

BACHELOR IN COMPUTER APPLICATIONS (BCA)

Term-End Practical Examination

June, 2007

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

Time allowed : 2 hours

Maximum Marks : 100

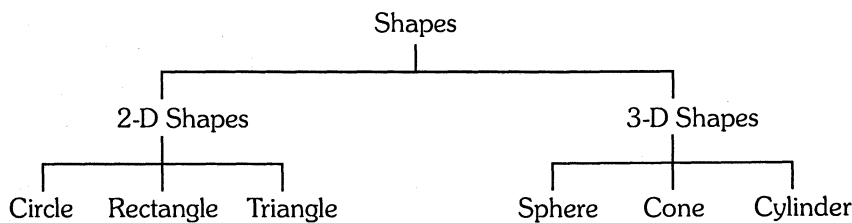
(Weightage 15%)

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 "Smatrix" of the type Square Matrix of real numbers and overload the operator "+" to find the sum of two objects of the type Smatrix. 40

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



You must include the following in your implementation :

- Member variables for the classes.
- At least one constructor for each class and destructor, if needed.
- A polymorphic member function that prints details of the shapes.