Course Title:	Numerical Methods	جامعة الجوف Jouf University College of Engineering	**Assignment #: 2**
Course Code:	MATH 254		Submission Deadline:24/3/2021
Instructor:	Zaki Ahmed Zaki		Date : 17/3/2021
Level/Year	Fifth level/3rd year		
Student Name:		**I.D#:**	Total Marks: 7

Question #	1	Total Marks	7	CLO	2	SO	1	PLO	2

Question (1):

(i) A manufacturer of thermistors makes the following observations on a thermistor, Compute the temperature corresponding to 754.8 ohms (find :y at x =754.8) by using

Lagrange interpolation

Resistance (x)	911.3	636.0	451.1
Temperature (y)	30.131	40.120	50.128

(ii) Find an interpolation polynomial by Newton forward Method which interpolate the function y = f(x), at the points (1,9), (2,26), (3,55), (4,102), then find y at x=1.5

(iii) Deduce a cubic interpolation polynomial which interpolate the function

y = f(x)at the points (1,- 4) , (2,8) , (5,140) , (8,542) , (9,764) , (10,1040) by divided difference method