

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

Second Semester

Computer Application – Core

OBJECT ORIENTED PROGRAMMING WITH C++

(For those who joined in July 2021-2022)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer:

1. \_\_\_\_\_ are the basic run-time entities in an object-oriented system.  
(a) classes (b) variables  
(c) constants (d) objects
2. \_\_\_\_\_ refers to the act of representing essential features without including the background details or explanation.  
(a) abstraction (b) polymorphism  
(c) inheritance (d) classes

3. The \_\_\_\_\_ directive causes the preprocessor to add the contents of the input output stream file to the program  
(a) #include<stdio.h>  
(b) #include<iostream.h>  
(c) void main()  
(d) none of the mentioned
4. A \_\_\_\_\_ member Function can be invoked using class name.  
(a) private (b) public  
(c) static (c) non static
5. Unary operators overloaded by means of a \_\_\_\_\_ function take one reference argument.  
(a) member function (b) friend function  
(c) static function (d) all the above
6. The destructor is executed when  
(a) when object goes out of scope  
(b) when object is not used  
(c) when object contains nothing  
(d) all the above

7. The protected keyword allows  
(a) derived class to access base class members directly  
(b) prevents direct access to public members  
(c) object to access private members  
(d) all of the above
8. When the properties of one class are inherited by more than one class it is called \_\_\_\_\_ inheritance?  
(a) hierarchical (b) multiple  
(c) hybrid (d) single
9. Which of the following true about FILE \*fp  
(a) FILE is a structure and fp is a pointer to the structure of FILE type  
(b) FILE is a buffered stream  
(c) FILE is a keyword in C for representing files and fp is a variable of FILE type  
(d) FILE is a stream

10. Which of these is the correct statement about eof() ?  
(a) Returns true if a file open for reading has reached the next character  
(b) Returns true if a file open for reading has reached the next word  
(c) Returns true if a file open for reading has reached the end  
(d) Returns true if a file open for reading has reached the middle

PART B -- (5 × 5 = 25 marks)

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

11. (a) Elaborate on procedure oriented paradigm.  
Or  
(b) Describe the major parts of C++ program.
12. (a) Illustrate private member functions with an example.  
Or  
(b) Demonstrate inline functions with example program.

13. (a) Characterize constructors with an example program.

Or

(b) How do you define operator overloading in C++. Give Examples.

14. (a) Illustrate multiple inheritance with example program.

Or

(b) How do you define derived classes in C++? Give differences between base class and derived class.

15. (a) Illustrate the role of eof() in file processing.

Or

(b) Establish command-line arguments with example C++ program.

PART C — (5 × 8 = 40 marks)

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

16. (a) Represent the usage of scope resolution operator with example C++ program.

Or

(b) Deliberate any five object oriented concepts in C++.

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17. (a) How to define a class, create objects and access class members? Illustrate with example.

Or

(b) Describe the ways to define member functions to a class with examples.

18. (a) Characterize parameterized constructors with example program.

Or

(b) Intricate on two-dimensional arrays. Write an example program.

19. (a) Elucidate on abstract class and illustrate with an example.

Or

(b) How the constructors are accessed in inheritance? Give example.

20. (a) Describe the unformatted console I/O operations.

Or

(b) Originate the mechanism of file pointers and their manipulators.

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