



Final Exam of fundamental Geology (G100)

For 1st year students-Faculty of Science – Summer semester 2019

Time allowed: 2 Hours

Total marks: 50 marks

الامتحان في ٦ صفحات

Write your answers in the same sheets

أكتب أجابتي في نفس ورق الأسئلة

I- Select or write the correct answer for the following. Each question has ONLY one correct answer (30 marks)

1- Pangaea began to split apart

- a- About 200 million years ago
- b. About one billion years ago
- c. About half million years ago

2-The earth's Core is made up mostly of

- a. Iron, with some nickel and few minor elements
- b. Iron, magnesium, silicon, and oxygen combined in varying proportions in several different minerals.
- c. Silicon, Aluminum, calcium, Sodium and oxygen combined in varying proportions in several different minerals.

3- Earth can be divided into five main layers based on physical properties and hence mechanical strength;- the lithosphere,,, and inner core.

4- A Continental Rifting will occur when

- a- one plate carrying oceanic crust collide with another carrying a continental crust
- b- one plate of continental crust collide with another carrying a continental crust
- c- two continental plates spread apart

5- Hexagonal crystals have 4 axes, one of them (c axis) being different in length than the other 3 axes (Yes or No)

6- A plane of symmetry is

.....
.....
.....
.....

7- Some minerals, such as mica have

- a. One set of parallel cleavage planes
- b. Two sets of parallel cleavage planes
- c. Three sets of parallel cleavage planes
- d. No cleavage planes

8- The color of a fine powder of mineral is named

9-The Vitreous luster is the luster of

- a. Corundum
- b. Quartz
- c. Hematite
- d. Magnetite

10- According to the Mohs hardness scale, the hardness of the mineral calcite =

11- Glass

- a- is a very fine-grained rock
- b. has no crystalline structure
- c. is a coarse-grained rock

12- From volcanic rocks are; basalt,, and
Mention other two rocks?

13- Intrusive igneous rocks

- a- are very fine-grained rocks
- b. are medium to coarse-grained rocks

14- The ultra basic rocks have

- a- 45% - 52% SiO₂
- b. <45% SiO₂
- c. >66% SiO₂

15- A crack along which no appreciable movement has occurred is called:

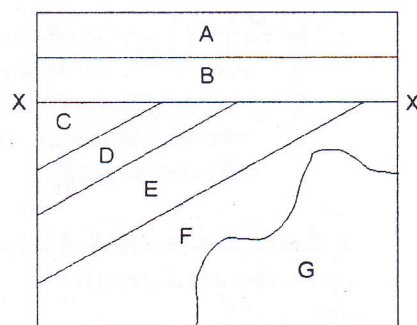
- a- Fault
- b- Anticline
- c. Joint
- d- Fold

16- Units A, B, C, D, E, and F are sedimentary rock.

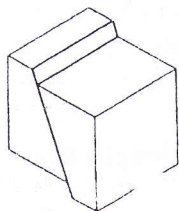
Unit G is granite.

Which of the following statements is true?

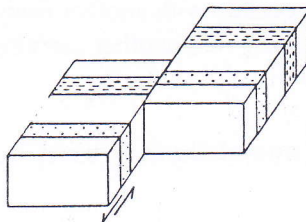
- a. Deposition of unit A occurred before deposition of unit B
- b. Erosion took place before the deposition of unit B
- c. Unit C is younger than unit A



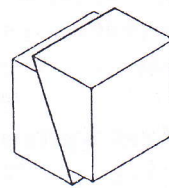
17- Identify the types of the following faults?



1.....



2.....



3.....

18- Chemical weathering can result from the action of:

- a- Burrowing by animals
- b- Ice wedging
- c- Carbonic acid
- d- Plant roots
- e. All of them

19- Which one of the following features is formed by wave erosion?

- a. A barrier island
- b. A spit
- c. A cave
- d. A beach

20- A disconformity is :

- a.-a rock unit that does not contain fossils
- b.-an erosional surface between igneous and metamorphic rocks
- c.-an erosional surface between horizontal layers of sedimentary rocks
- d.-a rock unit that is different than units above or below it

21-Hydration is a chemical reaction in chemical weathering; it is responsible for:

- A. The dissolved of the elements iron and copper
- B. The conversion of carbon to coal
- C. The addition of water to the mineral anhydrite

22- An 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

23- Artesian Well is:

- a. natural or manmade well where water flood to the surface under pressure
- b. A "cone of depression" develops around the pumping hole
- c. a well of water that is warmer than the mean annual air temperature

24-Desert pavement is:

- a. A layer of coarse rocks and pebbles left behind by deflation
- b. An alluvial fan
- c. A highway across the desert
- d. Salty crust in the desert

25- Chemical weathering in the desert is slow because:

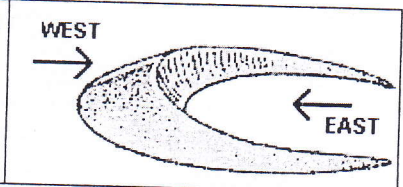
- a. Of the power of wind
- b. Rocks in the desert are resistant to weathering
- c. Deserts are high in elevation
- d. There is little water to dissolve rocks

26- The following question refers to this diagram of a barchan sand dune.

Which arrow on the diagram is the correct wind direction to form this crescent-shaped sand dune?

A- East

B- West



27- When a river meets an ocean or sea which depositional feature is often formed?

- a. Alluvial fan
- b. delta
- c. sand bar

28- What are the Types of Stream channels ?

- A-
- B-
- C-

29- Body fossils are the actual parts of an organism; they always present as unaltered bodies and never be found as altered ones

- a. True
- b. False

30-Which one of the following statements is true?

One of the conditions promote fossilization is

- a. Rapid burial and/or lack of oxygen
- b. Presence of soft body parts
- c. Material is trapped inside coating such as water

