D 2690

Name.....

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, JANUARY 2005

Computer Science

CS 101—PROGRAMMING AND PROBLEM SOLVING

Time : Three Hours Maximum : 60 Marks

Answer any **five** *questions from Part A and any* **three** *from Part* ***B.***

Part A

1. Give the different data types supported by 'C'.
2. What are the bitwise operations in 'C' ?
3. Discuss the function atof ( ).
4. What is the role of a preprocessor in "C" ?
5. Distinguish between swap (a, b) and swap (&a, &b).
6. What is a recursive function ? Give an example.
7. Describe formatted scan f.

(5 x 3 = 15 marks)

Part B

8. Write a program to input two lists of numbers and output a combined list without repetitions.
9. Write a program to interchange two rows in a given matrix.
10. Write a program to compute $x - \frac{x^2}{2!} + \frac{x3}{3!} - \frac{..4}{4!} \ldots n$ terms.
11. Write a program to count the lines, words and characters in input.

(3 x 15 = 45 marks)