

Code: R7411211



## IV B.Tech I Semester (R07) Supplementary Examinations, May 2012 IMAGE PROCESSING (Information Technology)

Time: 3 hours Max Marks: 80

Answer any FIVE questions All questions carry equal marks

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- 1. (a) Discuss the image sampling and quantization.
  - (b) Explain relations between the pixels:
    - (i) Connectivity.

- (ii) Neighbors.
- 2. (a) Discuss image enhancement using histogram techniques.
  - (b) Discuss following spatial filtering techniques.
    - (i) Median filtering.
- (ii) High boost filtering.
- 3. (a) Discuss the algebraic approach of unconstrained restoration.
  - (b) Discuss the formulation of ID degradation model.
- 4. Discuss in detail the concept of pseudo color image processing.
- 5. (a) Discuss different types of image retundancies
  - (b) Discuss the lossy predictive cooling with the help of block diagram.
- 6. Discuss the concepts of diation and erosion with the help of examples.
- 7. (a) What is the need for segmentation?
  - (b) Discuss the region oriented segmentation.
- 8. Discuss the patterns and pattern classes in case of object recognition.

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