

Assiut University

Faculty of Science-Geology Dept



جامعة أسيوط

كلية العلوم - قسم الجيولوجيا

First Level Examination in Fundamentals of Geology (G100)

Time: One Hours

PART I (Total Marks 25)

Ma., 2018

Answer the following questions: (Each question One Mark)

Complete the following:

- 1-The earth is made up of
- 2-Below the lithosphere is the
- 3-The plate boundary at which the plates move away from each other is named.....
- 4-The plate boundary at which the plates move towards each other is named.....
- 5-The plate boundary at which the plates slide past each other is named.....
- 6-At a convergent boundary where the oceanic crust sinks below the continental crust, this is called aZone
- 7-The lithosphere is made up of and

Indicate by the sign (✓) or (×):-

- 8-Isometric crystals have mutually perpendicular axes of unequal lengths ()
- 9-Triclinic crystals have non-perpendicular axes of unequal length ()
- 10-Tetragonal crystals have mutually perpendicular axes with two of equal length ()
- 11-Minerals are not natural (made in a laboratory) ()
- 12-Minerals are formed by a irregularly-arranged internal framework of atoms ()
- 13-Cleavage is poor if bonds in crystal structure are strong, good if bonds are weak. ()
- 14-Strong chemical bonds give high hardness ()
- 15-Metallic luster is the strong reflection produced by transparent substances ()

(Each question Two Mark)

Write short notes on:

18-Sandstone

19-Schist rocks

Compared between:

	Oceanic crust	Continental
Density		
Composition		
Thickness		

	Tetragonal system	Hexagonal systems
Crystallographic axes		
Angles		
Types of rotation along c-axis		

	Gabbro Rock	Basalt rock
Location		
Composition		
Grain size		

<p>Geology Department Faculty of Sciences Assiut University First level students</p>		<p>Second term examination Fundamentals of Geology (100 G) May, 2018 Time allowed: One hour</p>
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Second Part: External Processes (25 marks)
الاسئلة في ٤ صفحات . اجب عنها كلها

Select the letter (A, B,C, D, or E) of the choice that BEST answers the question. Each question has ONLY one correct answer

1. When the cut banks of a river erode back towards one another and completely cut off a loop of the meander the resulting feature is called a (an)

- A. levee B. oxbow lake C. pothole D. alluvial

2. The suspended sediment load of a stream consists of particles that are.....

- A. rolling and sliding along the stream bed B. held aloft in turbulent eddies.
C. transported in the form of chemical ions D. A and B above
E. all of the above.

3. What are the types of Stream channels

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4. Stream Velocity depends on:

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5. One of the major types of delta is:

- A. wind- dominated delta B. wave- dominated delta
C. lake- dominated delta

6. The lowering effect on the water table about the base of the well is called:

- A. aquifer B. perched water table
C. cone of depression D. hydraulic gradient

7. Aquiclude is:

- A. porous and permeable strata that store and transmit water freely
B. impermeable strata that prevent flow
C. a place where water flows naturally from rock onto the land surface

8. Spring is

- A. a stream that receives water from the zone of saturation
- B. a stream that loses water to the zone of aeration
- C. is a place where water flows naturally from rock onto the land surface

9. The factors affecting porosity include:

.....

10. are from trace fossils

- A. shells or teeth
- B. burrows or borings
- C. carbonization or petrification

11. What is a fossil?

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		<p>12. الشكل المرفق يوضح التطور الجيولوجي مع الزمن للطبقات الرسوبية A, B, C, D من المرحلة 1 حتى المرحلة 4</p> <p>أشرح باختصار التاريخ الجيولوجي والأحداث الجيولوجية المختلفة التي مرت بها هذه الطبقات</p>

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13. In deserts, wind erodes by:

- A. solution and hydrolysis
- B. traction and plucking
- C. solution and traction
- D. deflation and abrasion

14. Exfoliation is a natural process which results from

- A. activities of man
- B. burrowing of rocks
- C. thermal expansion of rocks
- D. wind action on rocks

15. Desert pavement is:

- A. highway across the desert
- B. salty crust in the desert
- C. layer of coarse rocks and pebbles left behind by deflation
- D. an alluvial fan

16. How does weathering differ from erosion?

- A. **Weathering** results in different material being formed; **erosion** removes the old material.
- B. **Weathering** occurs slowly over time; **erosion** occurs rapidly.
- C. **Weathering** requires the presence of moisture; **erosion** requires moving water.
- D. **Weathering** is an external process; **erosion** is an internal one.
- E. **Weathering** is the breakdown of material in place; **erosion** is the removal of the weathered material.

17. Which of the following represents a process of chemical weathering?

- A. thermal expansion and contraction
- B. root pry
- C. hydration and hydrolysis
- D. frost action and crystal growth

18. Weathering by abrasion occurs by agents such as:

- A. wind and water
- B. gravity
- C. thermal action

19. Normal graded bedding is characterized by:

- A. an increase in sediment size from bottom to top
- B. a decrease in sediment size from bottom to top
- C. an unsorted mixture of many different sediment sizes
- D. being found only on the continental slope

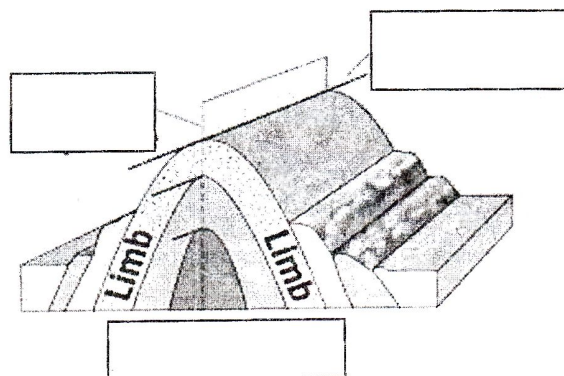
20. Barchans are:

- A. crescent-shaped dunes
- B. ridges parallel to the wind direction
- C. ridges transverse to the wind direction
- D. streamlined bedrock hills scoured by the wind

21. A faceted pebble shaped by the wind is termed a:

- A. ventifact
- B. delta
- C. yardang
- D. longitudinal dunes

22. Insert the names in boxes and identify the type of the following structure



23. A crack along which no appreciable movement has occurred is called:

- A. fault B. anticline C. joint D. vein

24. Compare between the nonconformity and disconformity.

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25. Compare between the normal fault and the reverse fault.

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26. Compare between the transverse and the star sand dunes.

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-----GOOD LUCK-----

Prof. Dr. Mamdouh F. Soliman Prof. Dr. Mahmud Essa Dr. Abdelhamid Salman