



2. (a) What is meant by image restoration ? What is noise model ? Explain different noise models for image noise term  $n(x, y)$ . 2+2+4
- (b) Explain Harmonic mean filter. 2
3. (a) What are Laplacian and Gaussian operator ? Describe different common edge detectors. 2+2+4
- (b) What is thresholding approach for image segmentation. 2
4. (a) Explain two morphological operations (i) erosion (ii) dilation. 2+2
- (b) Describe two compound operation used in morphological image processing (i) opening (ii) closing. 3+3
5. (a) Explain two very popular color model those are used in colour image processing (i) RGB (ii) HIS. 4+4
- (b) How can we convert a colour model from RGB to HSI color values. 2

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6. Write short notes (any *two*) :

5×2=10

- (a) Image compression
  - (b) Fourier transform
  - (c) Homomorphic filtering
  - (d) Basic Gray level transformation
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