

DC-101**December-2018****B.C.A., Sem.-III****CC-203 : Object Oriented Concepts and Programming
(New Course)****0 Hours]****[Max. Marks : 70**

- (1) What is Arrow Operator ? Explain with example 7
- (2) How to define the Function outside the class body ? Explain with example. 7

OR

- (1) Write a short-note on Default Arguments in C++.
- (2) Write a short-note on Function Overloading in C++.

Answer the following : (Any four)

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- (1) Give the full form of POP.
- (2) What is the data abstraction ?
- (3) How to give the comments in C++ ? Give small example of it.
- (4) What is the main difference between public and private access specifier in C++ ?
- (5) Define Class.
- (6) A/An _____ is an instance of class.
 - (a) object
 - (b) variable
 - (c) keyword
 - (d) None of these

- (1) Explain Dynamic Memory Allocation and De-allocation in C++ with example.
- (2) What is Constructor ? Explain the characteristics of it in detail.

OR

- 1) Explain Friend Member Function with example.
- 2) What is static member function ? Explain with example.

Answer the following : (Any four)

- 1) What is namespace in C++ ?
- 2) A constructor that has zero parameter lists is called
 - (a) Default Constructor
 - (b) Parameterized Constructor
 - (c) Copy Constructor
 - (d) None of these
- 3) What is 'Memory leakage' problem ?
- 4) What is Constant member function ?
- 5) What is Destructor ?
- 6) What is Mutable data member ?

- 1) (1) Explain Virtual destructor with example.
- (2) Explain the Hybrid Inheritance with example.

OR

- (1) Give the difference between Compile-time Polymorphism and Run-Time Polymorphism.
 - (2) What is Virtual Base class ? Explain with example.
- 1) Answer the following : (Any three)
- (1) Define Inheritance.
 - (2) What is Abstract class ?
 - (3) Define VTBL.
 - (4) What is function overriding ?
 - (5) What is Polymorphism ?
- 1) (1) How to convert a data of basic type to class type ? Explain with example.
- (2) Write a simple program to demonstrate class template.

OR

- (1) Write a program to concatenate two string by overloading binary '+' operator.
 - (2) Explain the function template with multiple parameters using example.
- 1) Answer the following : (Any three)
- (1) What is the purpose of istream and ostream class ?
 - (2) What is the use of put() function for text mode output operation ?
 - (3) Define the get() and getline() functions for text mode input operations ?
 - (4) What is class template ?
 - (5) Operator overloading is a/an _____ polymorphism.
 - (a) compile time
 - (b) run time
 - (c) executable
 - (d) None of these