

Term End Examination July – 2026

Course	: BSCIT	Date	: 18/08/2026
Subject Code	: BSCIT-204	Time	: 11:30am to 01:45pm
Subject Name	: Object Oriented Programming using C++	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three)

(30)

1. Discuss Encapsulation, Abstraction, Inheritance, Polymorphism, and Data Hiding with suitable examples.
2. Explain Arrays, Pointers, and Structures in C++.
3. Discuss function declaration, definition, function prototype, call by value, call by reference, and recursive functions with suitable examples.
4. Explain Operator Overloading in C++.
5. Explain File Handling in C++.

Section B

Answer the following (Attempt any four)

(20)

1. Explain the benefits of Object-Oriented Programming.
2. Write a short note on Reference Variables.
3. Differentiate between Default Constructor and Copy Constructor.
4. Explain the purpose of Visibility Modes in Inheritance.
5. Write a short note on Virtual Base Class.
6. Explain the use of Friend Function in C++.

Section C

Part – A (Multiple Choice Questions)

(10)

Q.1 Which programming approach primarily focuses on objects rather than functions?

- A) Procedural Programming B) Modular Programming
C) Object-Oriented Programming D) Functional Programming

Q.2 Which keyword is used to define a class in C++?

- A) object B) class
C) struct D) define

Q.3 Which symbol is used to access members of an object?

- [illegible]

Q.4 Which function is executed automatically when an object goes out of scope?

- A) Constructor B) Destructor
C) Inline Function D) Friend Function

Q.5 Which inheritance type allows one derived class to inherit from more than one base class?

- A) Single Inheritance B) Hierarchical Inheritance
C) Multiple Inheritance D) Multilevel Inheritance

Q.6 Which operator is generally used to access members through a pointer to an object?

- A) . B) ::
C) -> D) *

Q.7 Which keyword specifies that a member function can be overridden in a derived class?

- A) inline B) virtual
- C) friend D) static

Q.8 Which header file is commonly associated with file stream classes in modern C++?

- A) <string> B) <fstream>
- C) <iomanip> D) <cmath>

Q.9 Which manipulator moves the output cursor to the next line?

- A) setw() B) endl
- C) setprecision() D) flush

Q.10 Which operator is commonly used to extract input from the keyboard?

- A) >> B) <<
- C) == D) =

Part – B (State whether the following statements are true or false)

(10)

- 1 Objects can't communicate with each other.
- 2 Access specifiers help control the visibility of class members.
- 3 A constructor may be overloaded by defining multiple constructors with different parameter lists.
- 4 Recursive functions solve problems by calling themselves under appropriate termination conditions.
- 5 Operator overloading enables predefined operators to work with user-defined data types.
- 6 Pointer variables store memory addresses rather than actual data values.
- 7 Public inheritance preserves the public interface of the base class in the derived class.
- 8 Virtual functions support run-time method binding.
- 9 File handling enables permanent storage and retrieval of program data.
- 10 The scope resolution operator can be used to define member functions outside the class.
