

DB-103

December-2023

BCA., Sem.-III

CC-203 : Object Oriented Concepts and Programming

Time : 2½ Hours]

[Max. Marks : 70

1. Answer the following questions :

14

- (i) Write short note on function overloading with suitable example. 7
- (ii) List and explain all access specifiers used in C++. 7

OR

- (i) Write short note on this pointer with suitable example. 7
- (ii) Explain the Concept of Inline Function with example. 7

2. Answer the following questions :

14

- (i) What is Constructor ? Explain the concept of Copy Constructor with Example. 7
- (ii) Explain the concept of Friend Function with Example. 7

OR

- (i) Write a short note on Dynamic Memory Allocation in C++. 7
- (ii) What is Destructor ? Explain the concept and characteristics of Destructor with example. 7

3. Answer the following questions :

14

- (i) Explain the concept of multiple inheritance with suitable example. 7
- (ii) What is function overriding in inheritance ? Explain with example. 7

OR

- (i) What is virtual base class ? How to create it ? Explain by taking a suitable example. 7
- (ii) Explain the concept of Pure Virtual Function with example. 7

4. Answer the following questions :

14

- (i) Demonstrate the overloading of any one arithmetic operator with Example. 7
- (ii) How to do type conversion from class type to basic type ? Explain by example. 7

OR

- (i) How to overload function template with ordinary function ? Explain with example. 7
- (ii) Explain get(), getline() and put() function in C++ with Example. 7

5. Attempt any seven :

14

- (1) What is the primary purpose of inheritance in C++ ?
 - (A) Code reuse
 - (B) Code obfuscation
 - (C) Code optimization
 - (D) Code encryption
 - (2) Function overloading in C++ is also known as :
 - (A) Early binding
 - (B) Late binding
 - (C) Static polymorphism
 - (D) Dynamic polymorphism
 - (3) Define Data Hiding.
 - (4) A Constructor that accepts _____ no. of parameters is called the default constructor.
 - (5) Private members in a class are never inherited. (True/False)
 - (6) Function Overloading is an example of _____ polymorphism.
 - (7) When a derived class redefines a function of the base class, it is an example of:
 - (A) Function overloading
 - (B) Function overriding
 - (C) Function inheritance
 - (D) Function masking
 - (8) What is the primary purpose of function templates in C++ ?
 - (A) To define regular functions
 - (B) To create generic functions that work with multiple data types
 - (C) To write faster code
 - (D) To enhance code readability
 - (9) What is operator overloading in C++ ?
 - (A) Overloading the CPU with too many operations
 - (B) Defining new operators in C++
 - (C) Reusing existing operators to work with user-defined types
 - (D) Overloading the compiler with code
 - (10) If we define member function inside class then by default it becomes inline function. (True / False)
 - (11) A class having pure virtual function is called abstract class. (True/False)
 - (12) Memory size of an object is sum of size of each member data in a class. (True / False)
-