



Class Test - 1

Subject Code: RCS-082

Year: Fourth

[Time: 60 minutes]

Even Semester 2020-21

Subject Name: Image Processing

Branch: Computer Science & Engineering

[Total Marks: 20]

CO-1 Describe fundamental concepts of digital image processing.

SECTION-A

Attempt any two questions.

(3×2=6)

1. Write down the dynamic range of an 8-bit gray scale image.
2. Write down coordinates of a 4x4 image. What will be the new coordinates of image obtained after applying down sampling by 2.
3. List down few application areas of digital image processing.
4. Calculate the Euclidean distance between P and Q for the matrix given in question 2 of section B.

SECTION-B

Attempt any two questions.

(7×2=14)

1. Describe elements of Digital Image Processing System.
2. Let $V=\{0,1\}$, Calculate D4 and D8 distance between P and Q.

3	1	2 P	1
	2	0	2
2			
1	2	1	1
1	0	1 Q	2

Repeat the same for $V = \{1,2\}$.

3. Describe all fundamental steps of Digital Image Processing.
4. Explain illumination and reflectance. Define weber ratio.