Menoufiya University Faculty of Engineering Shebin El-Kom Academic Year: 2013 - 2014



Department: Civil Subject/Code: GIS

Time Allowed: 3 hours

Date:

22 / 1 /2014

Answer all the following Questions [100 Marks]

<u>Marks</u>

Question (1)

[25]

- (a) List three international environmental issues that could be addressed using GIS.
- (b) What does the acronym AM/FM mean? Is it synonymous with GIS?

*Question (2)* [25]

- (a) CAD is not GIS, but why is the distinction less clear in recent years?
- (b) Layers (or levels) are a fundamental means of organizing geographic data in almost all GIS, why?

*Question (3)* [25]

- (a) List four trends in the GIS technology.
- (b) Paper and digital spatial s are sometimes referred to as "dumb spatial s". Why they and what are would make them "intelligent"?

<u>Question (4)</u> [25]

- (a) Describe the differences between raster and vector based GIS?
- (b) Explain the difference between attribute and spatial data, give examples?

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