

Assignment-1

Unit 1: Introduction and Fundamentals

1. Define the following terms (CO1-Understand)
 - a. Image
 - b. Digital Image representation
 - c. Pixels
 - d. Resolution
 - e. Bit depth
 - f. Need of image processing
2. What is the storage size required to store a monochrome image of size 512x512 for 256 gray levels? (CO1-Understand)
3. What is the storage size required to store a RGB image of size 1024x1024, if one pixel is represented 8 bits? (CO1- Understand)
4. Consider an observer looking at a lamp-post which is at a distance of 50 m. if the height of the lamp post is 10 m, find the size of the image formed in the retina. Focal length is 17 mm. (CO1- Understand).
5. What do you mean by an image? Explain the types of image on the basis of its attributes, colour, dimensions, and data types. . (CO1- Understand).
6. What are the modes of imaging? Also discuss the lighting system design. (CO1- Understand).