Department of Computer Science & Engineering
School of Engineering & Technology
Guru Ghasidas Vishwavidyalaya (Central University)

CT-1 EXAMINATIONS – January, 2022

Subject: Digital Image Processing

Duration: **1 Hour** Date: 28-01-2022 Max Marks: **15**

Note: Answer any Five Questions and all Questions Carries Equal Marks.

1) Write down the difference between High level and Low-level Image processing Operation?

2) A triangle is marked by the points (1,1), (5,5) and (10,10)

a) Apply translation of $\delta x = 3$ and $\delta y = 4$.

3) Find the Convolution of the following streams of data:

F =

7	3	3
2	2	2
2	2	1

I =

1	1
1	-1

4) Consider two-pixel p and q whose coordinate are (0,0) and (6,3). Calculate the De, D_4 and D_8 distance between the pixel p and q.

5) Apply DFT for the following matrices.

7	0
3	1

6) Perform histogram equalization on the following 8 X 8 image. The grey level distribution of the image is given below:

4	4	4	4	4
3	4	5	4	3
3	5	5	5	3
3	4	5	4	3
4	4	4	4	4