

BCA-7-03T: Digital Image Processing Lab

Total Marks: 50
External Marks: 35
Internal Marks: 15
Credits: 2
Pass Percentage: 40%

Course Name: Digital Image Processing Lab	
Course Code: BCA-7-03P	
Course Outcomes (COs)	
After the completion of this course, the students will be able to:	
CO 1	Understand the basic functionalities and user interfaces of these tools for performing various image processing tasks.
CO 2	Gain hands-on experience with techniques such as contrast stretching, histogram equalization, and spatial filtering for enhancing image quality
CO 3	Implement image segmentation algorithms to partition images into meaningful regions or objects.
CO 4	Implement image compression algorithms to reduce the size of digital images while preserving visual quality.
CO5	Gain hands-on experience to enhance image the quality of images using spatial filters

Detailed Contents:

Experimental work in Python Programming

S. No.	Name of Experiments
1	Image Printing Program Based on Half toning.
2	Reducing the Number of Intensity Levels in an Image.
3	Zooming and Shrinking Images by Pixel Replication.
4	Zooming and Shrinking Images by Bilinear Interpolation.
5	Apply Arithmetic Operations on Images.
6	Image Enhancement Using Intensity Transformations.
7	Image Enhancement using Histogram Equalization.
8	Image Enhancement using Spatial Filtering

9	Image Enhancement Using the Laplacian.
10	Implementation of Image Segmentation Algorithm
11	Implementation of Image Compression Algorithms