

**S.Y. B. SC. (COMPUTER SCIENCE) SEM –III (CBCS - 2016
COURSE) : SUMMER - 2018
SUBJECT: OBJECT ORIENTED PROGRAMMING WITH C++**

Day : **Friday**
Date : **13/04/2018**

Time: **03.00 PM TO 06.00 PM**
Max. Marks: 60

S-2018-0810

N. B. :

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

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

- a) Write a C++ program to overload binary operator '+' to find addition of two complex numbers.
- b) Elaborate the concept of 'friend' function with suitable example.
- c) Write a C++ program to count total number of vowels present in your name.

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

- a) Describe compile-time polymorphism in detail.
- b) Write a C++ program to implement constructor and destructor.
- c) What is abstract class? Explain with example.

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

- a) Explain copy constructor with an example.
- b) Write C++ program to perform basic arithmetic operations using inline function.
- c) Define class student with member functions accept() and display(). Write a C++ program to display names of students who paid fees < 30,000/-

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

- a) Write a C++ program to implement 'this' pointer.
- b) Write a C++ program to show usage of access specifiers.
- c) Which operators cannot be overloaded? Also state the rules for overloading operators.
- d) Write a C++ program to reverse the string.

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

- a) Differentiate between C & C++.
- b) What is static data member?
- c) Give syntax of dynamic memory operators
i) new ii) delete
- d) Explain function prototyping and function definition.
- e) What is the purpose of <iostream.h>?
- f) State features and advantages of OOP.

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