Note: Each answer should be designed as per a 5/6-mark answer.
Answers should be clear and concise.
Use neatly labelled diagrams wherever possible.

Chapter 1 Assignment

What is an Image?
What is Digital Image Processing?
What are the applications of Digital Image Processing?
What are the Fields that use Digital Image Processing
What are the Fundamental steps of Digital Image Processing
What are the Components of an Image Processing System

Chapter 2 Assignment

Write a note on:
*Photopic Vision and Scotopic Vision
*Weber Ratio
*Good and Poor Brightness Discrimination
*Light and Electromagnetic Spectrum
*Luminance and Radiance
Explain Brightness Adaptation and Discrimination.
Why do we say that Perceived brightness is **not** a simple function of intensity? How do Mach Bands and Simultaneous Contrast help us understand this?
Explain Image Acquisition Using a Single Sensor, Image Acquisition Using Sensor Strips and Image Acquisition Using Sensor Arrays
Explain Sampling and Quantization in detail
What do you mean by Spatial and Intensity Resolution?
Write a note on Image Interpolation, explain bilinear interpolation and bicubic interpolation
Explain the basic Relationships between pixels – Neighborhood, Adjacency (4-adj, 8-adj, m-adj), Connectivity, Region, Boundary
What is Geometric Spatial Transformation and Image registration? Explain Identity, Scaling, Rotation, Translation, Shear (Horizontal), Shear (Vertical)