



Date: 27-04-2016

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

PART-A

Answer ALL questions

(10 x 2 = 20 marks)

1. Define digital image.
2. State Walsh Transform.
3. What is Contrast switching?
4. Define histogram.
5. What is meant by Image restoration?
6. Define salt-peper noise.
7. Why do we go for Image Compression?
8. Define Encoder.
9. What is polygon approximation?
10. Define Textures.

PART -B

Answer ALL questions

(5 x 8 = 40 marks)

11. a) Specify the various relationship among the pixels with neat Diagram.
(OR)
b) Explain about the Discrete Fourier Transforms.
12. a) Explain the basic Grey level transformations used in image enhancement.
(OR)
b) Explain about the image subtraction and Image averaging on digital images.
13. a) Briefly explain any 4 noise models with its equations.
(OR)
b) Describe the Blind Image Restoration Technique.
14. a) Write about variable length coding in Lossless compression.
(OR)
b). Discuss the Image compression standards JPEG and MPEG.
- 15 a) Write notes on:
(i) Chain codes.
(ii) Polygon approximation.
(OR)
b) Explain the Topological Descriptors in detail.

PART - C

Answer any TWO questions

(2 x 20 = 40 marks)

16. a) Describe the various steps involved in Digital Image Processing.
b) Explain the Image sampling technique.
17. a) Write the properties of 2D Fourier transform.
b) Give brief notes on singular value decomposition with suitable diagram.
18. Describe the following methods used for Image segmentation
 - (i) Region Based Segmentation.
 - (ii) Thresholding.

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