Code :R7410408

IV B.Tech I Semester(R07) Supplementary Examinations, May/June 2011 DIGITAL IMAGE PROCESSING (Electronics & Communication Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions All questions carry equal marks $\star \star \star \star$

- 1. (a) What is imaging geometry? Explain in detail.
 - (b) Give any four relationships between pixels.
- 2. (a) Define F.T. Explain FFT algorithms.
 - (b) Short notes on discrete cosine transform.
- 3. (a) What is meant by image enhancement by point processing?
 - (b) Write short notes on histogram equalization.
- 4. (a) Under what conditions does Butterworth low pass filters become on ideal low pass filter.
 - (b) Show that a high-pass filtered image in the frequency domain can be obtained by using the method of subtracting a low pass filtered image from the original.
- 5. Explain full colour image processing.
- 6. What is image restoration ? Explain the degradation model for continuous function in detail.
- 7. Write short note on:
 - (a) Thresholding.
 - (b) Segmentation techniques.
- 8. What is data redundancy? Explain various redundancies & their removal methods.
