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The main factor which keeps the stability of the ecosystem is

- diversity of living organisms.
- simplicity of ecosystem.
- inability to change.
- get rid of wastes.

2

Each of the following change the shape of earth surface except

- rotation of the outer core around the inner core
- underground temperature and pressure
- winds and torrents
- rivers and lakes

3

Combination of calcium and carbonate by effect of groundwater form

- stalactite and stalagmite
- stalactite and fractures
- stalagmite and joints
- stalagmite and slopes

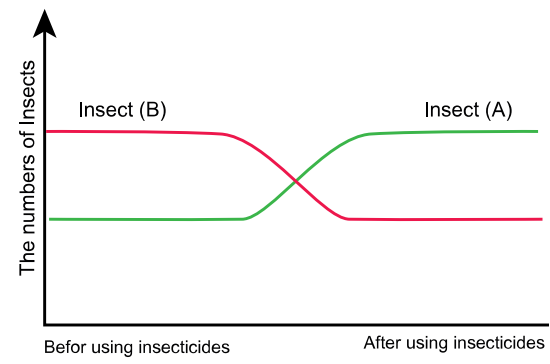
4

Which of the following sea floors are more exposed to earthquakes formed by destructive movements of tectonic plates ?

- Mediterranean Sea.
- Aqaba gulf.
- Red Sea
- Atlantic ocoen.

5

Study the following graph and then answer



The insects A and B, respectively, are.....

- A harmful , B useful
- A useful , B harmful
- A , B useful insects
- A , B harmful insects

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Plankton in marine food chain represent

- 1st and 2nd trophic level.
- 1st trophic level.
- 2nd trophic level.
- 1st and third trophic level.

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An inorganic solid material formed during preparing in laboratory, this material is not mineral because it is

- not formed in nature
- crystalized material
- inorganic
- solid material

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When the angles of orthorhombic crystal become different , the crystal system becomes

- triclinic
- monoclinic
- tetragonal
- cubic

9

Which of the following components Do not belong to natural environment ?

- textile factories.
- man who manage factories.
- animals which we use its leather to make clothes.
- trees that we use it's fibers to make papers.

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What is the origin of sharp edges clastics which form breccias rocks ?

- Gravels.
- Sands.
- Silt.
- Clay.

The hydrocarbon compounds matured under earth's surface will be converted into liquid or gaseous state at temperature of.....

- 80°
- 50°
- 40°
- 110°

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From the minerals which are used in building materials industries is

- calcite.
- olivine.
- anhydrite.
- sphalerite.

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What is the type of fault in which the hanging wall moves in the direction of the gravity?

- graben.
- thrust fault.
- reverse fault.
- strike- slip fault.

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The time relationship of rocks can be determined by

- folds
- faults
- joints
- primary structures

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Study the previous food chain :

Which of these organisms contain an amount of energy reaches 100 times the energy present in the third consumer?

- crustaceans
- algae
- octopus
- fungi

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The largest amount of salt is produced from evaporation of

- 2.5 liters of water from Arabian gulf.
- 3 liters of water from North sea.
- 10 liters of water from Nile River.
- 4 liters of water from Paltic sea.

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Study the following figure then deduce.



What is the percentage of lost energy from herbs to frogs?

- 99%
- 10%
- 1%
- 100%

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Food chain (A) contains :

algae → larvae → small fish → fungi.

Food chain (B) contains :

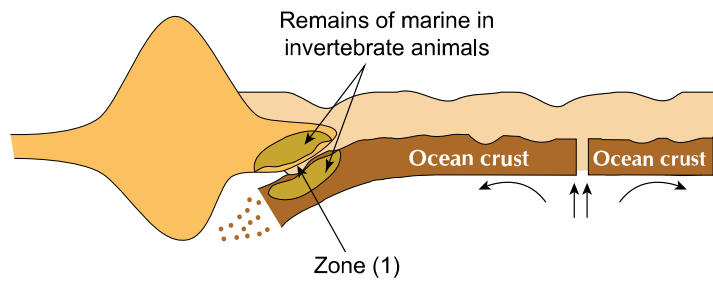
aloe → jerboa → snakes → Bacteria

Which organisms in both chain (A) , (B) differ in the source of energy from other organisms ?

- Algae , Aloe
- Larvae , Jerboa
- small fish , snakes
- Fungi , Bacteria

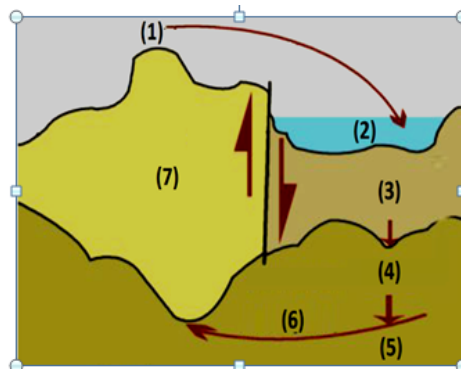
Environmental resources are

- Man depends on it but has nothing to do with its existence.
- Man made it and depends on it
- Man has nothing to do with its existence and does not depend on it
- Man depends on it and interferes with its existence.



Rocks That Contain skeletons of marine animals were formed from calcium compounds deposited from sea water in zone (1) will be.....

- **affected by heat and have attractive colours.**
- **affected by heat and foliated.**
- **affected by heat and pressure forming quartzite.**
- **affected by pressure and have no attractive colours.**



Study the opposite figure then answer:

Magma in area (5) rich in

- Calcium - Iron
- Sodium - Magnesium
- Sodium - Calcium
- Iron - Potassium

presence of quartz crystals beside a large mass of granite ,indicate all the following except....

- Chemical weathering by oxidation
- Chemical weathering by carbonation
- Mechanical weathering by thermal expansion
- Chemical and mechanical weathering together

Which of the following geological regions can be more exposed to presence of earthquakes centers ?

- convergence of plates forming Andes mountain.
- activities of erosion factors .
- areas of planes and valleys.
- epeirogenic movements .

What is the geological structure in which younger layer is surrounded by older layers?

- graben
- anticline fold
- normal fault
- thrust fault

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Some mineral deposits of one of the calcium salts were found on a polished rock and has lines parallel to the rocks movement .

it is expected that the structure and the deposits respectively are

- fault - calcite
- fold - calcite
- fault - dolerite
- fold - gypsum

If a mafic plutonic rock exposed to mechanical weathering and broken into minerals the formed soil contain.....

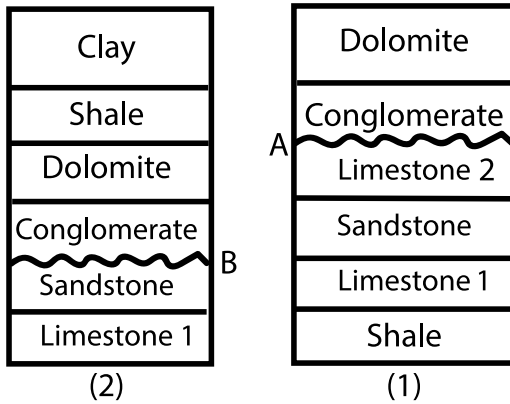
- Coarse grains of amphibole, calcium-rich plagioclase and pyroxene
- Fine grains of olivine, pyroxene and plagioclase
- Coarse grains of olivine, pyroxene and sodium-rich plagioclase
- Fine grains of amphibole, plagioclase and pyroxene

When waves collide with calcereous rock alternate with muddy rocks beside it form

- coastal endings and meanders
- coastal spits.
- coastal barriers
- dry delta cone.

In the following figure

(A) and (B) are two unconformity surfaces in two adjacent regions, the similar rocks which are above the surface of unconformity have the same age, and the rate of erosion in (2) is more than that in (1)

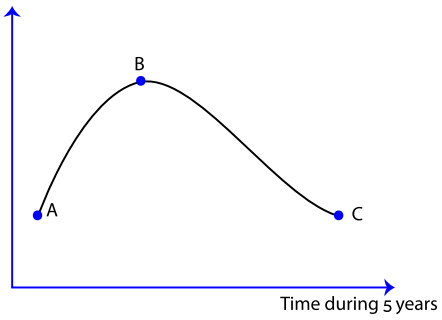


It is expected to find the time relation between the surfaces of nonconformity (A) , (B) is

- Have the same age and uplifting movements occurred in section (1)
- A is older than B
- B is older than A
- Have the same age and uplifting movement in section (2)

Study the opposite graph then deduce.

Quantity of potato in the same area



What is the reason of decreasing the amount of the crop of potato from (B) to (C)?

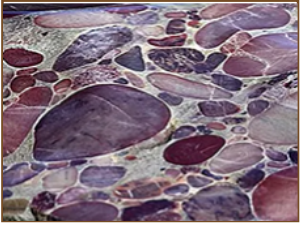
- planting potato for many sequence years.
- increasing the usage of organic fertilizers.
- the diversity of planting beans and potatoes.
- transforming houses garbage into fertilizers.

Which of the following compound mineral reflect light at high degree?

- pyrite.
- calcite.
- quartz.
- feldspar.

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There is a hand specimen for cemented grains in front of you :



It is expected that the dominant size of these grains is

- 2500 microns
- 1500 microns
- 500 microns
- 100 microns

Which of the following shapes can obsidian rock exists?

- Pillows.
- Dykes.
- Laccolith.
- Lopolith.

The repeated changes in temperature opposing with the formation of

- Kaolinite form granite.
- Talus slope at the foot of the mountain
- Rocks fragments at the desert
- Evaporates deposits formations

What's the name of the mountains produced from the collision between the indian plate with the urasian plate ?

- Himalaya
- Andes
- Maghara
- Alps

The rocks which are formed in tropical region and exist nowadays near North Pole has magnetic deflection angle about.....

- 30°
- zero
- 70°
- 90°

Economic minerals that are deposited when the speed of river decreases are called

- Black sand
- Flood plane
- Delta
- Dry delta

When we drill a well in Delta region , there was a succession of layers , a fragmented muddy layer was found above a sandy layer which above a limestone layer

The soil in this region will be

- transported
- residual
- constant
- calcareous

The amount of energy reaches to marine birds from zooplanktons is

- 0.1 %
- 1 %
- 10 %
- 100 %

Temperary vegetation in the desert is characterized by all of the following except.....

- Leave its seeds in soil in winter.
- Leave its seeds in soil in Summer.
- Seasonal non Specific.
- annual depends on rain water.

Which of the following is a native mineral with weak chemical bonds and cleavage in one direction?

- Graphite.
- Biotite.
- Muscovite.
- Halite.

Seas in region of Abo Tarur in New Vally 90 million years ago characterized by

- shallow and normal salinity
- deep and had high salinity
- deep and high temperature
- shallow and high temperature

Calcareous horizontal rocks found in low level area at depth of 133m lower than the sea level

This refers to the occurrence of

- slow tectonic movement
- fast tectonic movement
- occurrence of grabens
- occurrence of erosion for these layers

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What is the correct ascending order of subsurface igneous rocks in term of the percentage of silica?

- dolerite - diorite - microgranite.
- peridotite - microgranite - diorite.
- peridotite - diorite - gabbro.
- basalt - andesite - rhyolite.

If rhyolite is subjected to factors of the two types of weathering then its components exposed to compressing and intense pressure and low temperature

What is the type of formed rock?

- shale then slate
- mudstone then slate
- mudstone then shale
- mudstone then schist

There presence of coral reefs in Red Sea exposed at pressure about 7 atm- it may be accompanied with

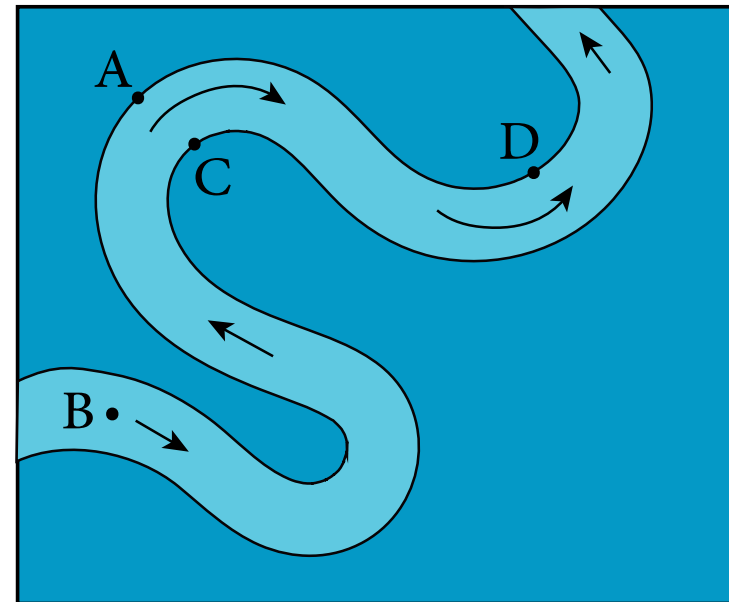
- fixed algae
- brown algae
- red algae
- vascular plants

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Which of the following phenomena formed as a result of passing water of river between rocks of different hardness on both sides ?

- Meanders
- River terraces
- River delta
- Water fall

The Opposite figure illustrates meanders of river A, B, C, D points in the stream bottom.



Which location has the Lowest speed?

- C and D
- A and B
- B and D
- D and A

The increase of population and industrial progress leads to depletion of all the following except

- Solar and wind energy
- Petroleum oil and solar energy
- Coal and wind energy
- Natural gas and nuclear fuel

The use of calcium nitrate as chemical fertilizer leads to.....

- erosion of soil
- decrease fertility soil
- removal of soil
- activity of earth worms

Which of the following resources need millions of years to be formed again ?

- hydrocarbon substance.
- rives water.
- agriculture crops.
- farm animals.