# Assignment 3

**1. All codes must be done using Python.**

**2. Numpy is allowed. Additional Packages are to be used only where it is mentioned.**

**3. Submit your codes and the generated output images in a zipped folder.**

**Part 1: [5+10+10+25+5]**

1. Read image restore.jpg in gray scale. (use package)

2. Blur the image using lowpass filter.

3. Add Gaussian noise of variance 100.

4. Apply Wiener filtering and print the PSNR and MSE value between the original and restored image.

5. Save the restored image. Store the PSNR and MSE values in a .txt file. (use package)

**Part 2: [5+15+20+5]**

1. Read image restore.jpg in gray scale. (use package)

2. Apply uniform motion blurring in the horizontal direction.

3. Apply Adaptive filtering and print the PSNR and MSE value between the original and restored image.

4. Save the restored image. Store the PSNR and MSE values in a .txt file. (use package).