

Code No: R05411103

**R05****Set No. 2**

**IV B.Tech I Semester Examinations, NOVEMBER 2010**  
**IMAGE PROCESSING AND PATTERN RECOGNITION**  
**Bio-Medical Engineering**

**Time: 3 hours****Max Marks: 80**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

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1. Explain Stochastic simulated annealing algorithm. [16]
2. Write short notes on:
  - (a) Training patterns
  - (b) Learning
  - (c) Bayes classifier. [5+6+5]
3. (a) Explain the transformation used to rotating a point in 3-D plane.  
(b) Explain about the basic relationships between pixels. [8+8]
4. Explain fundamental steps of digital image processing? What is the need for processing an image. [16]
5. Briefly explain minimum distance classifier. [16]
6. (a) Discuss the Fidelity criteria and error free encoding.  
(b) Explain the channel encoder and decoders. [8+8]
7. Explain sharpening frequency domain filters. [16]
8. Explain LMSE algorithm with a suitable example. [16]

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Code No: R05411103

**R05****Set No. 4**

**IV B.Tech I Semester Examinations, NOVEMBER 2010**  
**IMAGE PROCESSING AND PATTERN RECOGNITION**  
**Bio-Medical Engineering**

**Time: 3 hours****Max Marks: 80**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

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1. Explain fundamental steps of digital image processing? What is the need for processing an image. [16]
2. Explain sharpening frequency domain filters. [16]
3. Briefly explain minimum distance classifier. [16]
4. (a) Discuss the Fidelity criteria and error free encoding.  
(b) Explain the channel encoder and decoders. [8+8]
5. Write short notes on:  
(a) Training patterns  
(b) Learning  
(c) Bayes classifier. [5+6+5]
6. Explain LMSE algorithm with a suitable example. [16]
7. Explain Stochastic simulated annealing algorithm. [16]
8. (a) Explain the transformation used to rotating a point in 3-D plane.  
(b) Explain about the basic relationships between pixels. [8+8]

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Code No: R05411103

**R05****Set No. 1**

**IV B.Tech I Semester Examinations, NOVEMBER 2010**  
**IMAGE PROCESSING AND PATTERN RECOGNITION**  
**Bio-Medical Engineering**

**Time: 3 hours****Max Marks: 80**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

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1. Explain sharpening frequency domain filters. [16]
2. (a) Explain the transformation used to rotating a point in 3-D plane.  
(b) Explain about the basic relationships between pixels. [8+8]
3. Explain fundamental steps of digital image processing? What is the need for processing an image. [16]
4. Explain LMSE algorithm with a suitable example. [16]
5. Explain Stochastic simulated annealing algorithm. [16]
6. Write short notes on:
  - (a) Training patterns
  - (b) Learning
  - (c) Bayes classifier. [5+6+5]
7. (a) Discuss the Fidelity criteria and error free encoding.  
(b) Explain the channel encoder and decoders. [8+8]
8. Briefly explain minimum distance classifier. [16]

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Code No: R05411103

**R05****Set No. 3**

**IV B.Tech I Semester Examinations, NOVEMBER 2010**  
**IMAGE PROCESSING AND PATTERN RECOGNITION**  
**Bio-Medical Engineering**

**Time: 3 hours****Max Marks: 80**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

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1. Briefly explain minimum distance classifier. [16]
2. (a) Explain the transformation used to rotating a point in 3-D plane.  
(b) Explain about the basic relationships between pixels. [8+8]
3. Explain LMSE algorithm with a suitable example. [16]
4. (a) Discuss the Fidelity criteria and error free encoding.  
(b) Explain the channel encoder and decoders. [8+8]
5. Explain Stochastic simulated annealing algorithm. [16]
6. Explain sharpening frequency domain filters. [16]
7. Explain fundamental steps of digital image processing? What is the need for processing an image. [16]
8. Write short notes on:
  - (a) Training patterns
  - (b) Learning
  - (c) Bayes classifier. [5+6+5]

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