

Enrolment No.

--	--	--	--	--	--	--	--	--	--

S₃ (PCA05E08) MCA

MCA 5th Semester Mid Term Examination-2023

Name of Subject: Digital Image Processing

Paper code: PCA05E08

Full Marks: 20 Marks

Time: 1 Hr

The figures in the margin indicate full marks for the questions

Part A –(4*1)=4 marks

1. What is quantization?
2. An image is 1200 pixels wide and 1200 pixels high. The image was scanned at 300 dpi. What is the physical size of the image?
3. What is digital halftone process?
4. What is salt and pepper noise?

Part B- 8 marks

5. State the differences between DICOM and GIF file format 2
6. How arithmetic mean filter differs from contra harmonic filter? 3
7. Briefly explain the different levels of image processing operations with a block diagram 3

Part C- 8 marks

8. Perform histogram equalization for the 8*8 image as shown in below Table. 4

Grey Levels	0	1	2	3	4	5	6	7
No. of pixels	8	2	10	10	16	10	2	6

9. Apply DFT to the following sequence and verify whether it works. 4

$X=\{1\ 2\ 8\ 9\}$
