

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

**Term-End Practical Examination
December, 2013**

00161

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

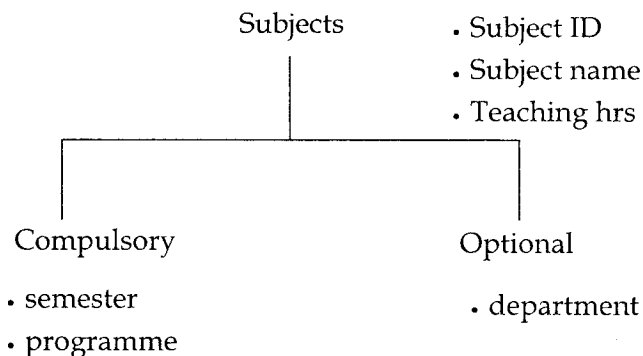
Time allowed : 2 hours

Maximum Marks : 100
(Weightage : 15%)

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- Note :**
- (i) There are *two compulsory* questions of **40** marks each. Rest **20** marks 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 customer using C + + . The class stores customer name, address and phone numbers of a customer. The class should have a constructor and a member function that displays the information of a customer object. Write the main () function that stores a list of five customers in an array, and prints the list of customers. **40**

2. Consider the following hierarchy along with suggested data members for the classes : **40**



Design and implement the classes in the hierarchy using C++. You may add more data members in the classes, if needed. Include at least one constructor in each class. Implement a function `display-subject-info ()` in every class which displays all the information of object of that class. Write appropriate `main ()` function that demonstrates polymorphism while using function `display-subject-info ()`.
