III Semester B.C.A. Degree Examination, March/April 2022

(CBCS)

(Y2K14) (F+R)

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. **Each** question carries **two** marks. (10×2=20)

1) List any two advantages of OOP.

2) Define data abstraction.

3) What are in-line functions ?

4) Define array of objects with an example.

5) What do you mean by default constructor ?

6) List any four operators which can be overloaded.

7) Define 'this' pointer.

8) What is the use of 'const' keyword ?

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

10) What are virtual functions ?

11) Define function template with its syntax.

12) What are command line arguments ?

SECTION – B

II. Answer **any five** questions. **Each** question carries **10** marks. (5×10=50)

13) a) Differentiate between procedure oriented programming and object oriented programming. 5

b) What do you mean by manipulators ? Explain any three manipulators. 5

14) a) Explain function overloading with an example. 5

b) Explain access specifiers of class. 5

P.T.O.

15) a) Explain parameterized constructors with an example. 5

b) Explain the types of casting with examples. 5

16) a) Explain multilevel inheritance with a program. 5

b) Explain the types of polymorphism. 5

17) a) Explain pure virtual function with an example. 5

b) Write a C++ program to swap two numbers using friend function. 5

18) a) Explain class templates. 5

b) Demonstrate the use of try and catch blocks in C++. 5

19) Write a short note on :

a) Function overriding. 3

b) Input and output streams. 3

c) Seekg() and Seekp() function. 4

20) a) What is an abstract class ? Explain with an example. 5

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

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