

Time: 3 Hours

Max. Marks: 80

- N.B.:** 1) Question No.1 is **compulsory**.
2) Attempt any **three** from the remaining **five** questions.
3) Figures to the right indicate full marks

Q.1 Write a short note on any four

20

- a) Vector quantization
- b) Inverse Filtering
- c) Digital Camera working principles Brightness
- d) Properties of 2-D DFT
- e) Homomorphic filter.

Q.2

10

- a) Describe Image compression standards- JPEG & MPEG.
b) Explain Hough Transform in detail.

10

Q.3

10

- a) What is meant by Discrete Cosine Transform? Explain .

10

- b) Describe image averaging Spatial filtering- smoothing filters?

Q.4

10

- a) Explain Image restoration Model in detail.

10

- b) What is meant by Handwritten and Printed Character Recognition ? Explain.

Q.5

- a) Explain Thresholding Region based segmentation Chain codes in detail.

- b) Describe Image restoration Model in detail.

Q.6

10

- a) Discuss about classification of image compression schemes

10

- b) Explain Vehicle Number Plate Detection and Recognition techniques