Mid-West University
Examinations Management Office
End Semester Examinations 2081

Bachelor level/ B. Sc. CSIT/ 8th Semester

Full Marks: 60

Time: 3 hours

Pass Marks: 30

Subject: Image processing (COM481)

Candidates are required to give their answer in their own words as far as Practicable. The figures in the margin indicate full marks.

Group A

Very short answer questions. [8x2 = 16]

1. Define negative image.
2. What is pattern?
3. What is bit plane slicing?
4. Define classification.
5. Define segmentation.
6. Write the advantage of region split and merge.
7. List out issues in evaluating classification.
8. Application of image processing.

Group B

Short answer questions (attempt any five). [5x4 = 20]

9 . What is image? Explain the representation of digital image representation.

10. Why use fourier transform is useful? Explain.

11. What do you mean by contrast stretching? Explain.

12. Explain run length coding with example.

13. What do you mean by syntactic pattern recognition? Explain.

14. Explain the different approaches of image segmentation.

Group C

Long Answer Question (Attempt any three). [3x8 = 24]

15. Explain the fundamental steps of digital image processing with block diagram.

16. What is histogram equalization? suppose that a message contains alphabet frequencies as given below and find the Huffman code for each alphabet.

Symbol	Frequency
A	45
B	13
C	12
D	16
E	9
F	5

17. Define pattern recognition? Explain the pattern recognition system.

18. Explain the types of gray level discontinuities with example.

THE END