

المستوى الاول

جيولوجيا البترول والتعدين



Final Exam For The First Level of PMGP Students

COURSE TITLE	Geomicrobiology		COURSE CODE: BOTN1202
DATE: 4/6/2017	SEMESTER: TWO	Total Assessment: 180 marks	TIME ALLOWED: 2 hrs

Part I Bactriology

Q1-Complete the following:

(20 marks) (4 marks each)

- The chemical structure of the capsule is mainly
- Flagellin is, while pillin is.....
- Plasmid is
- Conjugation is not a mean of reproduction but
- Bioremediation is

Q2-Give an account on only two:

(40 marks) (20 marks each)

- General Characters of Prokaryotes, and types of flagella.
- Microbial enhanced oil recovery.
- The role of bacteria such as Acidithiobacillus ferrooxidans
- mineral salts.
- the biomining of iron, copper, gold and uranium from.

Part II Mycology

Q1- Write on the following (choose 2 points only):

(40 marks)(20 marks each)

- Describe the general character of Fungi
- Explain the role of microorganisms in aerobic alkane metabolism
- Demonstrate the arrangement of vesicle in different fungi

Q2- Complete the following:

(20 marks)(4 marks each)

- hydrosphere layer includes
- Fungal growth divided into.....
- zygopores found in subdivision.....
- keratinophilic fungi had high uptake ofand low uptake of.....
- Dependent approaches methods is

Part III Phycology

Q1- Write on the following (choose 2 points only):

(40 marks)(20 marks each)

- Characterizing microbes
- Silification
- Compare between Heterococcoliths and Holococcoliths
- Different types of algal fossils
- External calcification

Choose one question only from the following

Q2-Complete the following:

(20 marks)(4 marks each)

- Pfiesteria* algae composed of two halves called.....and.....
- Diatomite is characterized by adensity and porous sedimentary rock.
- Diatom cell wall called, that has manydeposition.
- Chara has two types of branches called.....and.....
- Organisms can be classified according to their nucleus into.....and.....



Q3- Mark true (✓) and false (X) on the following

(20 marks)(4 marks each)

- Filamentous algae composed of one large, multinucleate cell without cross walls ()
- Coccolithogenesis seems highly coupled with photosynthesis ()
- Non heterocystous cyanobacteria cannot perform Nitrogen fixation ()
- Pennate forms of diatoms were dominant from Paleocene to recent ()
- Chara is one of the silicified algae ()

Good Luck!!

Examiner(s) : Prof. Dr. wageh El-shouny, Prof. Eman Abd El-Zaher and Dr. Mostafa Elshobary

	DEPARTMENT OF GEOLOGY FACULTY OF SCIENCE TANTA UNIVERSITY				
	FINAL EXAMINATION FOR FIRST LEVEL PMGP STUDENTS				
	COURSE TITLE	FUNDAMENTALS OF GEPHYSICS			COURSE CODE: PMGE 1204
DATE:	JUNE 2017	SEMESTER: TWO	TOTAL ASSESSMENT MARKS: 180	TIME ALLOWED: 2 hrs	

Answer the following questions:

- 1) Write about the Bouguer gravity data correction. (20 marks)
- 2) What do you know about the diurnal magnetic correction? (20 marks)
- 3) Write about **ONE ONLY** of the following: (20 marks)
 - a) Airy's theory of Isostasy of Earth's crust.
 - b) Elements of Geomagnetic Field.
4. Explain the following: (20 marks)
 - a) Natural and artificial seismology.
 - b) Bulk Modulus (K).
5. Discuss the following: (30 marks)
 - a) Types and characteristics of seismic waves.
 - b) Importance of well logging.
 - c) Applications of electrical methods.
6. Read each of the following statements and mark either (✓) if correct or (X) if wrong: (10 marks)
 - a) Surface seismic waves decrease as we go deeper into the Earth. ()
 - b) A rigid rock body movement is characterized by a displacement with no change in shape or volume and is represented only by translation and/ or rotation. ()
 - c) The **Epicenter** of an earthquake is the underground point of origin while **Focus** is directly above it on the Earth's surface. ()
 - d) Land seismic surveys use **air guns** while marine surveys use **vibrators**. ()
 - e) **Seismogram** is the instrument that measures motions of the ground while the **Seismograph** is a graph output by a seismogram. ()

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P.T.O.

