

**2007-ANDHRA UNIVERSITY**  
**IV B.TECH II SEMESTER DEGREE EXAMINATION**  
**IMAGE PROCESSING (ELECTIVE-II)**  
**(COMPUTER SCIENCE AND ENGINEERING)**

TIME-3HOUR  
MARKS-70

**NOTE:SECTION A IS COMPULSORY.ATTEMPT ANY FOUR QUESTIONS FROM SECTION B.**

**SECTION A [5\*2=10 MARKS]**

1. a) Define connectivity.
- b) Define sampling.
- c) Define quantization.
- d) Define noise of an image
- e) Define Walsh transform.

**SECTION B [4\*15=60 MARKS]**

2. Give an Algorithm for FFT.
3. a) How do you Acquire an image Explain in detail.
- b) Define and explain image sliding and image stretching.
4. a) Define and explain lowpass filters in brief.
- b) Define and edge. Explain various edge enhancement filters.
5. a) Define prewitt filter.
- b) Explam in detail "Homomorphie filter".
6. a) Explain compression at the time of Image Transmission.
- b) Explain about standardization in image compression
7. a) Explain split and merge technique for segmentation.
- b) Define and explain thresholding.
- c) Explain segmentation by PIXEL based methods.
8. a) Define Erosion and Dilation.
- b) Explain how the morphological operations may be extended to gray scale images.
- c) Explain "Skeletanization" in detail.