

Dr. Babasaheb Ambedkar Open University
Term End Examination July – 2026

Course	: BSCCS	Date	: 22/07/2026
Subject Code	: BSCCS-203	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. Describe Objects, Classes, Attributes and Member Functions with suitable examples.
2. Explain Operators in C++.
3. Differentiate between Constructor and Destructor. Explain constructor with example.
4. Discuss different forms of inheritance with suitable diagrams and examples.
5. Explain Polymorphism with example.

Section B

Answer the following (Attempt any four) (20)

1. What is Dynamic Initialization of Variables? Explain with an example.
2. Write a short note on Manipulators used in C++.
3. Explain the purpose of Arrays in C++.
4. Explain Decision Making and Looping Statements in C++.
5. Write a short note on Operator Overloading.
6. Explain the advantages of Virtual Functions.

Section C

Part – A (Multiple Choice Questions) (10)

Q.1 Which programming language was developed by Bjarne Stroustrup?

- A) Java B) C++
C) Pascal D) Python

Q.2 Which feature of OOP groups data and functions into a single unit?

- A) Inheritance B) Encapsulation
C) Compilation D) Tokenization

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

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

Q.4 Which loop is guaranteed to execute at least once?

- A) for B) while
C) do-while D) switch

Q.5 Which keyword is used to create dynamic memory in C++?

- A) create B) alloc
C) new D) malloc

Q.6 Which inheritance type allows one derived class to inherit from multiple base classes?

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

Q.7 Which keyword is used to declare a virtual function?

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

Q.8 Which stream object is generally used to receive input from the keyboard?

- A) cout B) cerr
- C) cin D) clog

Q.9 Which file stream class is commonly used for reading data from a file?

- A) ofstream B) ifstream
- C) fstream D) ostream

Q.10 Which keyword is used to define a constant value in C++?

- A) fixed B) define
- C) const D) static

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

(10)

- 1 C++ supports both procedural and object-oriented programming concepts.
- 2 An identifier cannot begin with a numeric digit.
- 3 A switch statement is commonly used for multiple selection.
- 4 Arrays store multiple values of the same data type.
- 5 Constructors are executed automatically when objects are created.
- 6 Multiple inheritance allows a class to inherit from more than one base class.
- 7 Virtual functions support runtime polymorphism.
- 8 The cin object is associated with the standard input stream.
- 9 File streams can be used to store data permanently.
- 10 C++ provides facilities for dynamic memory allocation.
