

IV B.Tech I Semester(R07) Supplementary Examinations, May/June 2011
IMAGE PROCESSING
(Information Technology)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
questions carry equal marks

1. (a) What is non uniform sampling and how it is different from uniform sampling.
(b) List the applications of image processing.
2. Discuss following techniques for image enhancement.
 - (a) Image negatives
 - (b) Image subtraction
 - (c) Derivative filters
3. (a) Explain the need for image restoration.
(b) Explain about Wiener-filtering.
(c) State and prove periodicity property of 2D DFT.
4. Discuss in detail about color fundamentals.
5. (a) Explain about objective and subjective image Fidelity criterion.
(b) Discuss about image compression standards.
6. (a) What is the need for morphological image processing.
(b) Explain about Hit or Miss transform.
7. (a) Explain about region based segmentation.
(b) Discuss about edge formulation and its detection.
8. Explain about following structural methods of object recognition.
 - (a) Syntactic methods
 - (b) String matching.
