



Shri Vile Parle Kelavani Mandal's

DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING

(Autonomous College Affiliated to the University of Mumbai)

NAAC Accredited with 'A' Grade (CGPA : 3.18)



Department of Computer Science and Engineering (Data Science)

Term Test – II (AY - 2024-2025)

Class: TY	Semester: V
Course Name: Image Processing and Computer Vision - I	Course Code: DJS22DSC503
Total Marks: 15	Time: 45 min

Q. No.	Question	Max. Marks
Q1 (a)	Describe how the Canny Edge Detector algorithm can be applied to an image to detect edges. Include the steps involved and discuss how this approach contributes to better image analysis.	[05]
	OR	
Q1 (b)	Explain the Hough Transform and its fundamental concepts. Consider the edge pixels detected at coordinates (1,1) and (3,3).	[05]
Q2 (a)	Analyze the impact of different morphological operators used in image processing, such as dilation, erosion, opening, and closing. How do these operations impact binary images?	[05]
	OR	
Q2 (b)	Describe how different noise can be handled in image restoration. How can restoration algorithms be applied to reduce or eliminate these types of noise from an image.	[05]
Q3	Analyze the differences and similarities between optical flow and the motion field.	[05]