

[REDACTED]

"FINAL TEAM"

NAME:-

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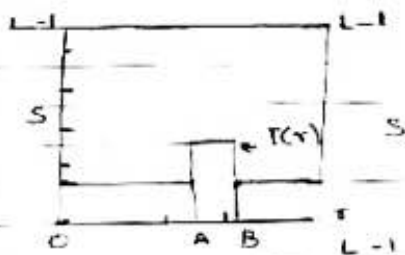
Question No: 2

Part (A)

(Gray Level Slicing)

Gray level Slicing equivalent to band pass filtering. It manipulates group of intensity levels in an image of ~~to~~ up to specific by diminishing rest or by leaving them alone. This transformation is application in medical images and satellite images such as x-rays, flaws, CT scans. Two different approaches are adopted for gray slicing [6] [7].

- 1) Gray level slicing with background. It displays high values in the specific region of an image and low value to other regions by ignoring background. Fig. 6 highlights range [A, B] of x-ray levels by reducing all other a constant fond.



PART: B

NEGATIVE OF A PICTURE

Negative of a picture is a total inversion in which lights areas appears dark. A ~~dark~~ negative colour image a an additional colour. Negative image has basically details in it that they are ~~seen~~ in the film they are open in the photography page.

Range then the final painted patterns images. The constant Typically increases Figure 6 Range [A, B] of gray levels by reducing all others to a constant levels.

- 2) Gray level Slicing without background. Fig. 7

highlights range $[A, B]$ by preserving all other levels. Fig. 8 displays high values in specific region of an image and original gray level to other region by preserving background [8] [9] [10]

When they they are are present painted in photographic page when negative film are brought in to digital film that these content can be adjusted at the scanning and by other processes.

Question: 2

Consider the picture given below:

In the picture it is enhanced by the histogram equalizer technique.

In histogram equalizer technique the adjustment of contrast of the image takes place. This technique improves the image appearance by scaling out the intensity range of the image through the reassignment of pixel value, the distribution on the histogram is stretched out to produce a more uniform distribution.

Question 3

Euclidean Distance.

$$P(x, y) = (6, 1)$$

$$Q(s, t) = (3, 7)$$

$$\begin{aligned} \rightarrow D_4(P, Q) &= |x-s| + |y-t| \\ &= |6-3| + |1-7| \\ &= 3+6 \\ &= 9 \end{aligned}$$

• City Block Distance

$$\begin{aligned} \rightarrow D_6(s, q) &= \max(|x-s|, |y-t|) \\ &= \max(|6-3|, |1-7|) \\ &= \max(3, 6) \\ &= \max(6) \\ &= 6 \end{aligned}$$

• Chessboard Distance

$$\begin{aligned} \rightarrow D_2(P, Q) &= \sqrt{(x-s)^2 + (y-t)^2} \\ &= \sqrt{(6-3)^2 + (1-7)^2} \\ &= \sqrt{(3)^2 + (6)^2} \\ &= \sqrt{9+36} \\ &= \sqrt{45} \end{aligned}$$

Question No 4:

PART: A

Histogram are very useful tool that many cameras offers there was to help them get a quick summary of the total range present in any given image.

The graph show the tones in the image from black (on the left) to white (on the ~~unside~~ right). The higher the graph at any part the more pixels of that color that are present in an image. Histogram with lots of dark pixels will be skewed to the left and one with lots of lighter color will be skewed to right.

Part: B

Pic a: Hgm 2

Pic b: Hgm 1

Pic c: Hgm 4

Pic d: Hgm 3