

COMSATS University Islamabad, Lahore Campus

CSD331- Digital Image Processing

Assignment 01

Due Date: October 17, 2019

Maximum marks: 10

Note: Submit your assignment in printed form supported with visual outputs.

1. Write a Matlab function to perform spatial filtering on an image using both convolution and correlation methods. In order to perform these operations, pad your image with 10 rows and columns at the border of the image, the value of the padding should be 0. Apply an averaging filter with a kernel size of 7x7 and display the image before and after applying the filter. **[5 marks]**
2. Apply median filter to the smoothed image (obtained in 1) and display the results. **[2 marks]**
3. Write a MATLAB code to implement the emboss effect in an image of your choice. **[3 marks]**