# TANTA UNIVERSITY FACULTY OF SCIENCE

# 1000

#### **DEPARTMENT OF GEOLOGY**

### EXAMINATION FOR SENIORS (FOURTH LEVEL) STUDENTS OF CHEMISTRY-GEOLOGY

| 1000  | COURSE TITLE: | Final Ex     | cam of Ore Mineralogy       | COURSE CODE: GE4226   |
|-------|---------------|--------------|-----------------------------|-----------------------|
| DATE: | JUNE. 2014    | TERM: SECOND | TOTAL ASSESSMENT MARKS: 100 | TIME ALLOWED: 2 HOURS |

# Part I: Ore Mineralogy (60 mins)

Write briefly on the following questions; illustrate your answer with drawing: (50 marks)

- 1- Solid solutions in native metals.
- 2- Colloform textures in supergene minerals.
- 3- Hematite-ilmenite, ulvospinel-magnetite and hematite- magnetite exsolution textures.
- 4- Pentlandite-pyrrhotite, chalcopyrite-sphalerite and bornitechalcocite exsolution textures.
- 5- Core, relict and selective replacement textures.

# Part II: Ore Mineralogy (60 mins)

- A) Write on the following; illustrating your answer with drawing: (50 marks)
- 1- Objective lenses.
- 2- Reflectance and anisotropism.
- 3- Microindentation hardness.
- 4- Grinding and polishing equipments.

**Examiners:** 

Prof. Ibrahim Salem

Prof. Bothina El-Dsoky

With Best Wishes

# TANTA UNIVERSITY FACULTY OF SCIENCE



#### DEPARTMENT OF GEOLOGY

#### EXAMINATION FOR FOURTH LEVEL STUDENTS OF CHEMISTRY-GEOLOGY

| 1909  | COURSE TITLE: | Final Ex     | am of Mining Geology       | COURSE CODE: GE4208   |
|-------|---------------|--------------|----------------------------|-----------------------|
| DATE: | JUNE. 2014    | TERM: SECOND | TOTAL ASSESSMENT MARKS:100 | TIME ALLOWED: 2 HOURS |

**Part One:** Write briefly on the following, Illustrate your answer with drawing. (50 marks)

- 1) Compared between surface mining method and underground mining method.
- 2) Drawn sketch of solid mineral reserves
- 3) What do you means by:
  - i) Balance reserve.
  - ii) Room and Pillar.
  - iii) Cut and filling stoping
  - iv) Longwall stoping
  - v) Block caving
- 4) What the differences between
  - i) Mine and Mining.
  - ii) Stope and stoping.
  - iii) Prospecting works and proving works.

Part Two: Answer The Following Questions. (50 marks)

- 1) Methods of mine ventilation.
- 2) The material for underground support.
- 3) Main stages of extracted surface ores, blasting caps detonators and dynamites.
- 4) Mine air, storage of explosives and conveyor of mine transport.

Examiners:

Prof. Ibrahim Salem

Prof. Hassan Haraz



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

EXAMINATION FOR SOPHOMORES (FOURTH YEAR) STUDENTS OF CHEMICAL/ GEOLOGY

|       | COURSE ITTLE: |          | PRE  | CAMBRIAN GEOLOGY            | COURSE CODE: GE4206   |
|-------|---------------|----------|------|-----------------------------|-----------------------|
| DATE: | JUNE, 2014    | TERM: SE | COND | TOTAL ASSESSMENT MARKS: 100 | TIME ALLOWED: 2 HOURS |

# 1- Discriminate between the following:

| a- | Classification of the Precambrian rocks given by El Ramly and Akaad (1960) and Akaad |      |
|----|--|------|
|    | and Noweir (1980)(20 mar   | ks)  |
| b- | Field occurrences of ophiolites and rocks of island arc system(20 mar                | ks)  |
| C- | Geochemistry and Tectonic setting of ophiolites and metagabbros(20 mar)              | ks)  |
| d- | Older granites and younger granites(20 Mar   | ks)  |
| e- | Dokhan volcanics and Hammamat sediments(20 Mar                                       | ·ks) |

Best wishes

| Exammer   1101. Dr. Gaarar Er Banariay | Examiner | Prof. Dr. Gaafar El Bahariay |
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#### TANTA UNIVERSITY FACULTY OF SCIENCE DEPARTMENT OF GEOLOGY

#### EXAMINATION FOR 4th LEVEL STUDENTS (CHEMISTRY & GEOLOGY)

| 1964  | COURSE TITLE: | PHOTOGEOLOGY                | COURSE CODE: GE 4204  |
|-------|---------------|-----------------------------|-----------------------|
| DATE: | 31/ 05 /2014  | TOTAL ASSESSMENT MARKS: 100 | TIME ALLOWED: 2 HOURS |

## Write briefly on the following:

| 1 - | - Characteristics of vertical photographs                                  |
|-----|--|
| 2-  | Compare between <u>pocket</u> and <u>mirror</u> stereoscopes(14 marks)     |
| 3-  | Relief displacement and factors affecting it(12 marks)                     |
| 4-  | Advantages of an aerial photographs over a map(12 marks)                   |
| 5-  | Major drainage patterns and their geologic significances                   |
| 6-  | Drainage density, photo-tone and obsequent streams(15 marks)               |
| 7-  | - Photogeologic appearance of intrusive igneous rocks and faults(22 marks) |

| EXAMINERS Prof. Mahm | oud H. Ashmawy |
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