ASSIGNMENT_1

Jadavpur University

Session 2019-20, Even Semester

Computer Programming and Numerical Methods

Sessional Assignments (Combined)

Flow Chart and Algorithms

- 1. Write an algorithm to determine maximum of three numbers. Also draw the corresponding flow chart.
- 2. Write an algorithm to determine the sum of individual digits of a given integer. Also draw the corresponding flow chart.
- 3. Write an algorithm to print the reverse of a number read as input. Also draw the corresponding flow chart. **[OPTIONAL]**
- 4. Write an algorithm to determine whether a given number is prime or not. Also draw the corresponding flow chart.
- 5. Write an algorithm to generate first 100 prime numbers. Also draw the corresponding flow chart.
- 6. Draw a flowchart to input three numbers in the variables a, b and c and hence to find the roots of the quadratic equation $ax^2 + bx + c = 0$. Consider carefully the zero input values of the coefficients a, b and c. **[OPTIONAL]**
- 7. Draw a flowchart to input 10 numbers, sort the numbers in ascending order and hence to write the numbers in sorted order. **[OPTIONAL]**