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

00928

Term-End Practical Examination June, 2016

CS-72(P)/S4: C++ AND OBJECT ORIENTED PROGRAMMING

Time: 2 Hours

Maximum Marks: 100

(Weightage: 15%)

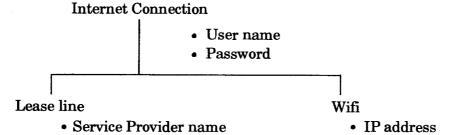
Note:

- (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.
- 1. Design and implement a class named "Weather" using C++. The class should have date of information, maximum and minimum temperature, humidity and time of sunrise, as data members. You may add more data members. The class should have the following two member functions:
 - First member function is required to input information into data members of an object
 - The second member function displays information stored in the object

Write appropriate main() function which creates three "Weather" objects in an array. Your main() function must demonstrate all the functionalities of the class. You must enter meaningful data in the objects.

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



Design and implement the hypothetical classes in the 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 a member function print_info() which displays all the information of the object of that class. You should demonstrate polymorphism using main() and print_info() functions.

40