

1. Explain application of imaging which uses:
  - a. Gamma---Rays
  - b. X-Ray
  - c. Ultraviolet
  - d. Visible and Infrared band
  - e. Microwave band
  - f. Radio band
2. Define spatial and gray level resolution. Explain about iso preference curves.
3. Explain about the basic relationships and distance measures between pixels in a digital image.
4. Explain the principle of sampling and quantization. Discuss the effect of increasing the
  - a. Sampling frequency
  - b. Quantization levels on image
5. How to measure distance between two pixels in an image? Explain with the help of example.
6. Explain with example
  - a) Neighbors of pixel
  - b) Connectivity.
7. What is m---connectivity among pixels? Give an example.

8. Explain relationship amongst the pixel.
9. Explain type of connectivity in pixels using example.
10. Explain types of path and distance with examples.
11. Explain image arithmetic with example.
12. Write note on following, also give its application:
  - a. Image Negatives
  - b. Log Transformations
  - c. Power-Law Transformations
  - d. Contrast stretching
  - e. Intensity---level slicing
  - f. Bit-plane slicing
  - g. Histogram processing
13. What do you mean by contrast stretching? Explain using one example.
14. What is meant by image enhancement by point processing? Discuss any two methods in it.
15. Define histogram of a digital image. Explain how histogram is useful in image enhancement?
16. Write about histogram equalization.

17. What is meant by image subtraction? Discuss various areas of application of image subtraction.

18. What is meant by image averaging? Discuss various areas of application of image