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Roll No.

TMC-304

M. C. A. (THIRD SEMESTER)
MID SEMESTER EXAMINATION, 2022
ELECTIVE IMAGE PROCESSING AND
COMPUTER VISION

Time : 1½ Hours

Maximum Marks : 50

Note : -(i) Answer all the questions by choosing
any *one* of the sub-questions.

(ii) Each question carries 10 marks.

1. (a) What do you mean by a digital image ?
Why do you want to digitize an image ?
10 Marks (CO1)

OR

- (b) Briefly explain the fundamental steps in
digital image processing with a neat
diagram.
10 Marks (CO1)

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2. (a) Explain the technique of convolution for reconstructing the signal. 10 Marks (CO1)

OR

- (b) Explain sampling and quantization process in detail. 10 Marks (CO1)

3. (a) What do you mean by Spatial filtering ? Differentiate between spatial domain and frequency domain enhancement.

10 Marks (CO2)

OR

- (b) Explain Logarithmic and Power law image enhancement techniques in detail.

10 Marks (CO2)

4. (a) Explain contrast stretching in detail.

10 Marks (CO2)

OR

- (b) What do you mean by bit slicing ? Explain with a suitable example. 10 Marks (CO2)

(3)

5. (a) What is an image histogram ? How does histogram help in image enhancement ?

10 Marks (CO2)

OR

- (b) What do you understand by histogram equalization ? 10 Marks (CO2)

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