## BACHELOR OF COMPUTER APPLICATIONS (Pre-revised) (BCA)

## Term-End Practical Examination June, 2017

DU166

CS-72(P)/S1: C++ AND OBJECT ORIENTED PROGRAMMING

Time: 2 Hours

(Weightage: 15%)

Maximum Marks: 100

Note:

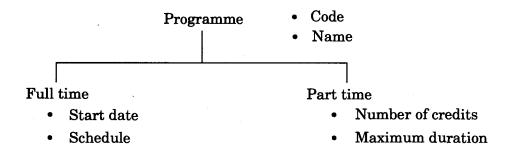
- (i) There are two **compulsory** questions in this paper carrying 40 marks each.

  Rest 20 marks are for viva-voce.
- (ii) You must write appropriate main() function and test your programs.
- (iii) Write/print your programs, input and results on your answer-sheet.
- (iv) Make and state suitable assumptions, if any.
- 1. Design and implement a class "Phone" using C++ having the following features:
  - The "Phone" class will store information about the brand, size, RAM size and storage space of the mobile device.
  - The class should have the following member functions:
    - (a) A member function to put values in the data members of the object.
    - (b) A member function that displays the data stored in the data members.
    - (c) A member function that displays only the RAM size if the size is above 2 GB.

Write appropriate main() function that creates an array of three "Phone" class objects. Main() should demonstrate all the member functions. You must store meaningful values in the objects.

40

2. Consider the following class hierarchy along with suggested data members:



Design and implement the classes in the hierarchy using C++. You may add more data members in the classes. You should include at least one constructor in each class. All the classes should have one member function print\_programme\_info() which should display all the information of that object. You must demonstrate polymorphism using the print\_programme\_info() and main() functions.

40