#### TANTA UNIVERSITY **FACULTY OF SCIENCE** DEPARTMENT OF GEOLOGY

EXAMINATION FOR SOPHOMORES STUDENTS OF SPECIAL GEOLOGY AND GEOPHYSICS

**COURSE CODE: GE2208** LITHOSTRATIGRAPHY COURSE TITLE: TOTAL ASSESSMENT MARKS: 100 TIME ALLOWED: 2 HOURS TERM: SECOND 10 JUNE, 2015 DATE:

#### Answer the following questions.

	(0.0 1.)
I- Complete the following sentences:	(20 marks)
1- Lithostratigraphy is	
2- Flow is	
3- Formation is	
4- Lithostratigraphic classification is	
5- Bed is	
II- Discuss in details with drawing the lithostratigraphic units of Miocene	sediments in
Nile Delta.	(20 marks)
III- Compare between the following with drawing:	(30 marks)
1	(50 marks)
a- Geological cross section and stratigraphic cross section.	
b- Structure contour map and isopach map.	
c- Moghra Formation and Samalut Formation.	
IV- Write notes about the followings with drawing if possible:	(30 marks)

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- a- Stratotype and type localities with examples from Egypt.
- b- Criteria used for lithostratigraphic correlation.
- c- Special aspects of igneous and metamorphic rocks.

EXAMINERS	PROF. A. A. ZALAT	PROF. H M KHALIL	WITH BEST REGARDS
	DR. M.S. FATHY		



DATE:

# TANTA UNIVERSITY FACULTY OF SCIENCE DEPARTMENT OF GEOLOGY

EXAMINATION FOR SOPHOMORES (SECOND LEVEL) STUDENTS OF SPECIAL GEOLOGY

COURSE TITLE: Rock forming minerals COURSE CODE: GE2202
6 JUNE, 2015 TERM: SECOND TOTAL ASSESSMENT MARKS: 100 TIME ALLOWED: 2 HOURS

## Write short notes on the followings:-

1- SiO <sub>2</sub> - MgO phase diagram.	(12 marks)
2- The alkali amphibole minerals.	(12 marks)
3- The classification of biotite.	(13 marks)
4- The varieties of garnet group and the characteristic features for each.	(13 marks)
5- The leucite – silica phase diagram.	(12 marks)
6- The classification of orthopyroxene . State the optical differences between	een
any two of them.	(13 marks)
7- The stability of silica.	(12 marks)
8- Epidote mineral group and the characteristic optical properties for each	h. (13 marks)
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Examiners	Prof. Samir Mohammed Aly	Prof. Ibrahim Abdel-Nagy	
	Prof. Hassan Z. Haraz	Prof. Gaafer El-Baharya	

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DATE:

#### TANTA UNIVERSITY

#### FACULTY OF SCIENCE

#### DEPARTMENT OF GEOLOGY

EXAMINATION FOR SOPHOMORES( LEVEL TWO) STUDENTS (SPECIAL GEOLOGY)

COURSE TITLE IGNEOUS PETROLOGY(1) COURSE CODE:GE2204

JUNE 2015 SEMESTER TWO TOTAL ASSESSMENT MARKS:100 TIME ALLOWED:2 HOURS

#### Answer the following questions:

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Best wishes

d- Nomenclature of ultramafic rocks composed of olivine, orthopyroxene

and pyroxene----(15 marks)

and clinopyroxene----(15 marks)

Examiners: Prof. Abd Elsalam Abu El Ela Prof. Gaafar El Bahariya



# TANTA UNIVERSITY FACULTY OF SCIENCE DEPARTMENT OF GEOLOGY

#### **EXAMINATION FOR SOPHOMORES STUDENTS**

OF

#### SPECIAL GEOLOGY AND CHEMICAL-GEOLOGY

May 2000/2007 FV-C+XC-1-to and colours are seen or specimens	COURSE TITLE:	APPLIED MINERALOGY		COURSE CODE: GE2214
DATE:3 /6/ 2015	JUNE, 2015	TERM: SECOND	TOTAL ASSESSMENT MARKS: 100	TIME ALLOWED: 2 HOURS

### Write brief on the Following:-

1) Advanced ceramics

(10 marks)

2) Cement minerals and Different types of Portland Cements

(20 marks)

3) Common types of glass

(20 marks)

4) Different types of:

(20 marks)

a) Clay Products

b) Refractory Products

5) How to obtain:

(30 marks)

- a) Soda Ash
- b) Zirconia from zircon
- c) Titania

Prof. Dr. Samir M. Ali

Prof. Dr. Hassan Z. Harraz



# TANTA UNIVERSITY FACULTY OF SCIENCE DEPARTMENT OF GEOLOGY

#### **EXAMINATION FOR SOPHOMORES STUDENTS**

OF

#### SPECIAL GEOLOGY AND CHEMICAL-GEOLOGY

DATE:3 /6/ 2015 JUNE, 2015 TERM: SECOND TOTAL ASSESSMENT MARKS: 100 TIME ALLOWED: 2 HOURS

#### Write brief on the Following:-

1) Advanced ceramics

(10 marks)

2) Cement minerals and Different types of Portland Cements

(20 marks)

3) Common types of glass

(20 marks)

4) Different types of:

(20 marks)

- a) Clay Products
- b) Refractory Products

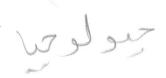
5) How to obtain:

(30 marks)

- a) Soda Ash
- b) Zirconia from zircon
- c) Titania

Prof. Dr. Samir M. Ali

Prof. Dr. Hassan Z. Harraz



	TANTA UNIVERSITY FACULTY OF SCIENCE DEPARTMENT OF GEOLOGY  EXAMINATION FOR (LEVEL 2) SPECIAL GEOLOGY			DGY
1969	COURSE TITLE:	Macropaleontolo		CODE: GE 2212
DATE:	JUNE, 2015	SEMESTER: 2	TOTAL MARKS:100	TIME ALLOWED: 2 HOURS

### Answer the following questions (Illustrate your answer with drawing):

Question 1:

a- How the organism become a Fossil and what are the conditions that lead to

a- How the organism become a Fossil and what are the conditions that lead to fossilization?

b- Explain dissolution/replacement as a type of altered fossil remains, What are the replacement materials.

Question 2:

(25 Marks)

a- Draw and briefly describe Belemnites morphology

Question 3: Draw an briefly write about:

(25 Marks)

- a- External and internal mold
- b- Types of Ammonoidea suture patterns.

Question 4:

(25 Marks)

a) - Match the number of the term in Column 1 with the letter of the correct definition in Column 2.

1- Belemnites	a- Appeared in Cambrian and still present
2- Ammonites	b- Appeared in L. Cambrian, one genus lives today
3- Bivalvia	c- Appeared in Cambrian and still present
4- Gastropoda	d- Appeared in Devonian and disappeared at the end of the Cretaceous
5- Nautiloidea	e- Appeared in E. Jurassic and disappeared at the end of the Cretaceous

b) - Complete the following:

1- Dentation is the dominant skeletal element in, umbilicus is the dominant	
skeletal element in	
2 The distance of the community of the c	

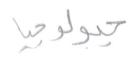
2- The tightness of coiling in Gastropods may be ......, and .....

3- Phylum Mollusca includes Class ......, Class ....... and Class .......

4- Ligament in Bivalves may be ..., and is used to ...,

#### Best wishes

Examiners	Prof. Dr. H. Khalil	Prof. Dr. M. Sobhy



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	EXAMINATION FOR SOPHOMORES (SECOND YEAR) STUDENTS OF GEOLOGY			OF GEOLOGY	
COURSE TITLE: GEOGRAPHIC INFORMAT		GEOGRAPHIC INFORMA	ATION SYSTEM (SPECIAL COURSE-1)	COURSE CODE: GE 2224	
	DATE:	30 MAY, 2015	TERM: SECOND	TOTAL ASSESSMENT MARKS: 50	TIME ALLOWED: 2 HOURS

# Answer the following Questions (using drawing when it possible)

# 1- Write SHORT NOTES on the following:a. Raster based surface analysis and its applications. (10 marks) b. Spatial data storage and maintenance. (10 marks) c. Map projections. (10 marks) 2- Compare between TWO ONLY of the following:-(15 marks) a. Direct and indirect spatial data capture. b. Equal interval and equal frequency techniques in the automatic classification. c. Overlay and connectivity functions. 3- Complete the following Sentences:-(5 marks) a. The main characteristics of a GIS software packages are ..... b. Geometric measurements on spatial features includes ..... c. Spatial data can be acquired from centralized repositories such as ..... d. Coordinate systems can be distinguished into two types ............ and ............ e. Metadata is defined as ..... .....

EXAMINERS	Prof. Alaa A. Masoud	Dr. Samir 7. Vamb
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	DEPARTMENT OF GEOLOGY			
	EXAMINATION FOR LEVEL TWO STUDENTS (SPECIAL GEOLOGY) 222			
	COURSE TITLE	METAMORPHIC PETROLOGY 1		COURSE CODE:GE 2206
DATE:	30/5/ 2015	SEMESTER: TWO	TOTAL ASSESSMENT MARKS :100	TIME ALLOWED: 2 hrs.

Answer the following questions. Illustrate your answer whenever possible.

## 1.Explain WHY 30 marks

- a. On the basis of texture and mineralogy, you can estimate the type of metamorphism. 6 marks
- b. Quartzite and marble are rarely foliated. 6 marks
- c. Almost index metamorphic minerals represent pathfinders of the metamorphic grades. 6 marks
- d. Features of impact metamorphism and dynamic metamorphism are completely different. 6 marks
- e. Migmatites are resultant from different rock sources.

6 marks

- 2. Write a concise article on metamorphic differentiation. 20 marks
- 3. Write short notes on the following: 50 marks
- A, Lower and upper limits of metamorphism. 7 marks
- B. Diagnostic minerals of low and high grade metamorphism.

  7 marks

C. Facies of regional metamorphism.

10 marks

D. Textures of dynamic metamorphism.

7 marks

E. Textures of thermal metamorphism.

7 marks

F.Regional metamorphism at convergent plate boundaries.

12 marks

Examiners: Prof. Mohamed Th.S. Heikal &

Prof. Gafar El Bahariya

Good Luck!