and print a welcome message eg., Priya, Welcome to C++

17. (a) List any five math library functions and give their description.

Or

(b) Write a C++ program to illustrate object as function argument.

18. (a) Explain parameterized constructor.

Or

(b) Write a C++ program to overload + operator to string concatenation.

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19. (a) Explain hierarchical inheritance.

Or

(b) Explain hybrid inheritance.

20. (a) Explain unformatted I/O operations.

Or

(b) Explain opening and closing of a file.

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