BACHELOR OF COMPUTER APPLICATIONS (Pre-revised)

(BCA)

00445

Term-End Practical Examination

June, 2017

CS-72(P)/S2 : C++ AND OBJECT ORIENTED PROGRAMMING

Time : 2 Hours   *Maximum Marks : 100*

(Weightage : 15%)

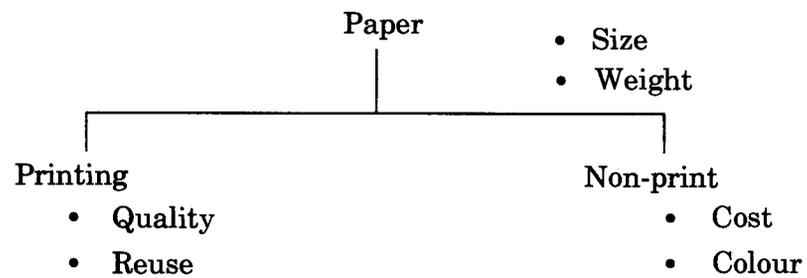
Note : (i)   There are two **compulsory** questions in this paper carrying 40 marks each.
               Rest 20 marks are for viva-voce.

         (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.

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1. Design and implement a class "Project" using C++. The class should have the following features :

    •   The data members of the class should be Project Name, Coordinator Name and Duration of project.

    •   The member functions of the class should include :

    (a)   A function that inputs data into data members of an object.

    (b)   A function that displays data members of the object.

    (c)   A function that lists the name of the project if its duration is more than a specified duration.

    Write appropriate main( ) function that uses an array to create a list of three "Project" objects. The main( ) function should demonstrate all the functions of "Project" class. You must store meaningful values in the objects.   *40*

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

Paper
- Size
- Weight

Printing
- Quality
- Reuse

Non-print
- Cost
- Colour

Design and implement the classes in the given hierarchy using C++. You may add more data members in the classes, if needed. You should include at least one constructor in each class. All the classes should have one member function "print_paper_info( )" which should display all the data of that object. You must demonstrate polymorphism using print_paper_info( ) and main( ) functions. *40*