

PROGRAMMING LANGUAGES
(CS-211, Dec.2005)

Time: 3Hrs

Max. Marks: 60

Note: Section A is compulsory. Attempt any four questions from Section B and any two from Section C.

Section-A

1. (a) What is the difference between C & C++?
(b) Explain the concept of dynamic memory allocation.
(c) What are registers and extern storage classes used in C/C++.
(d) How a class differs from a structure? What is an ADT?
(e) Explain the concept of MFC. What is active X control with MFC library?
(f) What are the various advantages of .NET environment?
(g) What are the various window structures in procedure oriented development?
(h) What does a stream stand for? What is the function of streambuf?
(i) Define overloading. Can all the operations in C++ be overloaded?

Section-B

2. What is the requirement of using constructors and destructors in C++? Explain with the example of a program.
3. How do the default constructors and destructors behave in an Inheritance hierarchy?
4. Explain a stack operation using a string of characters in object oriented programming.
5. What is the need of recursion? Write a program to find the factorial of a number, Using recursion.
6. What are the various advantages of using windows?

Section-C

7. What is the need for a foundation class library? What are the design principles for its implementation? Explain key foundation class library features.
8. (a) Write a program to explain the concept of hybrid inheritance.
(b) Describe the OLE features and specifications.
9. (a) Write a program to multiply two class objects after overloading arithmetic operator.
(b) Write short notes on the following:-
 - (i) 24 FOUR.CPP application file.
 - (ii) Advanced preprocessor operators.