



Course Title:	Digital Image Processing	Date:	16/04/2012
Course No:	0750474	Time Allowed:	10 minutes
Lecturer:	Dr. Qadri Hamarsheh	No. Of Pages:	1

**Information for candidates**

1. This Quiz paper contains 1 question totaling 5 marks

**Advices to candidates**

1. You should attempt all sub questions.
2. You should write your answers clearly.

**Question 1****(5 marks)**

Write a matlab function called "**ImageAdjust**" that accepts an input image and returns an enhancement image using the following linear level adjustment formula:

$$P_{\text{adjus}}(m,n) = \text{Bottom} + (P(m,n) - L) / (H - L) * (\text{Top} - \text{Bottom})$$

Where

<b>P (m,n)</b>	original image pixel
<b>P<sub>adjus</sub> (m,n)</b>	desired image pixel
<b>H</b>	maximum pixel level in the original image
<b>L</b>	minimum pixel level in the original image
<b>Top</b>	maximum pixel level in the image desired
<b>Bottom</b>	minimum pixel level in the desired image

- Check the class of the input image in your code, to determine the correct values for **Bottom** and **Top**.
- Use low level processing.
- The output image must be in **uint8** class.

**GOOD LUCK**