

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai — 600 044.

M.Sc. END SEMESTER EXAMINATION APRIL/NOV - 2021

SEMESTER - II

20PCST2005 - Digital Image Processing

Total Duration : 3 Hrs	Total Marks : 75
MCQ : 30 Mins	MCQ : 15
Descriptive : 2 Hrs.30 Mins	Descriptive : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Discuss about Color image processing and its models in detail.
2. What are the various element of Image processing System.
3. Explain Spatial Filtering in detail.
4. Discuss about the need for transformation and Explain Fourier transformation and Discrete Cosine Transformation.
5. What is meant by Image Restoration?
6. Explain how the image compression techniques can be designed to reduce or eliminate data redundancy.
7. Differentiate Lossless and Lossy coding image compression techniques.
8. Explain Edge detection in detail.

Section C

Part A

Answer any **TWO** questions ($2 \times 10 = 20$ Marks)

9. Describe Digital Image Transformation. Explain any two types on Digital Image Transformation in detail.
10. Explain about image restoration and degradation model.
11. Define Image Segmentation and illustrate various segmentation techniques with appropriate examples.
12. Explain huffman coding and Runlength coding with appropriate examples.

Part B

Compulsory question ($1 \times 10 = 10$ Marks)

13. Discuss about various Lossless and lossy Coding techniques in detail.