that the result is more suitable than the original for a specific application. It is subjective in nature. It involves increasing brightness or contrast, sharpening edges or reducing noise.

3.) Image Restoration: Involves restoring an image that has been degraded (blurry or noisy). It is an objective process unlike image enhancement, relying on mathematical models to remove degradation.

4.) Image Segmentation: partitioning the image into meaningful regions.

5.) Object Recognition: Identifying and classifying objects within the image based on characteristics

Q2.)

Image Sampling: Refers to the process of reducing the image dimensions by selecting discrete points (pixels) to represent the continuous image. Higher sampling rate provide better resolution.

Quantization: Refers to reducing the number of intensity levels in an image, essentially mapping continuous pixel values to a finite set of intensity levels. The step affects the image bit depth and introduces differentiation