

Exam. Code : 208602

Subject Code: 8393

M.Sc. (Information Technology) Semester-II

IMAGE PROCESSING

Paper-MIT-203

Time Allowed—3 Hours]

[Maximum Marks—100

Note :— Attempt any **FIVE** questions out of **EIGHT**. All questions carry **20** marks each.

1. What are the various areas of Image Processing ? Explain the design methodology for image processing.
2. Compare and analyze various algorithms for edge detection. What is the affect of different kind of noise on these algorithms ?
3. What is the significance of neighboring pixels ? What is the objective of Sampling and Quantization ? How do these steps affect the quality of an image ?
4. Write short notes on :
 - (a) Relation Description for Boundary
 - (b) Global Thresholding.

5. What are the various types of adaptive filters ? What is the difference between low pass filtering and high pass filtering techniques ?
6. What do you mean by Image Transformation ? Explain Walsh and Hadamard transformation in detail.
7. Discuss in detail the different scene matching and detection methods.
8. What are different Image Observation Models ? How the different filter methods effect these models ?