Seat No.	

B.C.A. (Semester - III) (CBCS) Examination March/April-2019
OOP WITH C++

Day & Date: Friday, 12-04-2019   Max. Marks: 70
Time: 12:00 PM To 02:30 PM

Instructions: 1) All questions are compulsory.
               2) Figures to the right indicate full marks.

Q.1 Choose the correct alternative and rewrite the sentences.   **14**

1) An expression A.B in C++ means _____.
   a) A is a member of object B   b) B is a member of object A
   c) Product A & B   d) None of these

2) In C++ program inline function are expanded during _____.
   a) Run time   b) Compile Time
   c) Late Binding   d) Early Binding

3) An exception in C++ can be generated using which keyword.
   a) thrown   b) threw
   c) throw   d) throws

4) Which of the following function declaration using default argument is incorrect?
   a) int fun(int x, int y, int z=10)   b) int fun(int x=5, int y=10, int z)
   c) int fun(int x=5, int y, int z=10)   d) Both b & c

5) Which function cannot be overloaded in C++ program?
   a) Virtual function   b) Member function
   c) Static function   d) All can be overloaded

6) Compile time polymorphism in C++ language is.
   a) Operator overloading   b) Function Overloading
   c) Function overriding   d) Both A & B

7) In a class pure virtual function in C++ is used _____.
   a) To create interface
   b) To make class abstract
   c) To force derived class to implement pure virtual function
   d) All of above

8) In C++ programming cout is an _____.
   a) Function   b) Operator
   c) Object   d) All of above

9) Which is abstract data type in C++ _____?
   a) class   b) int
   c) float   d) array

10) When you create an object of class, then which one will be called automatically
   a) Destructor   b) Constructor
   c) Copy constructor   d) None of these

11) The class in C++ which act as base class & which object is cannot be created
   a) Virtual class   b) Super class
   c) Abstract class   d) None of these

12) Data members & member functions of class are by default.
   a) protected   b) public
   c) private   d) none of these

13) Which object is used to allocate memory dynamically in C++?
   a) scope resolution operator   b) conditional operator
   c) new operator   d) none of these

14) The C++ header file _____ contains function prototypes for the standard input and standard output functions.
   a) <iomanip>   b) <fstream>
   c) <iostream>   d) All of above

Q.2 A) Answer any four of the questions briefly: 08
   1) What is the role of protected access specifier?
   2) What is reference variable in C++?
   3) What is this pointer?
   4) What is class?
   5) What is data encapsulation?

B) Write note on any two of the following.   06
   1) What is inline function? Give an example.
   2) Explain scope resolution operator with example.
   3) Explain pure virtual function with proper syntax.

Q.3 A) Answer any two of the following   08
   1) What are manipulators? Explain with example.
   2) Explain different type of file modes.
   3) What is class destructor? Explain with example.

B) Answer any one of the following.   06
   1) What is exception? How exception is handled in C++. Explain with example.
   2) Write a program to illustrate the concept of constructor overloading.

Q.4 A) Attempt any two of the following.   10
   1) What is operator overloading? What are the rule to overload unary & binary operator?
   2) What is friend function? Write an example on addition of member of two different classes?
   3) Why we declare base class as virtual? Explain with example.

B) Answer any one of the following: 04
   a) Explain different types of inheritance with example.
   b) Explain seekg() & tellg() function.

Q.5 Answer any two of the following: 14
   a) Design two base classes Personnel (Name, DOB, Address) & Qualification (Marks obtained in SSC, HSC,). Derived a class Biodata from these classes, write a C++ program to prepare biodata of student having personnel & qualification information.
   b) Create a class Time & input two different times from user in Hour & Minute. Write a program add two times using operator overloading & print the result in format of HH:MM.
   c) Write a C++ program that accept the name of two files, and copies the contents of the first file into the second file, [handle all kind of error in program execution]