M.Sc. 1ˢᵗ Semester Examination, 2020

Applied Mathematics With Oceanology And Computer Programming

Paper: MTM – 197

Full Marks: 25   Time : 1 hour

The figures in the right hand margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.
Illustrate the answers wherever necessary.

1.   Answer any **one** question of the following : $15 \times 1 = 15$

   (a)   Write a script in MATLAB to search a number from a list of numbers not using built– in function.

   (b)   Write a script in MATLAB to find the roots of a quadratic equation not using built – in function.

   (c)   Write a script in MATLAB to find the value of a finite integration by Trapezoidal Rule not using built-in function.

   (d)   Write a script in MATLAB to find root of an algebraic equation by Newton – Raphson method not using built-in function.

2.   Answer any **two** questions: $10 \times 1 = 10$

   (a)   Write a script in MATLAB to draw the curve of y=f(x) mentioning all necessary items in a graph.

   (b)   Write a script in MATLAB to draw a pie chart mentioning all necessary items in a chart.

   (c)   Write a script in MATLAB to draw a histogram mentioning all necessary items.

   (d)   Write a script in MATLAB to draw a surface of z=f(x,y) mentioning all necessary