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School of Computing Science and Engineering

Bachelor of Technology in Computer Science and Engineering

Mid Term Examination - May 2024

Duration : 90 Minutes

Max Marks : 50

Sem VI - R1UC618T - Digital Image Processing

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Explain segmentation. K2 (2)
- 2) How will you represent digital image? K1 (3)
- 3) Explain the steps of digital image processing. K2 (4)
- 4) Write a short note on Image Compression models. K2 (6)
- 5) Read an Image and Convert it into gray scale Image by using Python or MATLAB. K3 (6)
- 6) Describe the basic elements of visual perception. K3 (9)
- 7) Write down the intensity range of gray scale image and Compare it with other types of images. K4 (8)

- 8) Compare and contrast the performance of watershed segmentation and graph-cut segmentation algorithms for segmenting medical images such as MRI scans. K4 (12)

OR

- Read an Image, then use Mean filter, Max filter, Median filter using python or MATLAB. K4 (12)