## **BCA-10**

# June - Examination 2017

# BCA Pt. II Examination Object Orientated Programming in C++

Paper - BCA-10

Time: 3 Hours [ Max. Marks: - 100

**Note:** The question paper is divided into three sections A, B and C. Write answers as per given instructions.

#### Section - A

 $10 \times 2 = 20$ 

(Very Short Answer Questions)

**Note:** Answer **all** questions. Maximum in 30 words. Each question carries 2 marks.

- 1) (i) Define encapsulation.
  - (ii) How is class declared in C++?
  - (iii) What are virtual base classes?
  - (iv) Define single inheritance.
  - (v) What are pure virtual functions?
  - (vi) When do we declare a member of class static?
  - (vii) Define Late Binding.
  - (viii) What is an inline function?
  - (ix) Define Type Conversion.
  - (x) What is preprocessor directive?

#### Section - B

 $4 \times 10 = 40$ 

(Short Answer Questions)

**Note:** Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 10 marks.

- 2) Differentiate between OOP and POP.
- 3) Explain Control Structure in C++ with example.
- 4) Explain Static binding. How do virtual functions enable dynamic binding?
- 5) What is function overloading? Explain through an example.
- 6) Explain call by value and call by reference with example.
- 7) Write a C++ program to calculate the factorial of a number using recursion.
- 8) Explain the concept of inheritance with example.
- 9) How private and public member make a difference in C++.

### Section - C

 $2 \times 20 = 40$ 

(Long Answer Questions)

**Note:** Answer **any two** questions. Maximum in 500 words. Each question carries 20 marks.

- 10) Explain constructor and destructor with example.
- 11) Explain operator overloading with example.
- 12) Define Friend class and specify its importance. Explain with suitable example.
- 13) Explain Command line arguments in C++. Give an illustrative example.