Numerical Analysis Math 373 Rutgers Surya Teja Gavva

## ASSIGNMENT 3 Due Date: Thursday, 19th July

Homework will be due in two parts. Part 1 will consist of computational problems and will be graded by a grader. Part 2 will consist of more proof based problems and will be graded by me.

They must be turned in **separately** since they will go to two different people. Late homework will not be accepted; if you know you cannot make class you may email me your homework. The assignment must be in my email mailbox by 10:15 am the day it is due. Homework must be legible and stapled.

Read Chapter III from the textbook and solve problems Practice Lagrange Interpolation, Neville's method, Newton's divided difference, Hermite interpolation.

## Part I

 $\begin{array}{l} 2.5 - 1 \\ 3.1 - 5, \, 10, \, 13a, \, 13c, \, 15c \\ 3.2 - 1c, \, 1d, \, 3, \, 7 \\ 3.3 - 2, \, 4a, \, 5b, \, 9c \end{array}$ 

## Part II

 $\begin{array}{c} 2.4 \ -16 \\ 3.1 \ -22 \\ 3.3 \ -20, \ 21 \end{array}$