

B.Sc. - II (With Credits)-Regular-Semester 2012 Sem III  
**B.Sc.23142 - Computer Science Paper - II**  
**(Object Oriented Programming With C++)**

P. Pages : 2

Time : Three Hours



GUG/S/17/3335

Max. Marks : 50

Notes : 1. All questions are compulsory and carry equal marks.

**Either:**

1. a) Explain cin and cout with suitable example. 5  
b) Explain function overloading with example. 5

**OR**

- c) Explain the basic structure of C++ Program. 5  
d) Define the terms- 5  
i) Inline Function  
ii) Call by value and call by reference.

**Either:**

2. a) What are the characteristics and advantages of OOPS. 5  
b) Write program to define class "student\_info" which contains data members such as roll number, Name, Sex and Phone No. This data is to be read from the Keyboard and displayed on the screen. 5

**OR**

- c) Define the following terms. 5  
i) Class  
ii) Object  
iii) Data Members  
iv) Member Functions  
v) Access Specifier  
d) Write notes on- 5  
i) Inline member functions.  
ii) Static data members.

**Either:**

3. a) What is constructor? Write program to generate a series of Fibonacci numbers using copy constructor where it is defined the class using scope resolution operator. 5  
b) Explain Inheritance with suitable example. 5

**OR**

- c) Explain the term constructor with default arguments. 5
- d) What are the rules for operator overloading. 5

**Either:**

- 4. a) Explain new and delete operator with example. 5
- b) Write a program to read a text file and display the content on the screen. 5

**OR**

- c) Explain virtual function with an example. 5
- d) Explain file mode operation. 5

5. Attempt all questions.

- a) What is function prototype. 2½
- b) What are the applications of OOPS. 2½
- c) Write a program to perform arithmetic operations of two complex numbers using operator overloading. 2½
- d) What is input and output pointer? 2½

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