



## قسم الجيولوجيا



COURSE TITLE:	SPECIAL COURSE (MAGNETOSTRATIGRAPHY)	COURSE CODE: GP 3208
DATE: JUNE 2016	TOTAL ASSESSMENT MARKS: 100	TIME ALLOWED: 2 hrs

**Answer the following questions**

(Illustrate your answers with drawings whenever possible)

1) Write in detail on the following:

- a) Types of magnetization in relation to magnetostratigraphy. (15 marks)
- b) Methods of collecting oriented samples for a magnetostratigraphic study. (15 marks)

2) Discuss in brief each of the following:

- a) Presentation of magnetostratigraphic data. (15 marks)
- b) The Pliocene and Pleistocene magnetostratigraphic nomenclature. (15 marks)
- b) Construction of the Phanerozoic Geomagnetic Polarity Time Scale (GPTS). (15 marks)
- c) Uses of magnetostratigraphy in dating and correlation. (15 marks)

3. Read each of the following statements and mark either ( ✓ ) if correct or ( X ) if wrong: (10 marks)

- a) Remanent magnetization can fossilize a record of the Earth's magnetic field ( )
- b) Paramagnetic minerals may carry a strong remanent magnetization. ( )
- c) The intensity of magnetic susceptibility can be used to track back the transgression-regression (T-R) cycles throughout geologic times ( )
- d) Secular variations reflect the geomagnetic field variations that occur on a time scale that ranges from a few years to millennia. ( )
- e) In a reverse polarity state the magnetic north pole lies close to the geographical south pole. ( )
- f) In a magnetic polarity stratigraphic study, oriented samples must be collected ( )
- g) In an MSEC study, samples must be stepwisely demagnetized to isolate the primary magnetic records. ( )
- h) The most complete record of the reversal pattern of the geomagnetic field since 160 Ma is preserved in the continental crust. ( )
- i) Marine magnetic anomalies (isochrones) have been used as the main source of information in the construction of the Paleozoic GPTS ( )
- j) The most precise part of the GPTS is that for the Early Mesozoic time span. ( )

EXAMINERS	PROF. NADER H. EL-GENDY	PROF. ABDELAZIZ L. ABDELDAYEM
	PROF HAMZA M. KHALIL	PROF SHADIA T. EL-KHODARY





**EXAMINATION FOR THIRD LEVEL GEOLOGY (Special)**

COURSE TITLE:	<b>Structural Geology II</b>	COURSE CODE: GE3214
DATE: 5/6/2016	TOTAL ASSESSMENT MARKS: 100	TIME ALLOWED: 2 HOURS

**A) Complete the following sentences: (15 marks)**

- 1- ..... is the geometric arrangement of component features in a rock, seen on a scale large enough to include many samples of each feature.
- 2- ..... are wedge-shaped areas composed of less deformed matrix or of minerals that grew or recrystallized during deformation.
- 3- ..... are thin zones of very high shear strain within the main shear zone.
- 4- ..... are ductilely deformed rocks formed by the accumulation of large shear strain, in ductile fault zones.
- 5- ..... lenticular porphyroclasts of muscovite and biotite in mylonitic rocks.

**B) Write short notes about the followings (with drawing if present): (30 marks)**

- 1- Types of shear zones.
- 2- Types of penetrative lineation.
- 3- Joints associated with folds.

**C) Choose the correct answer: (15 marks)**

- 1- ..... are relatively large, single crystals in a fine grained matrix formed by metamorphic growth of crystals. (i) Porphyroclasts (ii) Porphyroblasts (iii) Pressure shadow.
- 2- ..... form by plowing of surface irregularities due to friction.  
(i) Intersection lineation (ii) Groove lineations (iii) Fiber lineations.
- 3- ..... formed by stretching, necking and eventually segmentation of a layer or planar body surrounded by a less competent matrix. (i) Boudinage (ii) Mullions (iii) S-C fabrics
- 4- ..... display regular, repeated, fold-like forms, ranging in wavelength from centimeters to meters. (i) Shear bands (ii) Mullions (iii) Crenulation lineation
- 5- ..... highly deformed and fine-grained rock containing more than 90 percent matrix and less than 10 percent relict grains. (i) Mylonite (ii) Protomylonite (iii) Ultramylonite

**D) Put (✓) in front of the correct phrase and (X) in front of the wrong phrase with error correction. (15 marks)**

- 1- Crenulation lineation is defined by the closely spaced fold hinges of the microfolds in a crenulated rock.....( )
- 2- Rodding are defined by aligned subgrains oblique to the long axis of larger individual grains and ribbons.....( )
- 3- A fault is called a shear fracture if its dimensions are more than one meter.....( )
- 4- Shear bands is a prominent planar structure that may differ in orientation from the bedding and indicate subsequent deformation and metamorphism .....( )
- 5- pinch-and-swallow structure is a primary structure occurs in siltstone and sandstone and expressed as a faint linear grain on bedding surfaces.. .....( )

**E) Compare between the following (with drawing if present): (25 marks).**

- 1-  $\sigma$ -type and  $\delta$ -type porphyroclasts.
- 2- Spaced and continuous foliation.
- 3- Simple shear and pure shear.

EXAMINERS	Prof. Mohamed Abd El-Wahed	Prof. Mohamed Atef Noweir
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## كلية العلوم - جامعة طنطا

المستوى : الأول

المادة : - لغة عربية

امتحان الفصل الدراسي الثاني

الزمن : - ساعتان

كود المقرر : - un1202

تاريخ الامتحان : - ١٤ / ٦ / ٢٠١٦ م

الشعبة : - علوم طبيعية

الدرجة الكلية : - (١٠٠ درجة)

### أجب عما يأتي :-

#### السؤال الأول :-

﴿ ٢٥ درجة ﴾

بلغ ابن المقفع منزلة رفيعة في منازل البلاغة العربية حتى عدّه معاصروه على رأس العشرة البلغاء لعصره ..  
أ - ما الذي أهله لهذه المكانة العالية ؟

ب - حفظ لنا التاريخ بعض آثار ابن المقفع .. عرف تعريفا موجزا لكل منها ، ومثل لما تقول بإحدى نماذجه الأدبية

#### السؤال الثاني :-

﴿ ٢٥ درجة ﴾

من مسرحية مجنون ليلى :-

التفت ابن عوف إلى المهدي وقال :-

أبا العامرية قلب الفتاة      يقول وينطق عن نبله  
فأصبح له وترفق به      ولا يسع ظلمك في قتله

أ - لم أثار ابن عوف أسلوب النداء ؟ وما السرفي اختياره لمفرد الأبوّة ؟

ب - ما علاقة البيت الثاني بالأول ؟ وبمعنى يوحى لمفرد " قتله " ؟

ج - يوضح البيتان عن رغبة ابن عوف في تحقيق مسعاه .. وضح ذلك .

#### السؤال الثالث :-

﴿ ٢٥ درجة ﴾

أ - من فنون اللغة العربية المقال حيث عرفه النقاد العرب والغرب بشكل يحدد عناصره ، ويوضح أفكاره ، وتكشف عن سماته ،  
اذكر ذلك مستخلصا تعريف المقال من التعاريف السابقة .

ب - يقوم المقال الفني على عناصر تكون إطاره وهيكله العام .. ما هي ؟ موضعا الخطّة التي يتألف منها المقال .

ج - اكتب ما تعرفه عما يأتي مستشهدا لما تقول :-

- المقال الذاتي - المقال الوصفي - المقال الانطباعي - المقال النقدي - المقال الفلسفي - المقال الصحفي .

﴿ ٢٥ درجة ﴾


#### السؤال الرابع :-

اضبط الكلمات الآتية ضبطا صحيحا :-

الملاحة - الملتخوليا - المهرجان - المنجد - النحاس - المنخل - النعناع - النغمّة - الأضحية - الثغرة - المنبر - المناخ - الشباك -  
المعدن - النسناس .

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ  
وَاللَّهُ الْمَوْفِقُ  
الْحَقُّ



TANTA UNIVERSITY FACULTY OF SCIENCE DEPARTMENT OF GEOLOGY				
EXAMINATION FOR FIRST LEVEL STUDENTS OF GEOLOGY				
	COURSE TITLE: Final Exam of Earth's Materials			COURSE CODE: GE1202
	DATE: JUNE. 2016	TERM: SECOND	TOTAL ASSESSMENT MARKS:100	TIME ALLOWED: 2 HOURS

### Part One: Crystallography (35 marks)

Answer the following questions: Illustrate your answer with drawing whenever possible:

- 1- What is meant by: (10 marks)
  - a. General Form
  - b. Holosymmetrical Class
  - c. Symmetry Formula
  - d. Axinite Type
- 2- Write true or false on the following statements and correct the false one: (10 marks)
  - a- Cubic system has the highest rank of crystal symmetry.
  - b- Solid angle and axial angle are the same at any crystal form.
  - c- All natural minerals crystallize, forming well-developed crystal faces.
  - d- Triclinic system has three equal crystallographic axes.
  - e- Zircon mineral is pertaining to monoclinic system.
- 3- Discriminate between the Holosymmetrical classes of cubic and monoclinic systems on the basis of: crystal elements, crystal symmetry and law of symmetry. (15 marks)


### Part Two: Mineralogy

1. Write briefly on the cohesive properties of minerals (hardness, cleavage, parting, fractures and tenacity). (20 marks)

### Part three: Rocks

-Write short notes on the following, Illustrate your answer with drawing: (45 marks)

1. Classification of sedimentary rocks.

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1. Classification of sedimentary rocks.

2. Bedding, graded-bedding and ripple marks.
3. Textures of sedimentary rocks.
4. Concordant and discordant of igneous rocks, Illustrate your answer with drawing.
5. Porphyritic, poikilitic, intersertal and glassy textures.
6. Types of metamorphic facies.
7. Write briefly on regional and contact metamorphism.

Examiners:

Prof. Ibrahim Salem

Prof. Mohamed Th.S. Heikal