

BACHELOR IN COMPUTER APPLICATIONS (BCA)

Term-End Practical Examination

December, 2008

01312

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

Time allowed : 2 hours

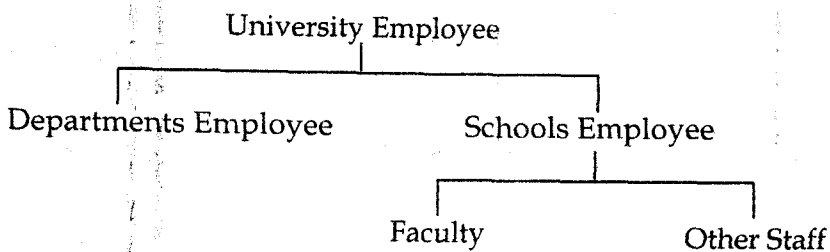
Maximum Marks : 100
(Weightage : 15%)

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 "MyDate" using C++ that stores day, month and year as variable. The class has a constructor that initialises date to '01-01-2001'. The class has a function that allows change in the date, but only after proper checking about the validity of date. You may assume that this date class can have date in the range 01-01-2001 to 01-01-2020. The class also has an overloaded minus (-) function that finds the difference in the years of the two dates and a function to display the date. 40

2. Design and implement the following class hierarchy using C++ : 40



You should include the following details for the class hierarchy :

- Member variable for all classes.
- At least one constructor for each class.
- A polymorphic function that displays the details of an employee.