BACHELOR OF COMPUTER APPLICATIONS (Pre-revised)

(BCA)

00773

Term-End Practical Examination

June, 2015

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

Time : 2 Hours   *Maximum Marks : 100*

(Weightage : 15%)

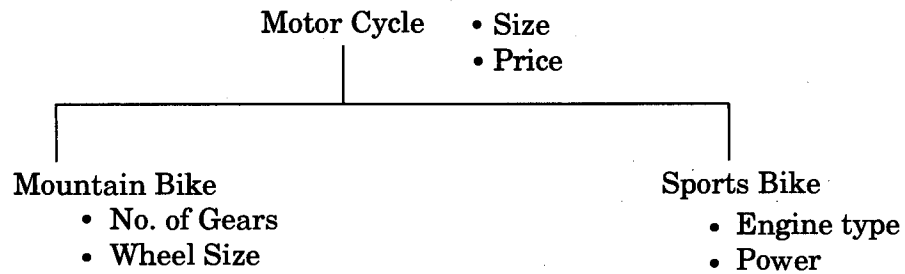*Note :*   (i)   *There are **two compulsory** questions in this paper carrying 40 marks each. Rest 20 marks are for viva-voce.*

(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 "Creditcard" using C++. The object of this class should store card number, card holder name, credit limit, amount due and date of next payment of amount. The class has two member functions — first puts, input data values in the data members of object and second displays the data values stored in the data members of an object.

Write appropriate main( ) function which creates five "CreditCard" objects in an array. Also write a code in main( ) that accepts an input of card number and displays the amount due for that card number, if it exists in the array of "CreditCard" objects.   *40*

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

Motor Cycle   • Size
              • Price

Mountain Bike   Sports Bike
   • No. of Gears   • Engine type
   • Wheel Size   • Power

Design and implement the classes in the hierarchy using C++. You may add more data members, if needed. Include at least one constructor in each class. Implement a function display_bike_info( ) in every class that displays all the data of the objects of that class. Write appropriate main( ) function that demonstrates polymorphism while calling display_bike_info( ) function. *40*

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