

## Noakhali Science and Technology University Department of Applied Mathematics

Course No.: A.MTH-3202 (Math Practical-IV)

## **Assignment**

- Write programs that will (a) print a constant string, (b) read a string and print it,
   (c) call a function, (d) read n numbers in an array and hence print them.
- 2. Write programs that will (a) read n numbers and print them in ascending order using bubble sorting, (b) store *n* numbers and search for an arbitrary number by (i) linear search, (ii) binary search.
- 3. Write programs for (a) printing first n prime numbers, (b) solving quadratic equation (including complex roots).
- 4. Write a program for finding determinant of a  $n \times n$  matrix and then for **A** where

$$A = \begin{pmatrix} 4 & 6 & 5 \\ 2 & 1 & 9 \\ 2 & 5 & 3 \end{pmatrix},$$

- 5. Write programs of (a) Bisection Method, (b) Fixed Point Iteration Method,(c) Secant Method, (d) Method of Falsi Position, (e) Newton-Raphson Methods for solving transcendental and algebraic equations.
- 6. Write a program of Romberg Integration in C.