III Semester B.C.A. Degree Examination, November/December 2018
(F+R) (CBCS) (2015 – 16 and Onwards)
COMPUTER SCIENCE
BCA – 303 : Object Oriented Programming using C++

Time : 3 Hours

Max. Marks : 70

Instruction : *Answer all Sections.*

SECTION – A

I. Answer **any ten** questions.

(10×2=20)

1) Mention any four differences between C and C++.

2) What are objects and how they are created ?

3) Mention the uses of scope resolution operator.

4) Define constructor.

5) Write the syntax of operator function.

6) Mention the memory allocation operators in C++.

7) List the operators which cannot be overloaded.

8) Define inheritance.

9) Differentiate between function overloading and overriding.

10) Define stream.

11) What are templates ?

12) Give the general syntax of cin and cout statements.

P.T.O.

SECTION – B

II. Answer **any five** questions.   (5×10=50)

13) a) Explain any five basic concepts of Object Oriented Programming (OOP).   5

   b) What is an inline function ? Write an inline function to find absolute value of a number.   5

14) a) Briefly explain function with default arguments.   5

   b) What is a friend function ? Explain with suitable example.   5

15) a) Give the general form of a class and illustrate access specifiers. 5

   b) Define constructor. Explain any three different types of constructors. 5

16) a) Define polymorphism. Discuss different types of polymorphism.   5

   b) Write a C++ program to add two complex numbers by overloading '+' operator.   5

17) Explain different types of inheritance with suitable examples.   10

18) a) Define pure virtual function. Give an example.   4

   b) What is exception handling ? Explain the different blocks in exception handling.   6

19) a) Explain function template with its general form.   4

   b) Write a function template to sort a set of elements.   6

20) Write a short note for the following :

   a) Input and output streams.   3

   b) fstream class.   3

   c) File opening modes.   4