Ans to the Q: NO: (1) (a)

Any 2D mathmatical function that bears information can be represented as an image. A digital images is an array of real or complex numbers represented by a finite number of bits. Digital image Processing generally refers to Processing of a 2D Picture by a digital computer and it has been normally Trained on the making.

Ans to the Q: No: (1) → (B)

Contrast is an important factor in any subjective evaluation of image quality. Contrast is created by the differences in luminance reflected from two adjacent surfaces. In other word contrast is the difference in visual properties that makes an objective distinguishable from other object and the background. So that this is the contrast.

Ans to the Q: NO: (2) → (a)

write down the simulation equation of generating a sinsodial image of full HD size.

$$g(x) = \frac{1}{2\sqrt{2\pi}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$$

$$g(5) = \frac{1}{2\sqrt{2\pi}} e^{-\frac{(5-\mu)^2}{2\sigma^2}}$$

$$= 0.1083 \text{ Hz}$$

∴ the vertical frequency

0.1083 Hz.

Ans to the Q: NO: (2) → (b)

write two main objective of image Processing:

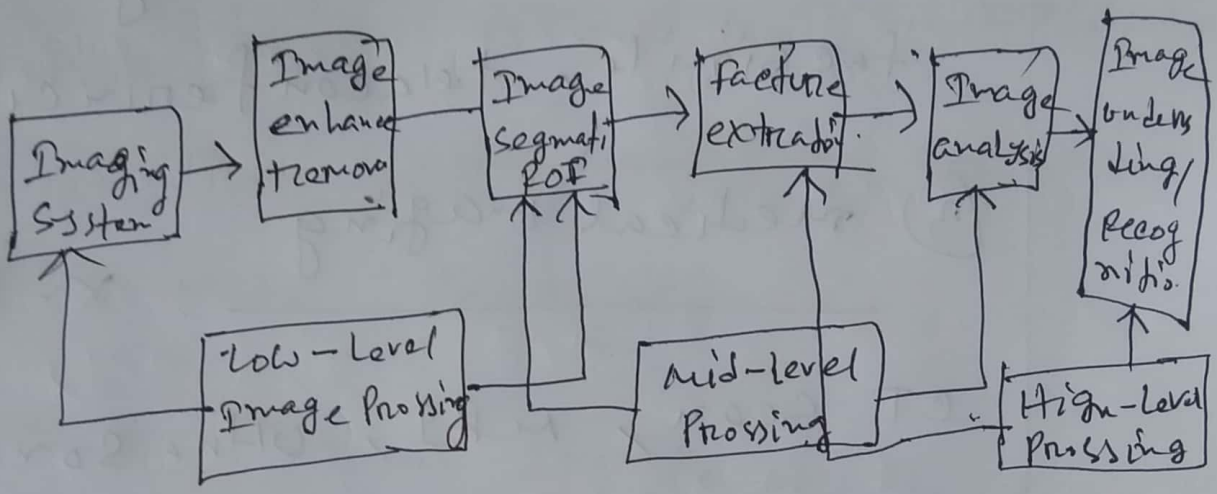
(1) Binary Image

(2) Gray-scale Image

Binary Images: A binary images is one that consist of pixels that can have one of exactly two colors, usually black and Images.

Gray-scalle Images: gray-scale Images is an moral time of the Images are often.

Ans to the Q: NO: (3).



digital image Processing diagram

classification of the flow diagram:-

(1) Remote Sensing via Satelites

geographical maping, Prediction of agricultural fore, weather forcasting, flood and fire control and military Application.

(2) Images transmission: Tv broadcast, cctv-based security monitoring facsimile, teleconferencing.

(3) medical imaging: X-ray, CT Scan, MRI, Ultrasonic scan, detection and monitoring of tumors and other diseases.

(4) Radar and Sonar imaging: In aircraft guidance and target detection, missile monitor and navigation system.

(5) Robot vision: Inside and outside Robot navigation

Ans to the Q: NO: (4)

Briefly explain any one application specific linear maping operation of image Processing:-

A gray scale Image $f(x,y)$ can be Transformed into images $g(x,y)$ using a linear function given as

$$g(x,y) = f(x,y) + b$$

If $b > 0$ the images is made brighter else the Images is drakend

b is known as "bias".

A Grayscale Images $f(x,y)$ can be Transformed into image $g(x,y)$ using a linear gain function given as g

$$g(x,y) = a * f(x,y)$$

if $a > 1$ the image is made brighter else the images is darkened

a is known as "gain".