NAVRACHANA UNIVERSITY
a UGC recognized University

School: School of Engineering and Technology
Program/s: BCA
Year: 3rd **Semester:** 5th
Examination: End Semester Examination
Examination year: December - 2021

Course Code: CA314 **Course Name:** Computer Graphics & Image Processing
Date: 07/12/2021 **Total Marks:** 40
Time: 2:30 pm to 4:30 pm **Total Pages:** 1

Instructions:
➔ *Write each answer on a new page.*

			Marks	COs*	BTL#
Q.1		**Do as directed.**			
	[a]	Full form of LCD.	[1]	CO1	1
	[b]	Differentiate between Raster Scan Display and Random Scan Display. **OR** Differentiate between Bitmapped Fonts and Outline Fonts.	[2]	CO1 CO2	4 4
	[c]	Write a short note on working of CRT with proper diagram.	[7]	CO1	1,2
Q.2		**Do as directed.**			
	[a]	Define aspect ratio.	[1]	CO1	1
	[b]	Differentiate between Image Sampling and Image Quantization **OR** Differentiate between Image Smoothing and Image Sharpening	[2]	CO6 CO6	4 4
	[c]	Write a short note human visual system.	[7]	CO5	1,2
Q.3		**Attempt any two [2 X 5].**			
	[a]	Write a short note on Flat Panel Displays.	[5]	CO1	1,2
	[b]	Write a short note on Gray Level Transformations.	[5]	CO6	2,3
	[c]	Write a short note on Boundary fill algorithm with limitations.	[5]	CO3	2,3,4
Q.4		Write a short note on Geometric Transformations with matrix representation. **OR** Find the points of Line having endpoints (x1,y1) = (30,42) and (x2,y2) = (37,47) (Using Bresenham's algorithm).	[10]	CO4 CO4	1,2, 2,3,5

*************End of Question Paper*************