Total No. of Pages: 2. Seat No. B.C.A. (Part - II) (Semester - III) Examination, November - 2017 OBJECT ORIENTED PROGRAMMING WITH C++ Sub. Code: 63399 Day and Date: Wednesday, 01 - 11 - 2017 Total Marks: 80 Time: 10.30 a.m. to 01.30 p.m. Attempt any 4 questions from Q1 or Q7. Instructions: 1) Q.8 is compulsory. 2) Figures to the right indicate full marks. 3) [8] Explain constants and variables used in C++. **Q1**) a) Write a program to find volume of cube, cylinder, and rectangular b) box using function overloading. Explain importance of constructor and destructor in C++. [8] **Q2**) a) Define array. Write a program to display student information using b) [8] array of object. What is pointer? Explain pointers in C++ with help of example. [8] **03**) a) What is inheritance? Explain multilevel inheritance with example. [8] b) Write a C++ program to display prime numbers between 1 to 50 using **04**) a) [8] class. What is OOP'? Explain different features of oop's. [8] b) Define friend function. Explain characteristics of friend function with Q5) a) [8] help of example. Explain static data member and member function with example. [8] b)

What is polymorphism? Explain types of polymorphism with example. [8]

Define file stream. Which are the file stream operations for input and

Q6) a)

b)

output?

[8]

- Q7) a) Write a program to accept Account information of person and perform different account transactions using hierarchical inheritance. [8]
 - b) What is inline function? Explain advantages and limitations of inline function. [8]
- Q8) Write short notes (Any 2)

[16]

- a) Pure virtual function
- b) Encapsulation
- c) Class and object
- d) Data types

