10EC763 – Image Processing

Assignment-II

Note:  
i) Write the assignment in a A4 size paper  
ii) Submit the assignment on or before 11.00 AM, Thursday, 29/09/2016  
iii) Mention your USN, name and section on the top right corner of first page

1. Write a short note on local histogram equalization.
2. For the given 8 grey level, 100x82 image, illustrate histogram equalization

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3. Explain the following terms
   a. Image Contrast
   b. Histogram
   c. PDF
   d. CDF

4. Explain the three properties of color.

5. Explain the following liner and order statistics filters with an example, indicating their uses.
   

6. Explain the RGB, CMY and HSI colour models.

7. Explain smoothing and sharpening Spatial Filters

8. Write a short note on sensitivity of cones in the Human Eye w.r.t. color

9. Write a note on the following pseudocolor image processing techniques.
   
a) Intensity slicing     b) Gray level to colour transformations.

10. Write steps involved in converting colours from RGB to HSI and vice versa.

11. Explain unsharp masking and high-boost filtering in spatial domain.

12. a) Briefly explain the process of histogram matching
    b) Illustrate histogram specification on the following

   **i/p image:**

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   **specified histogram:**

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