	COURSE: IMAGE PROCESSING		MARKS:	
Universiti Malaysia PAHANG Engineering • Technology • Creativity	TOPIC: Image Segmentation	CODE: BCM2063		/10
	Lab Exercise	NO: 5	DURATION: 90 minutes	

QUESTION 1 [5 Marks]

Instruction:

(a) Open "Lena.tiff", read the file into f.

(b) Write a new function to detect image edge using Sobel approximation to the derivatives (without build-in-function).

(c) Write a new function to detect image edge using Prewit approximation to the derivatives (without build-in-function).

(d) Display the two image edges obtained from Sobel and Prewit techniques for comparison.

(e) Inspect and analyse the results in terms of edge image.

QUESTION 2 [5 Marks]

Instruction:

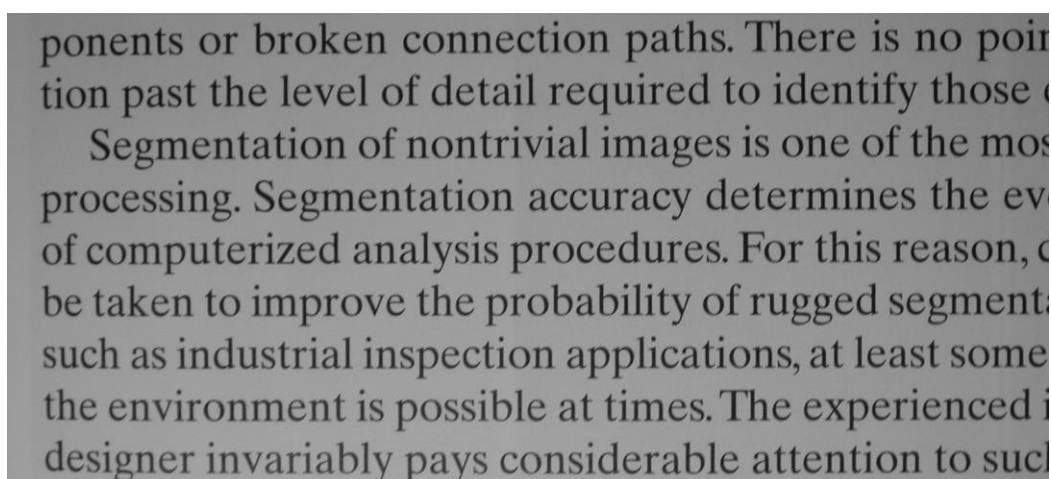**(a)** Open "Text image" as shown in Figure 1, read the file into f.

Figure 1. Text image.

(b) Split text and background image using global threshold.

(c) Display and analyse the results obtained from global threshold technique.