



M 25894

Reg. No. :

Name :

VIII Semester B.Tech. Degree (Supplementary – Including Part Time)
Examination, October 2014
(2007 Admn. onwards)

PT 2K6/2K6 EC 805(B) : DIGITAL IMAGE PROCESSING

Time : 3 Hours

Max. Marks : 100

Instructions : Answer *all* questions in Part A.
Answer *one* question from *each* module in Part B.

PART – A

- I. a) Draw the block diagram of an image processing and analysis scheme. 5
- b) Define perspective projection. 5
- c) Differentiate between intensity and brightness. 5
- d) What are the different image enhancement techniques ? 5
- e) Explain mathematical model of a degraded image. 5
- f) Define image segmentation. 5
- g) Explain image compression. 5
- h) Describe Huffman coding. 5

(5×8=40)

PART – B

- II. a) Describe image digitization. 15
- OR
- b) Describe the transformation of energy during image formation process. 15

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- III. a) Explain histogram stretching. 15
OR
b) Describe minimum – mean square error restoration for designing filter. 15
- IV. a) Derive the expression for optimum threshold for gray level thresholding. 15
OR
b) Describe Region Growing Algorithm. 15
- V. a) Describe transform domain compression. 15
OR
b) Describe JPEG Encoding scheme. 15
- (15×4=60)**

PART - A

1. a) Draw the block diagram of an image processing and analysis scheme. 5
b) Define perspective projection. 5
c) Differentiate between intensity and brightness. 5
d) What are the different image enhancement techniques? 5
e) Explain mathematical model of a degraded image. 5
f) Define image segmentation. 5
g) Explain image compression. 5
h) Describe Huffman coding. 5

PART - B

- II. a) Describe image digitization. 15
OR
b) Describe the transformation of energy during image formation process. 15