

M.Sc. (MACS) PROGRAMME

Term-End Practical Examination

December, 2013

**MMT-001 (P) : PROGRAM AND DATA
STRUCTURE**

Time : 2 hours

Maximum Marks : 50

Note : There are two questions in this paper, totalling 40 marks. Answer both of them. Remaining 10 marks are for viva-voce.

1. Write a C program that evaluates a polynomial at a given value using Harner's method. Your program should prompt for the degree of the polynomial, co-efficients of the polynomial, value at which the polynomial is to be evaluated and print the answer. Use your programme to evaluate the polynomial $x^{10} - 7x^9 + 8x^6 + 9x^3 + x + 1$ at the point 2.35. 15

2. Write a programme in C for the implementation of a queue using singly linked list. The elements of the queue should be strings of length at most 20 characters. It should prompt for the string, insert it in the queue and after it finishes reading the strings, it should print the contents of the queue. 25