

Menofia University
 Faculty of Engineering, Shebin El-Kom
 Civil Engineering Department
 Second Semester Exam, 2014-2015
 Date of Exam: 10 / 1 / 2015



Subject : Geometric Geodesy
 Code: CVE535
 Year : Public Works Diploma course
 Time Allowed : Three hours
 Total Marks : 100 marks

Try all Questions (Use clear sketches)

[Marks]

Question (1)

[25]

Compare:

- the two-dimensional and three-dimensional Cartesian coordinate systems,
- the right-handed and left-handed 3D-coordinate systems,
- the horizontal datums and vertical datums.

Question (2)

[25]

Expalin the mathematical relation-ship between the 3D- Cartesian coordinates and:

- the spherical coordinates,
- the ellipsoidal coordinates.

Question (3)

[25]

Explain:

- the geodetic reference systems,
- some common map projection methods,
- the difference between the 3D- Cartesian coordinates and the map projected coordinates.

Question (4)

[25]

Discuss:

- the transformation between different 2D-coordinate systems,
- the seven-parameter transformation between different 3D-coordinate systems.

With best wishes

This exam measures the following ILOs														
Question Number	Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4
skills	dk-1-1	dk-1-2	dk-1-1	dk-1-2		di-2-1	di-2-1	di-2-1	di-2-1		dp-1-1	dp-1-1	dp-1-1	dp-1-1
	Knowledge & Understanding Skills					Intellectual Skills					Professional Skills			