

Seat No. : _____

MC-116

March-2019

BCA, Sem.-III

CC-203 : Object Oriented Concepts and Programming (New Course) (Repeater)

Time : 2:30 Hours]

[Max. Marks : 70

1. (A) Write the following :

- (i) Differentiate POP and OOP approaches used in programming world. 7
- (ii) Explain the use of default arguments in function declaration and its rules. 7

OR

- (i) Discuss in detail use of scope resolution operator in C++. 7
- (ii) What is function overloading ? How it is implemented ? 7

(B) Do as Directed : (Any Four out of Six) 4

- (i) Boolean data type includes _____.
 - (A) true (B) false
 - (C) both (A) and (B) (D) None of the above
- (ii) Object is the _____ of class.
 - (A) instance (B) format
 - (C) design (D) overview
- (iii) Structure in C++ has _____.
 - (A) members only (B) functions only
 - (C) member and functions both (D) No member and no function
- (iv) class member function can be defined outside class using _____ symbol
 - (A) : (B) ::
 - (C) # (D) →
- (v) _____ is the multiline comment.
 - (A) /*.....*/ (B) Inline
 - (C) // (D) **
- (vi) It is _____ to declare private section before public section in a class design.
 - (A) not compulsory (B) compulsory
 - (C) may be compulsory (D) None of the above

2. (A) Write the following :
(i) Explain with code: how to make non-member function as friend of class.
(ii) Explain the use of new and delete operator in C++.

OR

- (i) Explain array of objects with suitable example.
(ii) List types of constructor and explain copy constructor with an example.
- (B) Do as Directed : (Any Four out of Six)
- (i) Destructor _____ declared in public section.
(A) must be (B) maybe
(C) should be (D) None of the above
- (ii) A class having another class is called _____.
(A) Embedding class (B) Embedded class
(C) nested class (D) special class
- (iii) constructor has _____ return type.
(A) no (B) any type as
(C) multiple (D) None of the above
- (iv) Same variable names can be declared in different _____.
(A) classes (B) functions
(C) namespaces (D) All of the above
- (v) class objects can be used as _____ with functions.
(A) argument only (B) return value only
(C) both (A) and (B) (D) None of the above
- (vi) Allocation of memory is done using _____ keyword.
(A) new (B) allocate
(C) assign (D) None of the above

3. (A) Write the following :
(i) Explain types of inheritance between classes. 7
(ii) What is the use of pure virtual function ? How it is defined ? Explain. 7

OR

- (i) Explain function overriding with suitable example.
(ii) What is virtual function ? What are the rules of it ? Explain
- (B) Do as Directed : (Any Three out of Five) 3
- (i) Parent class inherited by child class which is parent to another class is _____ inheritance.
(A) simple (B) multiple
(C) multilevel (D) hierarchical
- (ii) Early binding is also called as _____.
(A) static binding (B) dynamic binding
(C) default binding (D) late binding

nd of class.

example.

- (iii) Function declared with 0 assignment can said to be _____
(A) Nested class (B) Parent class
(C) Abstract class (D) Virtual class
- (iv) Base class pointer _____ refer to Derived class object.
(A) can (B) cannot
(C) may (D) must not
- (v) class members are available to anywhere through _____ access specifier.
(A) public (B) private
(C) protected (D) None of the above

- (A) Write the following :
- (i) Explain operator overloading types and give an example of any one type. 7
 - (ii) List all type conversion methods and explain any one in detail. 7

OR

- (i) What is the use of template in C++ ? Explain with an example. 7
 - (ii) How text mode output to file is performed using insertion (<<) operator ? 7
- (B) Do as Directed : (Any Three out of Five) 3

- (i) _____ operator cannot be overloaded.
(A) + (B) =
(C) :: (D) All of the above
- (ii) ifstream and ofstream classes are available under _____ class.
(A) iostream (B) stream
(C) fstream (D) ifstream
- (iii) template declared inside another template is called _____.
(A) nested (B) inner
(C) Both (A) and (B) (D) None of the above
- (iv) The function to read a line from file is _____.
(A) get() (B) getline()
(C) read() (D) readline()
- (v) Finding sum through different functions with different data types can be achieved by _____.
(A) function template (B) class template
(C) nested function template (D) nested class template