

BACHELOR IN COMPUTER APPLICATIONS (BCA)

Term-End Practical Examination

December, 2008

01818

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

Time allowed : 2 hours

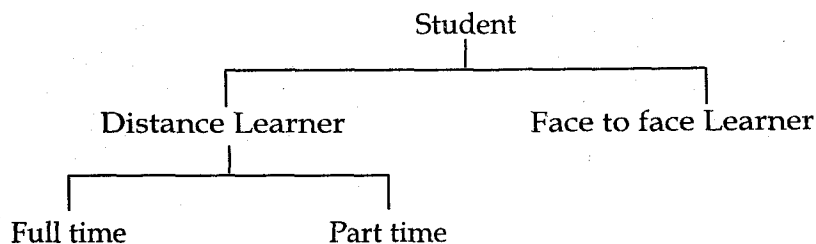
Maximum Marks : 100

(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 "MyMatrix" that can store a matrix as a two dimensional array of size 3×3 . The class have a constructor that initialises all the elements of array to zero. Also write two functions one for displaying the matrix and one for input of the elements of matrix. Finally, write an overloaded multiplication (*) operator that multiplies two matrices. 40
2. Design and implement the following class hierarchy using C++ : 40



You must include the following in your implementation :

- Member variables for each class.
- At least one constructor for each class.
- A polymorphic function that displays the details of a student.