

Code No: R05420502

R05

Set No. 3

**IV B.Tech II Semester Regular/Supplementary Examinations, May 2010
IMAGE PROCESSING**

Computer Science And Engineering

Time: 3 hours

Max Marks: 80

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

1. (a) Explain about the logic operations involved in binary images?
(b) What is mutually exclusive and disjoint set? [8+8]
2. Explain in detail with block diagram the fundamental steps in digital Image processing and their importance. [16]
3. (a) Explain about Hamming channel encoder?
(b) Explain 1-d, 2-d compression standards? [8+8]
4. Explain in detail the working of following smoothing spatial filters & compare
a) Averaging filter b) Median filter. [116]
5. (a) Define and Explain about isolated point?
(b) Explain about line detection? [8+8]
6. Explain the following filters used in Image restoration.
a) Inverse filter
b) Wiener filter. [16]
7. (a) Define and Explain about Hyperplane?
(b) Explain about matching by correlation? [8+8]
8. (a) Derive the CMY transformations to generate the complement of a color image.
(b) Explain in detail about color image smoothing & sharpening. [16]
