

**Code No: C6302****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****M.Tech I Semester Examinations, March/April 2011****DIGITAL IMAGE PROCESSING****(IMAGE PROCESSING)****Time: 3hours****Max. Marks: 60****Answer any five questions  
All questions carry equal marks**

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1. (a) Discuss various methods of image acquisition, and also compare them.  
(b) Discuss the concept of image stretching with an example. [12]
- 2.(a) Write about spatial domain and frequency domain model for enhancement of an image.  
(b) What is the effect on image by applying high pass filtering? [12]
3. (a) Explain Histogram equalization with an Example.  
(b) Briefly write about Run length coding. [12]
4. Discuss in detail the WALSH transform with an example. [12]
5. Discuss the following morphological operations with suitable examples. [12]  
(a) Dilation      (b) Erosion  
(c) Opening      (d) Closing      (e) Pruning.
6. Discuss the characteristics of Segmentation. Discuss any two segmentation techniques. [12]
7. (a) Write short notes on Image compression standards.  
(b) Discuss about Huffman coding with a suitable example. [12]
8. What are the different color models used in image processing? Explain in detail. [12]

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