

Code No. 3038

B.Sc. II-Semester (CBCS) Examination, May / June 2019

Subject : Computer Science

Time: 3 Hours

Paper - II : Programming in C++

Max. Marks: 80

 $PART - A (5 \times 4 = 20 Marks)$ Note: Answer any FIVE of the following questions.

- Explain inline function with a program. 1 2
- Write down the applications of OOP. 3
- What is aggregation? List out the types of aggregation. What is the need for private members ? Explain.
- State the rules associated with virtual functions.
- 7
- Explain the different types of stream classes in C++.
- What is a template? Write the syntax of a template. What is an Exception? List out built-in-exceptions.

## PART - B (4 x 15 = 60 Marks) (Essay Answer Type) Note: Answer ALL from the questions.

- (a) Explain the concept of binary search with proper example and program.
  - (b) What is function prototype? Discuss the process of passing data by value with
- 10 (a) What is a constructor? Explain about copy constructor with example program.
  - (b) Explain instance and static members of a class with proper examples.
- 11 (a) What is polymorphism? Explain different types of polymorphism with examples.
  - (b) What are streams? Explain different formatted and unformatted I/O operations.
- 12 (a) Explain about catching multiple exceptions with suitable program.
  - (b) What is function template? Write a C++ program to swap two numbers using