SET - 2

BACHELOR OF COMPUTER APPLICATIONS (BCA)
(Pre-revised)
Term-End Practical Examination

01031

June, 2013

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

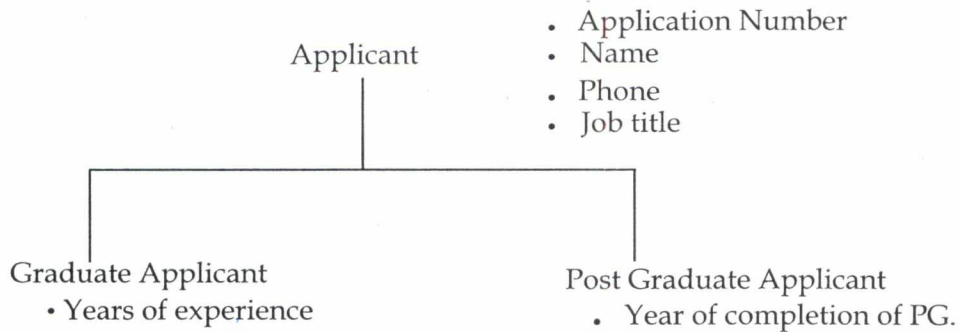Time allowed : 2 hours

Maximum Marks : 100
(Weightage : 15%)

Note :

*(i) There are **two compulsory** questions 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 result on your answer-sheet.

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

1. Design and implement a class named "Vector 5D" using C++ which stores a hypothetical vector having 5 components, you may assume these components as V[1], V[2], V[3], V[4] and V[5] . The class should use array to store these components. The class should have necessary constructors and member functions. In addition, the class has an overloaded + operator which adds two vectors component by component. Write appropriate main ( ) function that adds two such vectors and shows the output of the resultant vector.   40

2. Consider the following hierarchy along with suggested data member for the classes   40


```
                                         • Application Number
                        Applicant        • Name
                            |            • Phone
                            |            • Job title
              _____|_____
             |                             |
             |                             |
    Graduate Applicant            Post Graduate Applicant
      • Years of experience            • Year of completion of PG.
```

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-applicant - info ( ) which prints all the data of the object. You must demonstrate polymorphism using print - applicant - info ( ) and appropriate main ( ) function.

_____