

N-576

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Seat No.	
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B.C.A. (Under Faculty of Commerce) (Part - II)
(Semester - III) Examination, April - 2016
OBJECT ORIENTED PROGRAMMING WITH C++ (Paper - 304)
Sub. Code : 63399

Day and Date : Friday, 29 - 04 - 2016
Time : 11.00 a.m. to 2.00 p.m.

Total Marks : 80

- Instructions :**
- 1) Attempt any four from Q.No. 1 to Q. No.7.
 - 2) Q.No. 8 is Compulsory.
 - 3) Figures to the right indicate marks to the question.

- Q1) a)** Explain various features of Object oriented programming. **[8]**
- b) List and Explain different data types of supported in C++ with its range and size? **[8]**
- Q2) a)** What is friend function? What is the use of using friend functions in C++? Explain with a program. **[8]**
- b) What is class? How it is declared? How member functions are defined inside and outside the class body with example program. **[8]**
- Q3) a)** What are Constructor and Destructor? Explain different types of constructors with the help of example. **[8]**
- b) Why it is necessary to overload an operator? Write a program to input two complex numbers and add them with + using operator overloading? **[8]**
- Q4) a)** What is inheritance? Show the use of multiple inheritance with the help of proper programming example. **[8]**
- b) What is function overloading? Explain with suitable example. **[8]**

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- Q5) a)** What is polymorphism? Differentiate between early binding and late binding with example. [8]
- b)** Explain following terms with example: [8]
- Virtual function
 - Pure virtual function
- Q6) a)** What is a stream? Explain with a neat diagram the C++ class hierarchy for stream handling. [8]
- b)** Write a C++ program to copy the contents of one file to another. [8]
- Q7) a)** Explain public, private and protected access specifiers and show their visibility when they are inherited as public, private and protected. [8]
- b)** What do you mean by Operator? List different types of operators in C++ and explain relational and logic operators? [8]
- Q8) Write short notes on (any four):** [16]
- Constant in C++.
 - Array in C++.
 - Multilevel inheritance.
 - Inline function.
 - File pointer.