# **BCA-10**

# June - Examination 2018

# 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. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.

- 1) (i) What is class and object?
  - (ii) What is the significance of access modifier in a class?
  - (iii) Differentiate constant and variable.
  - (iv) What is virtual function?
  - (v) What do you mean by random access file?
  - (vi) What do you mean by data hiding in C++?
  - (vii) What is function prototyping?
  - (viii) What are the steps involved while opening the file?

- (ix) What do you mean by header file?
- (x) What do you mean by scope resolution operator.

### 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) What is a pointer? What operations can be performed on pointers?
- 3) What are the main characteristics of an object oriented programming? Compare them with structured programming.
- 4) Discuss the various data types in C++. Support your answer with an example.
- 5) What purpose is served by constructors and destructors? Explain with the help of examples.
- 6) Write a program to swap two integers without using any third variables.
- 7) Explain Operator and Function overloading with simple examples.
- 8) What are nested classes? How the members of the nested class are assessed? Give an example to illustrate a nested class.
- 9) Differentiate between public and private access modifier. Explain with an example.

## Section - C

 $2 \times 20 = 40$ 

(Long Answer Questions)

**Note:** Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 20 marks.

- 10) Write short notes on the following:
  - a) Error handling during IO Operations.
  - b) Polymorphism.
- 11) Describe how Object Oriented System development is different from traditional procedure oriented software development. How Data Abstraction is achieved in C++?
- 12) Explain Operator and Function overloading with simple examples.
- 13) Explain different type of Inheritance with example.

\_\_\_\_