



- b) Draw a histogram of given matrix. Find out its normalized value. 07

24	28	30	20	1
10	10	12	0	0
42	39	49	44	33
10	10	12	5	5
20	15	15	10	10

- c) Define point processing and mask processing. 03

**Q-5** **Attempt all questions** (14)

- a) What is image smoothing? Discuss smoothing linear filters in detail. 07  
b) Discuss steps of image filtering in frequency domain. Discuss 2D DFT with help of equations. 07

**Q-6** **Attempt all questions** (14)

- a) Explain image degradation and restoration model. 07  
b) Explain RGB color model. 07

**Q-7** **Attempt all questions** (14)

- a) Explain dilation and erosion morphological operations. 07  
b) What is data redundancy? Explain coding redundancy. 07

**Q-8** **Attempt all questions** (14)

- a) Explain thinning and thickening operations on the digital image. 07  
b) Discuss about point detection and line detection operations on the digital image. 07

