BT–7/D-22   47305

DIGITAL IMAGE PROCESSING

Paper–ECP 17A

Time Allowed : 3 Hours]   [Maximum Marks : 75

Note : Attempt **five** questions in all, selecting at least **one** question from each Unit. All questions carry equal marks.

Unit–I

1. (a) Briefly Explain Image Processing applications.

   (b) Write short note on fundamental steps in Digital Image Processing.   15

2. Write short notes on the following :   15

   (a) Image sampling and Quantization.

   (b) Relationship between pixels.

   (c) Color fundamentals.

Unit–II

3. Write short notes on the following :   15

   (a) Intensity transformation in image processing.

   (b) Histogram Processing.

   (c) Spatial domain filtering.

4. Explain smoothing and sharpening frequency domain filters used in image processing.　15

Unit–III

5. What do you understand by Image compression. Explain any two-error free image compression coding techniques.　15

6. Write short notes on the following :　15

    (a) Erosion and Dilation.

    (b) Image Segmentation.

Unit–IV

7. Write short note on Video Frame Classifications.　15

8. Write short note on Patterns and Pattern Classes.　15