

Exam. Code: 1000

Sub. Code: 34991

2056

M.E. (Computer Science and Engineering)

Second Semester

CS-8201: Digital Image Processing

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. Answer the following:-

- a) Write the histogram processing techniques.
- b) What is coding redundancy?
- c) Define erosion.
- d) Discuss thresholding.
- e) What is image segmentation?

(5x2)

UNIT - I

- II. Explain sampling and quantization in digital image processing. Discuss their effects on image resolution and quality. (10)
- III. Explain Fourier Transform and its important properties used in image processing. (10)
- IV. Discuss JPEG compression technique with a neat block diagram. (10)

UNIT - II

- V. Describe opening and closing operations. Explain their applications in image processing. (10)
- VI. Explain Hough Transform for line detection with working principle. (10)
- VII. Explain decision-theoretic methods for object recognition with suitable example. (10)

x-x-x