

BACHELOR IN COMPUTER APPLICATIONS (BCA Revised)**Term-End Practical Examination**

June, 2011

00356

CS-72P : C++ AND OBJECT ORIENTED PROGRAMMING

Time allowed : 2 hours

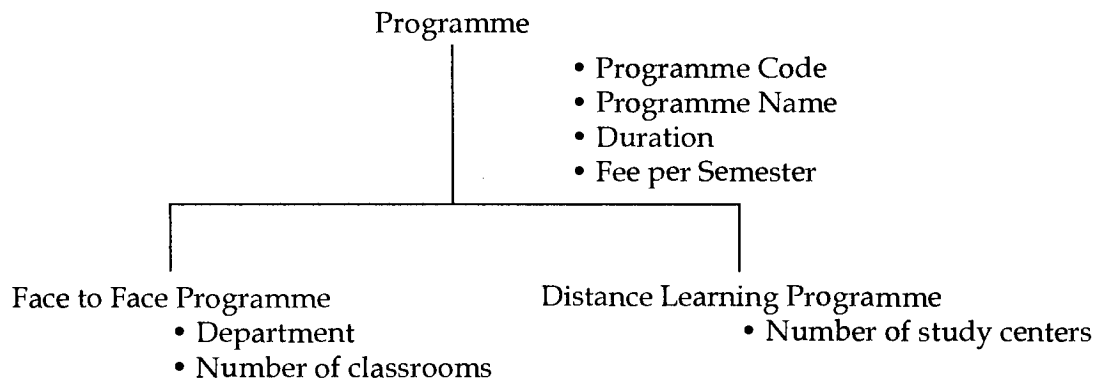
Maximum Marks : 100

(Weightage : 15%)

General Instructions :

- (i) There are two *compulsory* questions in this paper of 40 marks each. Rest 20 marks are for the *viva-voce*.
- (ii) You must write the appropriate `main()` function and test your programs.
- (iii) Write/Print the programs, input and results on your answer-script.
- (iv) Make and state suitable assumptions, if any.

1. Design and implement a class "line-segment" using C++. The class stores the information of the two end points of the line segments using x and y dimensions. The class should have a constructor and a function that calculates the length of the line segment. Also implement the appropriate `main()` function to demonstrate the constructor and other function of the class. **40**
2. Consider the following hierarchy along with suggested data members of classes : **40**



Design and implement the classes in the hierarchy using C++. You may add more data members in the classes, if needed. You may include at least one constructor in classes, if required. Also implement a function `print-programme-info()` that prints the details of the related object. You should demonstrate polymorphism using the `print-programme-info()` and appropriate `main()` function.