



QP – 415

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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

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- 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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