Code No: **R204105G** **R20** **Set No. 1**

IV B.Tech I Semester Regular Examinations, January – 2024

COMPUTER VISION

(PE-IV: Computer Science & Engineering, CSE-AIDS, AIDS and CSD)

Time: 3 hours **Max. Marks: 70**

Answer any FIVE Questions
ONE Question from Each unit
All Questions Carry Equal Marks

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UNIT - I

1	a)	Define image pyramids and discuss their use in multi-resolution image analysis.	[7]
	b)	Explain about the building blocks of geometric primitives.	[7]
		(OR)	
2	a)	Explain the terms chip size, fill factor and sensor noise in digital camera.	[7]
	b)	Write a short note on Fourier descriptors and region descriptors.	[7]

UNIT - II

3	a)	Explain any application showing edge editing and enhancement.	[7]
	b)	How to compute vanishing points in an image.	[7]
		(OR)	
4	a)	Describe about 2D alignment and 3D alignment.	[7]
	b)	Explain in detail about panoramic view of an image.	[7]

UNIT - III

5	a)	Elucidate about 8-point algorithm and 7- point algorithm.	[7]
	b)	Explain about Fourier based alignment of an image.	[7]
		(OR)	
6	a)	Describe layered motion framework.	[7]
	b)	Explain any application related to Layered motion.	[7]

UNIT - IV

7	a)	What is panography and explain it with an example.	[7]
	b)	Explain about Deghosting with an application.	[7]
		(OR)	
8	a)	Explain image stitching using an application	[7]
	b)	Explain the concept of Bundle adjustment.	[7]

UNIT - V

9	a)	Explain about shape from shading and shape from texturing in images.	[7]
	b)	Explain in detail about 3D scanning.	[7]
		(OR)	
10	a)	Describe 3D scanning using an application.	[7]
	b)	Explain in detail about volumetric representation of an image.	[7]

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