

भारतीय सूचना प्रौद्योगिकी संस्थान इलाहाबाद

Indian Institute of Information Technology Allahabad

An Institute of National Importance by Act of Parliament Deoghat Jhalwa, Allahabad-211015 (U.P.) INDIA

<u>Lab Assignment – 4</u>

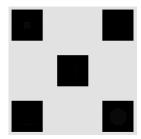
Subject: Image and Video Processing

Time: 1.5 hrs

Note: Usage of built-in functions is not allowed only if specified. Internet will be turned-off at 4:30pm.

1. Given an image "embedded_square_noisy.tif" perform local histogram equalization. Also perform global histogram equalization and show the differences visually.

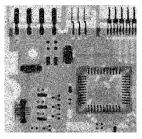
Note: You can use built-in functions only for this question.



2. Generate a Gaussian filter mask of sizes m=3,5,7,9 and varying σ . Perform smoothening on the given image. Show the images visually using subplot with titles.



3. You are given a noisy image and you only know two filtering techniques average filtering and median filtering. Apply those operations on the noisy image and show the differences.



4. You are asked to sharpen given blurry image using four different Laplacian masks.



5. Given the image perform unsharp masking and high boost filtering. Show each steps visually.

