

C

(Printed Pages 3)

Roll No. \_\_\_\_\_

**19/186**

**B.C.A. Examination, 2019**

**Third Semester**

**First Paper**

**(Object Oriented Programming Using C++)**

*Time : Three Hours*

*Maximum Marks : 75*

**Note:** Attempt any **five** questions. **All** questions carry equal marks.

**Note:** The answers to short questions should not exceed 200 words and the answers to long questions should not exceed 500 words.

1. (a) Differentiate between: 7½

(i) C and C++

(ii) Procedural Programming and Object oriented Programming

(b) Write short notes on containers. 7½

P.T.O.

2. ✓ (a) Discuss how dynamic allocation is achieved in C++ programming. 7½
- (b) Write the rules for overloading of operators. 7½
3. (a) What is generic programming? How is it implemented in C++? 7½
- (b) Write a C++ program to sort the given list of numbers in ascending order. 7½
4. ✓ (a) What are the different forms of inheritance supported by C++? Explain with examples. 10
- (b) Can base class access the members of a derived class? Give reasons. 5
5. ✓ (a) Discuss briefly various Exception Handling options. 7½
- (b) Write a C++ program to implement friend class. 7½
6. (a) Write short notes on predefined streams. 7½

- (b) Create a new file to store and retrieve the student marks details using file I/O classes. 7½
7. ✓ Write short notes on any **three** of the following: 5×3=15
- (i) Overriding
  - (ii) Polymorphism
  - (iii) Garbage collection
  - (iv) Interface
8. Write a program in C++ to generate the Fibonacci series upto N terms, where N is provided at runtime. 15