

امتحانات الفصل الدراسي الاول

للعام ٢٠١٧/٢٠١٦

المستوى الثالث

جيوفيزياء

حوضیات

جامعة بنها



BENHA UNIVERSITY  
FACULTY OF SCIENCE  
DEPARTMENT OF GEOLOGY

EXAMINATION FOR THIRD LEVEL GEOPHYSICS STUDENTS

SEISMIC FIELD METHODS

COURSE CODE: GP3105

TIME ALLOWED: 2 HOURS

COURSE TITLE:

DATE: 9 JANUARY, 2017

TERM: FIRST

TOTAL ASSESSMENT MARKS: 100

Answer of the following questions:-

**Question 1: Discuss:-**

- 1- Marine energy sources and sources using controlled charges of dynamites (20 degree)
- 2- Detection of seismic wave and Seismic Recording Instruments (Illustrate your answer). (20 degree)

**Question 2: Write about the followings: (Illustrate your answer).**

- a) Seismic waves. (20 degree)
- b) Nonexplosive sources. (20 degree)

**Question 3: Put (✓) in front of the write sentence and (X) in front of the wrong sentence and correct the wrong one. (14 degree)**

- A) Secondary waves are the fastest seismic waves ( )
- B) Surface waves are not the most damaging seismic waves ( )
- C) Dynamite is an explosive seismic source ( )
- D) The principle constituent of dynamite in land prospecting is the Nitroglycerine ( )
- E) Electrical damping in geophones is preferred rather than viscous mechanical damping ( )
- F) Sensitivity of an electromagnetic geophone depends on the strength of magnet only ( )
- G) All geophones currently used for seismic recording on land are of electromagnetic type) ( )

**Question 4: Choose the correct answer (6 degree)**

**A) Seismic waves are important for .....**

- 1- Mapping the interior of the earth.
- 2- Detection of contaminated aquifers.
- 3- Finding prospective oil and natural gas locations.
- 4- All the previous

**B) Sound is a ..... Wave**

- 1- Longitudinal
- 2- Secondary
- 3- Surface
- 4- Love

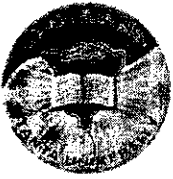

**C) Maxipulse is a seismic source used in .....**

- 1- Marine acquisition.
- 2- Land acquisition.
- 3- Seismogram.
- 4- Accelograph

WITH BEST MY WISHES

EXAMINER

DR. KHALED ABD ELLAH MAHMOUD OMAR


|   |   |               |   |
|---|---|---------------|---|
|  | TANTA UNIVERSITY<br>FACULTY OF SCIENCE<br>DEPARTMENT OF GEOLOGY |               | <br>1969 |
|   | FINAL EXAMINATION FOR THIRD LEVEL (ALL SECTIONS)                |               |   |
| COURSE TITLE:   | SEDIMENTARY PETROLOGY   | COURSE CODE:  | GE 3107   |
| JANUARY, 2017   | TOTAL ASSESSMENT MARKS: 100                                     | TIME ALLOWED: | 2 HOURS   |

**ANSWER THE FOLLOWING QUESTIONS:**

1. Mention the different types of depositional and post-depositional porosities in sedimentary rocks and the main factors affecting porosity. (15 Marks)
2. Write briefly on the following:
  - A) Grain-size analysis of sand-size clastic sediments. (5 Marks)
  - B) Types of packing and grain contacts of particles. (5 Marks)
3. "During transportation, water, wind and glacial ice affect the surface texture of particles, grain-shape, degree of sorting, as well as, the sphericity and roundness of grains" – COMMENT? (15 Marks)
4. Write on the transportation processes of sedimentary rocks. (15 Marks)
5. Explain both chemical and biological weathering processes. (15 Marks)
6. Write shortly on the following (use drawings when possible):
  - A) A classification scheme for the different types of primary sedimentary structures. (10 Marks)
  - B) The most common syn-depositional (intrabed) structures. (20 Marks)

|                         |                       |             |
|-------------------------|-----------------------|-------------|
| Prof. A.T. Abdel-Hameed | Prof. A. El-Shishtawy | Dr. G. Mosa |
|-------------------------|-----------------------|-------------|

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|---|---|-------------|-----------------------------|-----------------------|
| <br>1969 | TANTA UNIVERSITY<br>FACULTY OF SCIENCE<br>DEPARTMENT OF GEOLOGY |             |                             |                       |
|   | EXAMINATION FOR JUNIORS (THRID YEAR) STUDENTS OF GEOPHYSICS     |             |                             |                       |
| COURSE TITLE:   | FIELD GEOLOGY AND FIELD STUDIES                                 |             | COURSE CODE: GE 3111        |                       |
| DATE:   | 23 JANUARY, 2017  | TERM: FIRST | TOTAL ASSESSMENT MARKS: 100 | TIME ALLOWED: 2 HOURS |

**Answer the following questions, illustrating with drawing when it possible**

- 1- Write **in detail** the three main components of the GPS system. (20 marks)
  
- 2- How can you **differentiate** between the pyroclastic and metamorphic rocks in the field. (15 marks)
  
- 3- **Explain** how the traversing methods and geophysical aids can help the geologist in the geological mapping. (25 marks)
  
- 4- One of the most objectives of the geologic report is to communicate your ideas and field observations to others. **Discuss** the basic parts of this report to achieve this objective. (20 marks)
  
- 5- **Compare between the following:-**
  - a- Sources of GPS errors and selective availability. (10 marks)
  - b- Geographic coordinates and metric grids. (10 marks)

©Good Luck©

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|-----------|----------------------------|----------------------|
| EXAMINERS | Prof. Mohamed Th. Heikal   | Prof. M. Atef Noweir |
|           | Prof. Mohamed Abd El-Wahed | Dr. Samir Z. Kamh    |

