

*Sem - III*  
S. Y. B.Sc (Com. Sc.) (CBCS – 2016 COURSE): WINTER – 2017  
SUBJECT: OBJECT ORIENTED PROGRAMMING WITH C++

Day : Thursday  
Date : 26/10/2017

Time: 11.00 A.M. TO 02.00 PM  
Max. Marks: 60

**W-2017-0719**

**N. B. :**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw diagrams **WHEREVER** necessary.

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**Q.1** Answer **ANY TWO** of the following: **(12)**

- a) Compare and Contrast – function overloading and operator overloading.
- b) Write a note on features and applications of object oriented programming.
- c) Write a C++ program to swap the contents of two variables using call by reference and call by value.

**Q.2** Attempt **ANY TWO** of the following: **(12)**

- a) Write a C++ program to accept and display 10 employee records using array of objects.
- b) Describe various types of Inheritance in detail.
- c) Explain run-time polymorphism with the help of suitable example.

**Q.3** Answer **ANY TWO** of the following: **(12)**

- a) Write a C++ program to show the use of constructor and a destructor.
- b) Write a C++ program to find GCD and LCM of two numbers.
- c) Write a C++ program to overload unary++ operator.

**Q.4** Answer **ANY THREE** of the following: **(12)**

- a) Explain various access specifiers in detail.
- b) What are manipulators? Give example.
- c) Write a C++ Program to find whether given number is prime.
- d) State rules for operator overloading. Also list the operators which can not be overloaded.

**Q.5** Answer **ANY FOUR** of the following: **(12)**

- a) What is 'this' pointer? Give an example.
- b) Define – encapsulation and polymorphism.
- c) Explain various stream classes supported by C++
- d) What is pure virtual function?
- e) What is type casting and type conversion?
- f) Give syntax and example of an inline function.

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