

22P451

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Name:

Reg.No:

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2024

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC19P CSS4 E04A - DIGITAL IMAGE PROCESSING

(Computer Science)

(2019 Admission onwards)

Time : 3 Hours

Maximum : 30 Weightage

Part-A

Answer any *four* questions. Each question carries 2 weightage.

1. Explain Brightness,adaptation and Discrimination.
2. Discuss histogram matching.
3. Discuss Unsharp Masking and Highboost Filtering.
4. Explain edge detection.
5. Discuss MPP Algorithm.
6. Discuss arithmetic coding.
7. Explain any two image compression standards.

(4 × 2 = 8 Weightage)

Part-B

Answer any *four* questions. Each question carries 3 weightage.

8. Explain distance measures.
9. Explain Walsh transformation.
10. Explain spatial correlation and convolution.
11. Describe correspondence between filtering in spatial and frequency domains.
12. Illustrate noise models.
13. Conclude constrained least mean square filtering.
14. Discuss run length coding.

(4 × 3 = 12 Weightage)

Part-C

Answer any *two* questions. Each question carries 5 weightage.

15. Illustrate fundamental steps in image processing.
16. Discuss DFT and DCT.
17. Describe sharpening in frequency domain.
18. Describe fundamental concepts of image compression.

(2 × 5 = 10 Weightage)
