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

CLASS TEST-II, March 2022

Subject: Digital Image Processing Branch: Computer Science & Engineering

Time: 1 hrs. MM: 15

Note: Attempt all questions. All question carry equal marks.

1. Apply the following spatial filters to the given image f(x,y) and show the intermediate results :

$$f(x,y) = \begin{array}{c|cccc} 1 & 3 & 5 \\ 4 & 4 & 3 \\ \hline 5 & 2 & 2 \end{array}$$

- a) Low pass filter
- b) High pass filter

2. What are the different ways in which segmentation algorithms can be classified?

[CO-3, BTL- 1, Marks- 3]

3. What is Gaussian Filter? [CO-1, BTL- 2, Marks- 3]

4. Explain the different stages of Edge Detection. [CO-2, BTL- 2, Marks- 3]

5 Explain Global Thresholding Algorithm for image segmentation. [CO-1, BTL-3, Marks-3]
