

48- All of the sediment carried by saltation, rolling and sliding along a stream bed is the.....

- a. Suspended load
- b. Bed load
- c. Dissolved load
- d. Channel pattern

49- An Example of unaltered fossils is:

- a. Fossils that preserved by Permineralization
- b. Organisms that have been preserved in amber
- c. Fossils that preserved by replacement
- d. Tissue material is decomposed or reduced to a film of carbon

50- Which of the following rocks reflect the greatest porosity?

- a. A rock composed of partly consolidated grains
- b. A rock composed of poorly-sorted grains with irregularly shaped particles
- c. A rock composed of coarse and well-sorted grains
- d. None of above

انتهت الأسئلة/ مع أطيب الأمنيات بالتوفيق

- 37- Oxbow lakes may form by
 a- Cut off of a meander
 b- Down cutting of a stream erosion
 c- Cut banks of a stream
 d- A stream runoff on the soft rocks
- 38- Alluvial Fan deposits are formed
 a- During the Floodplains of a stream
 b- When a stream water and sediments pass through a narrow hill in continental regions
 c- When a stream meet sea
 d- On the sea coast
- 39- Which of the following is true about the Water table of the groundwater
 a- It is the top of saturated zone of groundwater
 b- It is the level to which water will rise in a hole
 c- It is the level to which water will rise in an unconfined aquifer
 d- All of the above
- 40- The pumping of water from a well creates
 a- Failure of the well
 b- Cone of depression
 c- Upward rise in the water table
 d- a sinkhole
- 41- Artesian wells are natural or manmade wells that can form in
 a- An Unconfined Aquifer
 b- A tilted aquifer
 c- An Aquicludes
 d- A horizontal confined aquifer
- 42- Trace fossils include footprints, nests, burrows, and.....
 a- Casts
 b- Coprolites
 c- A shell
 d- A teeth
- 43- The Phanerozoic Eon is divided into 3 time sections called "Eras". These From oldest to youngest are:
 a- Hadean → Archean → Proterozoic
 b- Paleozoic → Mesozoic → Proterozoic
 c- Paleozoic → Mesozoic → Phanerozoic
 d- Proterozoic → Mesozoic → Proterozoic
- 44- Sand dunes are
 a- Asymmetrical mounds with a gentle slope in the upwind direction
 b- Symmetrical mounds with a gentle slope in the upwind direction
 c- Asymmetrical mounds with a steep slope in the upwind direction
 d- Asymmetrical mounds with a gentle slope in the downwind direction
- 45- If there is a break in time during the deposition of rock units, this will result in the development of a/an.....
 a. Fault
 b. Conformity
 c. Unconformity
 d. None of the above
- 46- A rock that has been abraded, pitted, etched, grooved, or polished by wind is termed
 a. Ventifact
 b. Ripple mark
 c. Barchanoid
 d. Sand dune
- 47- Braided channels are found
 a. In streams having highly variable discharge and easily eroded banks
 b. When the erosion on the outside meander bends continuous to take place
 c. In streams having low variable discharge and resistant eroded banks
 d. During groundwater dissolution of limestones

c-($a \neq b \neq c$) ($\alpha = \beta = \gamma = 90^\circ$)

13- The Cubic System

a-($a = b = c$) ($\alpha = \beta = \gamma = 90^\circ$) b-($a \neq b \neq c$) ($\alpha = \beta = \gamma = 90^\circ$)
c-($a = b \neq c$) ($\alpha = \beta = \gamma \neq 90^\circ$)

14- Which element is not among the eight most abundant in Earth's crust?

a- Silicon b- Aluminum c- Sodium d- Titanium

15- Which of the following describes the luster of quartz?

a- Metallic b- Vitreous c- Resinous d- Pearly

16- Which mineral is the hardest on the Mohs hardness scale?

a- Quartz b- Diamond c- Talc d- Calcite

17- Which igneous rock is classified as felsic and volcanic?

a- Gabbro b- Basalt c- Rhyolite d- Peridotite

18- Which sedimentary rock forms in environments with strong, turbulent currents and contains poorly sorted, rounded clasts?

a- Breccia b- Shale c- Conglomerate d- Chalk

19- Stalactites and stalagmites form due to the dissolution and reprecipitation of which mineral?

a- Gypsum b- Halite c- Calcite d- Quartz

20- Which of the following minerals will precipitate first during the evaporation of seawater?

a- Halite b- Gypsum c- Calcite d- Dolomite

21- Which sedimentary rock is composed primarily of silt and clay particles and splits easily into layers?

a- Sandstone b- Shale c- Breccia d- Coal

22- Which pair of processes is critical for transforming shale → slate → phyllite → schist?

a- Compaction and cementation b- Heat and directed pressure c- Partial melting and fractional crystallization d- Hydrothermal alteration and vesiculation

23- Marble is the metamorphic product of which parent rock?

a- Sandstone b- Limestone c- Basalt d- Shale

24- What is the primary cause of contact metamorphism?

a- High pressure b- Heat from magma intrusion c- Tectonic stress d- Hydrothermal fluids

25- Which metamorphic rock forms along fault zones due to intense pressure?

a- Marble b- Mylonite c- Phyllite d- Amphibolite

Part II

- 26- Recent ripple marks may consist of
- a- Consolidated sands
 - c- Sand dunes
 - b- Unconsolidated sands
 - d- Siltstones
- 27- Erosion by winds on sand dunes occurs
- a- On the upwind direction
 - c- On the downwind direction
 - b- On the slip face
 - d- On the steep slope direction
- 28- Cross bedding forms by
- a- The action of compressional forces
 - b- The action of tensional forces
 - c- The action of compressional and tensional forces
 - d- The action of air or water
- 29- Compressional forces produce
- a- Normal faults and joints
 - b- Two sets of joints and reverse faults
 - c- Primary structures and reverse faults
 - d- Primary structures and two sets of joints
- 30- Plastic deformation causes
- a- Faults and joints
 - c- Migration of sand dunes
 - b- Folding rocks
 - d- Primary structures such as folds
- 31-a- A dextral fault is
- a- Right-lateral strike slip fault
 - c- Normal strike slip faults
 - b- Left-lateral strike slip fault
 - d- Reverse strike slip faults
- 32- Which of the following applies to an anticline fold:
- a- Up folded sandstone
 - c- Primary structures in sandstone
 - b- Up folded sands
 - d- Secondary structures in sands
- 33- Exfoliation by weathering is found in
- a- Limestones
 - c- Granites
 - b- Sandstones
 - d- Basalts
- 34- Hydrolysis of feldspars produces
- a- Clay minerals
 - c- Hydroxide minerals
 - b- Carbonate minerals
 - d- Oxide minerals
- 35- Rapids and waterfalls may characterize a stream
- a- During its mature stage of the stream erosion
 - b- During its young stage of the stream erosion
 - c- During its old stage of the stream erosion
 - d- During all stages of the stream erosion
- 36- Deposition by a stream may occur
- a- Along the inner parts of the meanders
 - b- Along the outer parts of the meanders
 - c- Along the outer and the inner parts of the meanders
 - d- Along the cut banks of the meanders



First Level Examination in Fundamentals of Geology

Time: One Hours

PART I (Total Marks 25)

Mau., 2025

Choose the correct answer of the following: (Each One Mark)

1- Plate tectonics is a result of Earth's internal heat engine, powered by

- a-the Sun b-gravity c- heat flowing from Earth's interior outward

2- Volcanic island arcs are associated with

- a- transform boundaries b-divergent boundaries c- convergent boundaries

3- Along what type of plate boundary does subduction occur?

- a- divergent b- transform c- convergent

4- Average thickness of mantle from the Earth's surface is

- a-2500 km b-1900 km c-2900 km

5- What type of plate boundary has the two plates moving away from each other?

- a-Divergent plate boundaries b-Convergent plate boundaries
c-Transform-fault plate boundaries

6- Convergent boundaries are areas where:

- a-two plates come together b-two plates slide past each other
c-two plates slide apart from each other

7- Average density of continental crust is

- a- 3.7 g/cm³ b- 2.9 g/cm³ c- 2.7 g/cm³

8- Average density of oceanic crust is

- a- 3.7 g/cm³ b- 3 g/cm³ c- 2.7 g/cm³

9- The composition of oceanic crust:

- a-is granitic composition b-is basaltic composition
c-is dioritic composition

10- The composition of mantle:

- a-is peridotite composition b-is basaltic composition
c-is granitic composition

11- The Tetragonal System

- a-(a = b = c) ($\alpha = \beta \neq \gamma = 90^\circ$) b-(a = b = c) ($\alpha = \beta = \gamma = 90^\circ$)
c-(a = b $\neq$ c) ($\alpha = \beta = \gamma = 90^\circ$)

12- The Orthorhombic System

- a-(a = b = c) ($\alpha = \beta \neq \gamma = 90^\circ$) b-(a = b = c) ($\alpha = \beta = \gamma = 90^\circ$)