III Semester B.C.A. Degree Examination, November/December 2016
(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) State any four differences between C and C++.
2) Why do we require const qualifier give example ?
3) What is scope resolution operator ?
4) What is default constructor ?
5) What is the role of EOF ?
6) What is class template ?
7) Explain Dynamic Binding.
8) Define pure virtual function.
9) Define stream.
10) What is the use of file pointer ?
11) Define Exception Handling.
12) What is destructor ? Explain.

SECTION – B

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

13) a) Explain the characteristics of oops.
   b) Describe any three Manipulators.
14) a) Explain function overloading with example.
   b) Write a program to perform addition of two matrices using operator overloading.
15) a) What are access specifiers used for? Explain the concept of protected access specifier.

b) Write a note on class templates.

16) a) What are default arguments? How they are passed to functions?

b) Write a program to show returning current object using “this” pointer?

17) a) Explain different types of polymorphism?

b) Write a program to swap two numbers using friend function.

18) Explain different types of inheritances with example.

19) a) Explain inline function and illustrate the same with an example?

b) Write a program to calculate area and circumference of circle using inline function.

20) Write short note on:

   a) Data Hiding

   b) Storage classes

   c) Seekg () and seekp () functions

   d) Virtual Base class.