

Roll No.....

Total No. of Questions : 09]

[Total No. of Pages : 02

## Paper ID [CS211]

(Please fill this Paper ID in OMR Sheet)

MAY 2003

B. Tech. (Sem. - 3<sup>rd</sup>)

### PROGRAMMING LANGUAGES (CS - 211)

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.
- 3) Attempt any **Two** questions from Section - C.

#### Section - A

Q1)

(10 × 2 = 20)

- a) What are derived and base classes?
- b) Differentiate between an object and a class.
- c) What are the various access levels used in declaration of classes?
- d) How many arguments are required in the definition of an overloaded unary operation?
- e) All programming languages are not OOP. Explain.
- f) What is a pointer?
- g) What is dynamic memory allocation?
- h) What is CLR?
- i) What is an application wizard?
- j) Why OLE is used?

#### Section - B

(4 × 5 = 20)

Q2) Briefly explain Pure Virtual Function overloading?

Q3) What is a class and its reusability?

Q4) Write a program in C++ to find the factorial of given integers using recursion.

Q5) Briefly explain various visual C++ windows tools.

Q6) How can a linked list overcome the drawbacks of an array?

### Section - C

(2 × 10 = 20)

Q7) What is object design? Explain with help of example.

Q8) What are the design goals and principle feature of .NET framework?

Q9) Explain the basic structure of C++ program with following points:

- (a) All built in function
- (b) Data types
- (c) Special operators
- (d) Symbolic statements