

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

00449

June, 2010

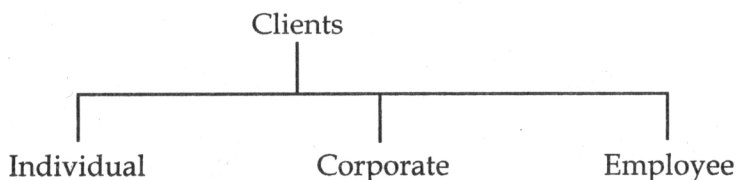
CS-72P : C++ AND OBJECT ORIENTED PROGRAMMING

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 **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 "class-marks" using C++ that stores the marks of the students of a class in three different subjects. The class should have the functions for input of class marks and for finding the total marks of the students. You must use array for your implementation. Implement the appropriate `main ()` function that demonstrates the functions of the class. 40
2. Consider the following hierarchy : 40



The clients of a bank are of three types. The individual clients need to have a guarantor, a corporate client is given an overdraft limit, whereas an employee gets special rate of interest.

Design and implement the classes using C++ for the description given above. Your implementation should include at least one data member and at least one constructor of each class. The classes should also have a function to print all the details of the clients. You may use polymorphism for implementing the print function.