DIGITAL IMAGE PROCESSING [18UCS0607]

QUESTION BANK [UNIT 2, 3, 4] - IA2 PORTION

UNIT -2

1. Fundamentals of Spatial Filtering (pageno.144) and The Mechanics of Spatial Filtering (pageno.145)
2. Problems on matrix, window, correlation (pageno.147)
3. How smoothing filters are used for blurring and noise reduction?
4. Effects of smoothing filters as a function of filter size?
5. How median filter can be used for noise reduction?
6. Similar problems from (pageno.159)
7. How image sharping is performed?
8. What is unsharp masking, write the steps involved in it. What is high boost filtering?
9. What are the different gradient operators?
10. Explain the Using of first order Derivative for Image Sharpening.(pageno.159)

UNIT -3

1. Explain Opening and Closing procedure in Morphological Image Processing

2. Refer problem 9.6

3. Refer problem 9.1c , 9.3, 9.5

4. Explain Hit and Miss transforms

5. Refer problem 9.18 , 9.19, 9.20, 9.21,9.22

UNIT - 4

1. Explain Three Fundamentals steps performed in Edge Detection.

(Page no.704, 10.2.4)

1. How are Diagonal edges detected using gradient operators.

(Page no. 707, 10.2.5)

1. Explain the steps followed in the Marr-Hildreth edge detector.

(Page no. 714, 715, 716, 10.2.6)

1. How local Processing is used for edge linking and boundary detection.

(Page no. 726 ,727, 10.2.7)

1. How Global processing is done using the Hough transform?

(Refer page no. 736)