

Menoufiya University
Faculty of Engineering
Shebin El-Kom



Academic Year: 2013-2014

Department: Civil Engineering
Subject/Code: Digital Image Processing
Time Allowed: 3 hours
Date: 13 / 1 / 2014

Answer all the following Questions [100 Marks]

Question (1)

Marks

[25]

- (a) Define digital image processing?
- (b) What are the applications of image processing?
- (c) Talk about the elements of image processing systems?

Question (2)

[25]

- (a) What are the basics of color image processing?
- (b) What are the used terms to define color light?
- (c) What are the fundamental steps in image processing?

Question (3)

[25]

- (a) What are the two basic steps of image perception?
- (b) What are the different digital image processing algorithms?
- (c) Define the Following:
 - Image Rectification.
 - Registration.
 - Kappa Coefficient.
 - Image Enhancement Techniques.

Question (4)

[25]

- (d) What is the meaning of Ground Control Points (GCP)?
- (e) What are the basic steps involved in the typical supervised classification procedure?
- (f) What are the typical criteria need to be considered to select the digital image file format?

Best Wishes: Dr/ Mohamed Ismail مع أطيب التمنيات بالتوفيق