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CS-72(P)/S1

BACHELOR OF COMPUTER APPLICATIONS (Pre-revised)

(BCA)

00733

Term-End Practical Examination

June, 2015

CS-72(P)/S1 : 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 the programs, input and results on your answer-sheet.

(iv) Make and state suitable assumptions, if any.

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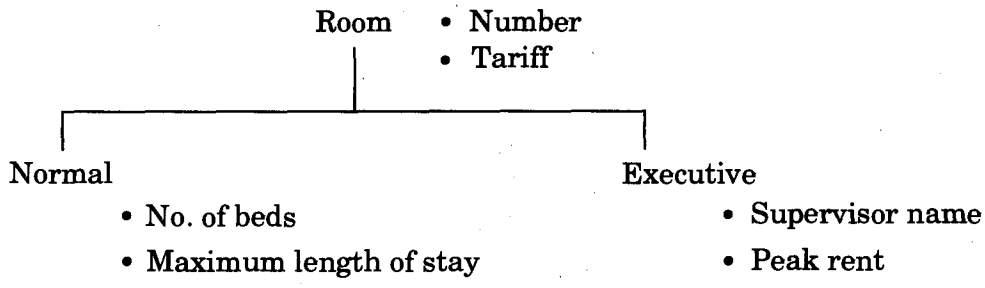
1. Design and implement a class "Vehicle" using C++. The class should have the following features :

- It should store vehicle registration number, vehicle make and type, year of making, and owner name and address.
- The class should have two member functions.
  - → First one to input the values to an object.
  - → Second displays the content of the object.

Write an appropriate main( ) function which creates an array of five such vehicle objects. Also write code in main( ) that takes vehicle registration number as input and displays the details of the object whose vehicle registration number matches the input. *40*

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



Design and implement the 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_room_info( ) which should display all the data of the object. You must demonstrate polymorphism using the print_room_info( ) and main( ) functions. *40*