



PILLAI COLLEGE OF ENGINEERING, NEW PANVEL
(Autonomous) (Accredited 'A+' by NAAC)
END SEMESTER EXAMINATION
May 2023

SEM-VI**BRANCH: Electronics and Computer Science****Subject:- Image Processing and Machine Vision****Time: 02.00 Hours****Max. Marks: 60****Date: 02 /05 /2023****N.B 1. Q.1 is compulsory****Subject Code EC 310****2. Attempt any two from the remaining three questions****3. Each Question carry 20 marks.**

Q.1.	Attempt Any Four	Marks
a)	What do you understand by sampling and quantization w.r.t. digital image? How will you convert analog image to digital image?	5
b)	Explain the different Elements of Image Processing.	5
c)	Compare between contrast stretching and histogram equalization.	5
d)	How will you detect following in a digital Image-i) Point ii) Line & iii) Edge	5
e)	With suitable examples explain the following morphological Operations : i) Dilation ii) Erosion	5
Q.2.	Attempt All	
a)	List out the important properties of DFT(Any Four)	8
b)	Explain the various image enhancement techniques in spatial domain.	8
c)	Explain the different types of connectivity of pixels in Image.	4
Q.3.	Attempt All	
a)	Explain the segmentation based on similarity and discontinuity.	8
b)	Explain the 2-D Moments up to second Order including central Moments.	8
c)	What is degradation models in Image Restoration? Explain.	4
Q.4.	Attempt All	
a)	What is Support Vector Machine? Explain in detail.	8
b)	Write short note- GLCM	6
c)	Explain the different noise models.	6