

Roll No.

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M.Tech.(IT) (2015 & Onwards)/(CSE Engg.) (2015 to 2017) (Sem.-1)

DIGITAL IMAGE PROCESSING

Subject Code : MTCS-105

M.Code : 72633

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

1.
 - a) What do you understand by image sliding and image stretching? Explain with example.
 - b) What do you understand by false color and pseudo color? How do they differ with each other?
2. What are the various steps in image processing? Explain with the help of an example.
3.
 - a) How do you acquire an image? What are the devices used in that? Explain with example.
 - b) Define Histogram of an image. Explain Histogram based operations.
4.
 - a) How many shades of gray are there in a color RGB system in which each RGB image is an 16 bit image?
 - b) What are the various color models? How RGB model can be transformed to Hue - saturation and Intensity model?
5. Write short notes on :
 - a) Dilation
 - b) Pattern matching
6. What is image enhancement? What are the various image enhancement techniques? Discuss with example.
7. What are the various high pass filters? Explain the application of each of them.
8.
 - a) What are the methods of Boundary representation in image processing? Explain with example.
 - b) How curve detection is done in image segmentation? Explain with example.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.