

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

M.Sc. (MACS)

Term-End Practical Examination

00381

June, 2014

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

Time : $1\frac{1}{2}$ hours

Maximum Marks : 40

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

1. Load an image of size 512×512 and carry out edge detection in both directions (Horizontal and Vertical) using

(i) Sobel operator.

(ii) Roberts operator.

Do not use inbuilt commands. Use the corresponding masks and then carry out edge detection.

15

2. Restore the above image using

(i) Wiener filter.

(ii) Median filter.

15
