



QP CODE: 25047405



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2025

Third Semester

M Sc COMPUTER SCIENCE

Core Course - CA010301 - DIGITAL IMAGE PROCESSING

2019 ADMISSION ONWARDS

D6D413FC

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. What is image segmentation?
2. What you mean by image sensing?
3. Name the different types of gray level transformation used for image enhancement.
4. Write the application of sharpening filters.
5. How image enhancement is done in frequency domain?
6. What is Homomorphic Filtering?
7. What is the purpose of image restoration?
8. What is filtering of an image?
9. Describe variable thresholding.
10. Explain the concept of Region Splitting.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. What is image processing system?
12. What is a Spatial domain? Explain the Spatial domain process.
13. Explain image arithmetic with example.
14. Compare ideal low -pass and ideal high-pass filter.
15. What are the types of noise models?





16. What is Image compression? What are the two types of image compression?
17. Explain the classification of edge.
18. Describe Watershed Transform.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Explain the Histogram Processing in detail.
20. Explain Fourier transformation and its inverse.
21. Explain MPEG image compression in detail.
22. Explain any edge detection method.

(2×5=10 weightage)

