Menoufiya University

Faculty of Engineering

Shebin El-Kom

Academic Year: 2013-2014



Department: Civil Engineering

Subject/Code: Digital Maps

Time Allowed: 3 hours

Date:

12 / 1 / 2014

## Answer all the following Questions [100 Marks]

<u>Marks</u>

Question (1)

[25]

- (a) Define the map and what is Cartography science?
- (b) What is the difference between computer mapping and Geographic Information Systems?

Question (2)

[25]

- (a) State the historical development of Maps?
- (b) Classify the maps according to : scales types -?
- (c) The basics of any map consist of five components, explain them?
- (d) Define briefly: Surveying marks Linear marks Engineering marks

Question (3)

[25]

A boat traveling from place B which its latitude  $46^{\circ}$   $30^{\circ}$  S and its longitude  $02^{\circ}$   $38^{\circ}$  E to place C which its latitude  $39^{\circ}$   $42^{\circ}$  S and its longitude  $16^{\circ}$   $48^{\circ}$  W. Find the distance between the two places "using two different methods" (R = 6376 km)?

Question (4)

[25]

- (a) What are the uses of photogrammetry photos?
- (b) Explain the main steps of digital photogrammetry?

مع أطيب التمنيات بالتوفيق ....... Best Wishes: Dr/Mohamed Ismail