SET - 4

BACHELOR IN COMPUTER APPLICATIONS (BCA)

Term-End Practical Examination 00796

June, 2011

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

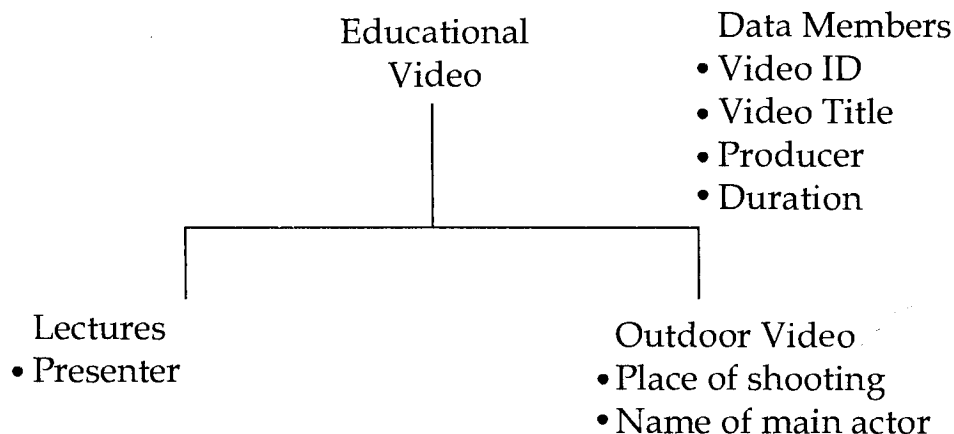*Time allowed : 2 hours*   *Maximum Marks : 100*

(Weightage : 15%)

General Instructions :

(i)   *There are two **compulsory** questions in this paper 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 results on your answer-script.*

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

1.   Design and implement a class using C + + that stores the length and width of a rectangle.   **40**
The class has a constructor and a member function that calculates the area of the rectangle. Also implement a overloaded minus (−) operator that finds the difference in the areas of two rectangles. Write appropriate main ( ) function that demonstrates all the functions of the class.

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


```
           Educational          Data Members
             Video              • Video ID
                                • Video Title
                                • Producer
                                • Duration

   Lectures              Outdoor Video
   • Presenter           • Place of shooting
                         • Name of main actor
```

Design and implement the classes related to the hierarchy given above using C+ +. You should include at least one constructor in each class. Also implement a member function printvideoinfo( ) that prints all the details relating to an object of that class. You should demonstrate polymorphism using printvideoinfo( ) function and appropriate main ( ) function.