Mansoura University
Faculty of Science
Geology Department
Date: 19/05/2015

Final Exam. (May 2015)
Fourth Level (Geology Program)
Subject: G409
Course: Stratigraphy of Egypt طبقات مصر
Time allowed: 2 hours **Full Mark: 60**

Answer the following questions: (20 marks for each question)

1. a. Give an account on the Miocene rock stratigraphy in the Gulf of Suez Region. (7 marks)
   b. Describe the Eocene-Oligocene stratigraphy in the Fayoum Province. (6 marks)
   c. Illustrate the Neogene-Quaternary subsurface succession in the Nile Delta area. (7 marks)

2. Compare between each pair of the following:
   a. The Carboniferous successions on both sides of the Gulf of Suez region. (7 marks)
   b. The Jurassic succession in Northern Sinai and in the subsurface of the north Western Desert. (7 marks)
   c. The Miocene rock stratigraphy in the Gulf of Suez region and along the Red Sea coastal plain. (6 marks)

3. a. Arrange the following rock units from older to younger; mention the age and dominant lithology of each. (6 marks)
   -The Malha Formation - The Dakhla Shale - The Naqus Formation
   - The Sudr Chalk - The Araif El Naga Formation - The Thebes Formation.

   b. Complete the following sentences. (8 marks; one for each space)
   1. The ---------- Formation is mainly Turonian in age and is subdivided by the working oil companies into ---------- members, because of its importance for oil exploration in the north Western Desert.
   2. The ---------- Shale ranges in age between the Paleocene and the Eocene, underlying the ---------- Formation and its type locality is Gabal Awaina in the Nile Valley.
   3. The Raised Beaches and Coral Reefs are extensively developed along the ---------- Coast and are of ---------- age.
   4. In the subsurface of the north Western Desert, the Paleogene rocks are divided into a lower marl-limestone unit of Paleocene-Middle Eocene age, named the----------Formation and an upper marl-shale unit of Late Eocene-Oligocene age named the ---------- Formation.

   c. Mark right (√) or wrong (X) and correct the false words. (6 marks)
   1. In Egypt, Devonian deposits are recorded only from the Western Desert and are named the Zeitoun Formation in the Oweinat area and the Wadi Malik Formation in the subsurface of Siwa area
   2. The Qiseib Formation is Permo-Triassic in age, composed mainly of a red bed clastic succession and is widely distributed in the Fayoum Province.
   3. The Burg El Arab Formation is Early Carboniferous in age and is subdivided into four members of which three are payzones for oil and gas.
   4. The Matulla Formation is well developed in the Sinai and the Gulf of Suez region and is Aptian-Albian in age.
   5. Nummulitic " *gizehensis*" limestone's are characteristic deposits for the Carboniferous of Egypt and are well developed in the Greater Cairo area.
   6. The phosphate deposits are well developed in Central Egypt, named the Duwi Formation of Miocene age.

Good Luck

لجنة الإمتحان والتصحيح*:

أ.د.محمود قورة* أ. د. أحمد عبد اللطيف أ.د. محمد عابد د. حمدى سراج الدين

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أ.د.محمود قورة* أ. د. أحمد عبد اللطيف أ.د. محمد عابد د. حمدى سراج الدين

Mansoura University
Faulty of Science
Department of Geology

Date: 23/5/2015
Final semester – Academic year 2014/2015
4th Program Geology and Geophysics
Full Marks: 60 marks
Time allowed: 2 hrs

Final Exam in Petroleum Geology of Egypt (G410)

Answer the Following Questions

Q1. Mention short notes on the most characteristic events that have been taken place in the following times: **(20 Marks)**

a. Lower Cretaceous in the Western Desert **(5 Marks)**
b. Oligocene in the Gulf of Suez **(5 Marks)**
c. Upper Cretaceous in Egypt **(5 Marks)**
d. The beginning of the Aquitanian-Burdigalian time in the Gulf of Suez **(5 Marks)**

Q2. Compare between each of the following: **(20 Marks)**

a. Miocene succession in **both** the Gulf of Suez and the Nile Delta **(5 marks)**
b. Paleozoic structural evolution in **both** the Gulf of Suez and the Western Desert **(5 Marks)**
c. The main tectonic features in Upper Cretaceous in **both** the Gulf of Suez and the Western Desert **(5 Marks)**
d. Crude oil of **both** Belayim and Kareem formations **(5 Marks)**

Q3. Write on the petroleum Geology of the Western Desert; describing both Paleozoic basins and Upper Cretaceous basins **(20 Marks)**

All the best

Dr. Ghaleb Essa

لجنة الامتحان والتصحيح:

د. غالب عيسى* د. وليد شكرى الديسطى

Mansoura University
Faculty of Science
Geology Department
Date: 2-6-2015
Time: 2 hours

Second Term Exam (May 2015)
Fourth Level (Geology Program)
Subject: Environmental Geology & Geoarchaeology (G401)
Total Marks: 60

Environmental Geology

Answer the following questions:

Question One: Mention causes: (20 Degrees)

1- Earth is the only suitable habitat and unique for human.
2- Formation of earth's materials on the earth surface.
3- Falling of acidic rains.
4- Sources of nitrogen and oxygen in the atmosphere.
5- Protection of life on the earth planet.
6- Geological importance of the atmosphere.
7- Occurrence of water on the earth planet in liquid form.
8- Environmental pollution in Egypt.
9- Failure uses of metamorphic rocks in environmental purposes.
10-Earth is a closed system.

Question Two: Complete the following: (10 Degree)

1- Environmental problems such as ..... , ... , ... , ...
2- Primitive organisms produce ..... and ..... in the earliest atmosphere.
3- When water temperature ..... oxygen dissolving in water .....
4- ..... and ..... Are minerals not suitable for environmental purposes.
5- By using of ..... , ... earthquakes and volcanism can be observe.
6- We obtain ..... and ..... from sun owing to .....
7- ..... folds are best than ..... folds due to ..... and .....
8- ..... , ... , ... are landforms produced by river deposition.
9- The early primitive atmosphere consists from ..... , ... , ...
10-..... , ... , ... are landforms formed by sea erosion.

بقية الأسئلة خلف الصفحة

Geoarchaeology

Question Three: **Tick (✓) or (X) and correct:** **(10 Degrees)**

1- Ceramics are made of limestone.
2- Urban culture started before farming.
3- Man discovered fire during the Holocene.
4- River valleys represent the most densely inhabited environment.
5- Moist sediments filling ditches exhibit high electrical resistivity.
6- Plaster of Paris is manufactured by heating calcite.
7- Rising of sea level during the Holocene may preserve coastal archaeological sites.
8- Chemical activity is more common in caves compared with rock shelters.
9- Organic matter of soils can give important measures on the intensity of human occupation.
10- Firing of the soil beyond the Curie point can intensify the local magnetic field.

Question Four: **Complete:** **(20 Degrees)**

1- Plaster is ..... tempered compared with .....
2- With trenching it is possible to observe ..... and ..... change of the subsurface sediments.
3- Accumulation of fired artifacts such as ..... and ..... can intensify the local magnetic field.
4- C^{14} techniques can be used for dating ..... and ..... in archaeological sites.
5- Quartz and ..... in archaeological sites can be dated by ..... techniques.
6- Archaeological sites are more preserved in ..... and ..... compared with open air sites.
7- Organic rich soils used as building material can be recognized by ..... and .....
8- Low anomalies in electrical resistance can be produced by archaeological features such as ..... and .....
9- Farming requires a more sedentary life- style compared with ..... and .....
10- Human occupation of caves is indicated by the presence of ..... and .....

With Our Best Wishes

Exam Committee:
Prof. Dr.Adam El-Shahat Prof. Dr.Amin Gheith Prof. Dr.Abdalla Shahin Dr. Mohamed Awad

Mansoura University
Faculty of Science
Geology Department

Final Theoretical Exam
2nd Term 201٥

Date: 30 / 05 / 2015
Time Allowed: Two Hours
Full Mark: 60 Marks

نظام : الساعات المعتمدة المستوي الرابع برنامج : الجيولوجيا

كودالورقة الامتحانية : ج ٤٠٣ المقرر: رواسب الخامات وجيولوجيا اشعاعية

Ore Deposits & Radioactive Geology

Answer Three Questions from the Followings:-

(20 Marks for each question)

1- **Answer the followings :--**
   - A- **What are the properties of radioactive minerals.**
   - B- **Describe method of air-borne radioactive prospection.**
   - C- **Draw the path of light through the Ore Microscope.**

2- **Write briefly on the followings:--**
   - A- **Geochemistry of uranium.**
   - B- **Origin of radioactive ore deposits.**
   - C- **Dependent factors of colour property.**

3- **Describe in detail the followings :--**
   - A- **Reflectance & Bireflectance.**
   - B- **Scratch Hardness.**
   - C- **Classification of the radioactive minerals.**

4- **Write short notes on the followings :--**
   - A- **Reflection Pleochroism & Internal Reflection.**
   - B- **Preparation of Polished Sections.**
   - C- **Ages and occurrences of radioactive ore deposits in Egypt.**

GOOD LUCK & BEST WISHES

لجنة التصحيح* :- أ.د. حسني غزالة – أ.د. عمر حجاب -- د. شعبان مشعل* - د. أحمد الجلادي