

Total No. of Questions – [02]

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G.R. No.

P118 - 141(T2)

OCTOBER 2018 / IN - SEM (T2)

F. Y. M. TECH. (Signal Processing) (SEMESTER - I)

Image and Video Processing (ETPA11181)

(2018 PATTERN)

Time: [30 Mins]

[Max. Marks: 10]

(*) Instructions to candidates:

- 1) Answer Q.1 OR Q.2
- 2) Figures to the right indicate full marks.
- 3) Use of scientific calculator is allowed
- 4) Use suitable data where ever required

Q.1) a) What is data redundancy? Explain following redundancies (6)
used in image compression

- 1) Coding Redundancy
- 2) Interpixel redundancy
- 3) Psycho visual Redundancy

b) Explain how the Laplacian mask is designed? Comment on (4)
the resultant image after applying Laplacian?

OR

Q.2) a) Explain procedure of image filtering in frequency domain? (6)
Compare the performance of ideal, Butterworth and
Gaussian low pass.

b) What is Mean Square Error (MSE) and Peak Signal to Noise (4)
ratio (PSNR). Explain their significance in image quality
assessment.