

00460

**M.Sc. (MATHEMATICS WITH APPLICATIONS
IN COMPUTER SCIENCE)
M.Sc. (MACS)**

Term-End Practical Examination

June, 2016

**MMTE-003 (P) : PATTERN RECOGNITION AND
IMAGE PROCESSING**

Time : 1½ hours

Maximum Marks : 40

*Note : This question paper has two questions worth 30 marks.
Remaining 10 marks are for viva-voce. Sci-lab is to be
used.*

1. Load an image in Sci-lab. Choose a blurring function to blur this image and add noise to the blurred image. Now try to restore this image using
(a) Wiener filter
(b) Median filter
Comment on the result. 20

2. Load an image in Sci-lab. Find its discrete cosine transform. Construct the amount of compression achieved when the image is reconstructed with 50% coefficients only. 10