



TANTA UNIVERSITY
FACULTY OF SCIENCE
DEPARTMENT OF GEOLOGY

EXAMINATION OF SECOND LEVEL GEOPHYSICS STUDENTS

COURSE TITLE:	SEISMIC METHODS (1)		COURSE CODE: GP2202
DATE:	17 JUNE, 2017	TERM: SECOND	TOTAL ASSESSMENT MARKS: 150
			TIME ALLOWED: 2 HOURS

Answer of the following questions (illustrate your answers with clear drawings):

Question (1): (30 Marks)

Explain the time-distance curve in case of refraction methods in two horizontal layers.

Question (2): (30 Marks)

Write short note on:-

- The hidden and blind layer problems.
- 2D and 3D shooting.
- Types of seismic waves.
- Lead time.

Question (3): (30 Marks)

- Compare between the advantages and disadvantages of seismic methods.
- Write shortly on the seismic data acquisition in land.

Question (4): (30 Marks)

Discuss the following:-

- Types of shooting operation.
- Huygens' Principle.
- Delay time.
- Shear Modulus.


Question (5): (30 Marks)

In case of refraction methods

- How to determine the dip angle and the vertical thicknesses of inclined beds.
- Mention the different ways for determines the depth in two horizontal layers.

EXAMINERS	PROF. MOHAMED ATAF NWEAR	DR. ALI SOLIMAN ALI
	DR. MOATAZ KHAIRY BARAKAT	DR. KHALED ABD ELLAH

Q. 2, 4, 5, 6, 7, 8, 9, 10

	TANTA UNIVERSITY FACULTY OF SCIENCE DEPARTMENT OF GEOLOGY			
	EXAMINATION FOR SECOND YEAR STUDENTS OF GEOLOGY			
	COURSE TITLE	IGNEOUS PETROLOGY		COURSE CODE:2204
DATE:	17 June, 2017	Summer course	TOTAL ASSESSMENT MARKS :100	TIME ALLOWED:2 HOURS

Answer the following questions:

1-Discriminate between

- b- Constituents of magma and chemical classification of magma----- (12 marks)
- c- Fractional crystallization and equilibrium melting------(6 marks)
- d- Equilibrium and fractional crystallization of basaltic magma------(10 marks)
- e- -Crystal-liquid differentiation of magma and magmatic assimilation------(16 marks)
- f- Mafic and felsic minerals of igneous rocks------(6 marks)

2-Write short notes on the following illustrating your answer with diagrams whenever is possible:


- a- Equigranular textures ------(15 marks)
- b- Ophitic and subophitic textures ------(5 marks)
- c- IUGS Classification for volcanic rocks (using Q-A-P triangle)----- -(15 marks)
- d- IUGS classification of ultramafic rocks----- -(15 marks)

Best wishes

Examiners:

Prof. Gaafar El Bahariya
Dr. Ismail Thabet

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	TANTA UNIVERSITY FACULTY OF SCIENCE DEPARTMENT OF GEOLOGY			
	EXAMINATION FOR LEVEL TWO STUDENTS (CHEMISTRY- GEOLOGY)			
	COURSE TITLE	IGNEOUS PETROLOGY (1)		COURSE CODE:GE2204
DATE:	MAY 2017	SEMESTER: TWO	TOTAL ASSESSMENT MARKS :100	TIME ALLOWED:120 min

Part 1 (50 marks)

1- Put \checkmark or \times marks and correct the wrong ones: - (25 marks)

- (a) Quartz formed at early stage of magmatic crystallization at high temperature.
- (b) Flourine, chlorine, water found at high temperature in early stage of crystallization and concentrated in dunite and perdotite.
- (c) Olivine and quartz constitute the essential minerals in Harzburgite.
- (d) Magma mixing takes place between magma and country rocks to give xenoliths.
- (e) Alkali pyroxenes as aegirine occur in intermediate rocks whereas the calcic pyroxenes as augite found in monzogranites.
- (f) Plutonic rocks have anhedral crystal, small grain size and amorphous groundmass.
- (g) Dunite composed mainly of alkali feldspar and olivine
- (h) The essential minerals in syenite are mainly quartz, albite and mica
- (i) Felsic magma are low viscosity, rich in silica and occur as low elevation mountains in the field
- (j) Calcic plagioclase crystallized at intermediate pressure and temperature in late stage of crystallization with microcline and orthoclase.

2- Discuss the magmatic crystallization and formation of different varieties of igneous rocks based on Bowen's reaction series. (15 marks)

3- Discuss the magmatic assimilation between basic magma and limestone, basic magma and sandstone, give some examples. (10 marks)

انظر خلفه

