PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MCA DEGREE EXAMINATION DECEMBER 2018
(Fifth Semester)

Branch - COMPUTER APPLICATIONS

<u>CORE ELECRIVE-IV : DIGITAL IMAGE PROCESSING</u>

Time: Three Hours   Maximum: 75 Marks

<u>SECTION -A (30 Marks)</u>
Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 x 6 = 30)

1   a What are the components of an Image Processing System? Explain.
OR
   b Explain about sampling.

2   a Explain the basic gray level transformations.
OR
   b Write short notes on Butter worth low pass filter.

3   a Discuss about notch filter in short.
OR
   b Write a note on color slicing.

4   a Explain about discrete wavelet transformation.
OR
   b Discuss about lossy compression.

5   a With suitable example explain about erosion.
OR
   b Write a note on Edge detection.

<u>SECTION -B (45 Marks)</u>
Answer any **THREE** questions
ALL questions carry **EQUAL** Marks (3 x 1 5 = 45)

6   Explain the elements of visual perception.

7   Write in detail about Fourier transform.

8   Discuss in detail about color models.

9   Explain error free compression.

10   With suitable example explain any three basic morphological algorithms.

Z-Z-Z   END