MMTE-003(P)

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

M.Sc. (MACS)

00130

Term-End Practical Examination

December, 2016

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

Time : 1½ hours

Maximum Marks : 40

Note : (i) *This question paper has two questions worth 30 marks.*

(ii) *Remaining 10 marks are for viva-voce.*

(iii) *Sci-lab is to be used.*

1. Load an image in Sci-lab. Carry out edge detection in both directions using

   (a) Sobel operator,

   (b) Roberts operator.

   Do not use in-built commands. Use the corresponding mask and then carry out edge detection. **15**

2. Load an image in Sci-lab in grey shades with maximum grey value 255. Change the number of grey levels to 64, 16, 8, 4, 2 to display the same image. Comment on the observation. **15**

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