Exam.Code: 0906 Sub. Code: 6676

## 1108

## B.E. (Information Technology) Second Semester

IT-201: Object Oriented Programming Using C++

Time allowed: 3 Hours

Max. Marks: 50

**NOTE:** Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Attempt the following:
  - a) What are the objectives of Object oriented programming?
  - b) Define Polymorphism?
  - c) What is a default constructor?
  - d) Define generic functions?
  - e) Define void pointer?

(5x2)

- II. a) When will you make a function inline? Why? How it is defined in C++?
  - b) What are constructors. How can constructors be invoked? With an example distinguish between parameterized constructors and copy constructor? (2x5)
- III. What is the use of function overloading? Write a C++ program using function overloading to find the area of the circle and rectangle? (10)
- IV. a) Write a C++ program to implement a Binary Search Procedure to find whether the given element is present in the array or not using Objects and Classes.
  - b) What is reference variable? Write a program in C++ to find the sum of two numbers using reference variable? (2x5)

## UNIT - II

- V. a) What is inheritance? Explain different types of inheritance with suitable example and syntax?
  - b) What is a function template and Function instantiation? Explain?

(2x5)

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(2)

VI. What is pointer? Write a C++ program to sort the array of integers in ascending and descending order using pointer function? (10)

VII. Write short notes on: Mainpulators and Generic classes.

(10)