## 120917467050

Code No. 7037

## B.Sc. II-Semester (CBCS) Examination, May / June 2018

**Subject: Computer Science** 

Time: 3 Hours

Paper - II: Programming in C++

Max. Marks: 80

PART – A (5 x 4 = 20 Marks)
(Short Answer Type)
Note: Answer any FIVE of the following questions.

- 1 Explain about any two looping statements in C++ with proper example.
- 2 Define Function Overloading. Write a program to illustrate the same.
- 3 What are constructors? Write about types of constructors.
- 4 What is a class? How classes provide data encapsulation?
- 5 What are the various access specifiers in C++?

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- 6 Explain about different C++ unformatted I/O operations.
- 7 Describe about rethrowing an exception in C++.
- 8 Explain the overloading with function template.

PART – B (4 x 15 = 60 Marks) (Essay Answer Type) Note: Answer all the questions.

- 9 (a) Explain concepts of Object Oriented Programming with proper examples.
  - (b) What is an array? Differentiate one and two dimensional arrays. Write a C++ program to sort the given array of numbers in ascending order.
- 10 (a) Explain Operator overloading as a concept of polymorphism. Write a program to overload operator + for adding two complex numbers.

OR

- (b) Write in detail about friend functions and friend classes with proper programs.
- 11 (a) Write about inheritance and different types of inheritance in C++? Write a program to demonstrate the multiple inheritance
  - (b) What are stream classes? Explain formatted I/ O operations with example program.
- 12 (a) What is an exception? What happens if exceptions are not handled? Explain exception handling in C++.

  OR
  - (b) Write about templates in C++, Write a C++ program to demonstrate class template.