M.E. Second Semester (Computer Science & Information Technology) (New - CGS)

13190: Performance Analysis for Imaging Systems: 2 RNME 2

P. Pages: 1



AU - 3438

6

	ages : 1 e : Thre	ee Hours	AU - 3438 Max. Marks : 80
	Notes	 Due credit will be given to neatness and adequate dimensions. Assume suitable data wherever necessary. Illustrate your answer necessary with the help of neat sketches. Use of pen Blue/Black ink/refill only for writing the answer book. 	
1.	a)	Explain different imaging system issues.	7
	b)	Draw the block diagram and explain imaging system components. OR	7
2.	a)	Explain Linear Shift - Invariant (LSI) imaging system.	7
	b)	Explain three - step imaging process.	7
3.	a)	Explain threshold vision of aided eye.	7
	b)	State and explain Image Quality Metric.	6
1 .		OR Explain Target Task Performance (TTP) metric.	13
5.	a)	State and explain differentiation & Integration property of Fourier transform.	7
	b)	Explain Dyadic & Discrete wavelet transform. OR	6
6.	a)	Explain Radically Symmetric Filter with a Power Window.	7
	b)	Explain Image Resampling Model.	6
7.	a)	Explain Error - energy reduction algorithm.	7
	b)	Explain P - Deblurring Filter along with it's properties. OR	7
3.	a)	Give belief overview of the super resolution reconstruction algorithm.	7
	b)	Explain CLEAN algorithm.	7
9.	a)	Explain in brief construct Enhancement method based on wavelet edges.	7
	b)	Explain experimental approach for image contrast enhancement. OR	6
10.		Explain different single - scale methods in brief.	13
11.	a)	What is Image Fusion? Explain important characteristics of Fusion Algorithm	ı. 7
	b)	State & explain the benefits of multiple Image modes. OR	6
12.	a)	Explain in brief Image Fusion Quality Metrics.	7

b)

Explain perceptual linearization tonc scale technique.