

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
MSc DEGREE EXAMINATION DECEMBER 2018
(Ninth Semester)

Branch-SOFTWARE SYSTEMS
(Five year integrated)

CORE ELECTIVE - HI - DIGITAL IMAGE PROCESSING

Time: Three Hours

Maximum: 75 Marks

SECTION -A (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

- 1 a Explain about imaging in the visible and infrared bands.
OR
b Illustrate the components of an image processing system.
- 2 a Enumerate the representation of digital images.
OR
b Discuss histogram equalization in detail.
- 3 a Explain some importance noise probability density functions.
OR
b Write a short note on : Mean Filters.
- 4 a Elucidate about color slicing in detail.
OR
b Discuss about the Haar Transform.
- 5 a Describe about bit-plane coding.
OR
b Discuss about wavelet coding.

SECTION -B (45 Marks)

Answer any THREE questions

ALL questions carry EQUAL Marks (3 x 15 = 45)

- 6 Explain about fundamental steps in image processing.
- 7 Discuss briefly about smoothing spatial filters.
- 8 Explain the following :
 - (i) Ideal Low Pass Filter (7)
 - (ii) Gaussian Low Pass Filter (8)
- 9 Enumerate about pseudo color image processing.
- 10 Summarize about edge detection.