**National Institute of Technology, Meghalaya**

**Department of Computer Science and Engineering**

**Digital Image Processing**

Assignment-III

Date of Submission:- 20.10.2017

1. Read lena512.bmp image and store it in f. Transform f with gray level resolution is 2k, when k=5, k=3 and k=1; and store them in f5, f3, f1 and display the three new images i.e., f5, f3, f1.
2. Increase the size of lena512.bmp to 1024X1024 using nearest neighbor interpolation and bilinear interpolation method in MATLAB.
3. Write a program to perform the negative transformation of image lena512.bmp.
4. Write a program to perform the log transformation of image lena512.bmp, taking c=1.
5. Write a program to perform the power-law transformation of image lena512.bmp for c=1 and gamma= 0.75, 0.25, 2.5, 5.
6. Perform the contrast stretching operation of image lenalc.bmp (make it in full contrast).
7. Show the histogram of image lenalc.bmp without using imhist() function in MATLAB.
8. Show the histogram equalized image of lenalc.bmp without using histeq() function in MATLAB.