

Questions #01

"A" Rock is broken down by frost rain and Sun at A. what name is given by the process?

Ans:- Frost wedge weathering.

"B" How is sediment grain in a river changed during transport from A to B? state two difference in the likely appearance of the grain.

Ans:- The sediments reduce edges by transportation. The grains during A having high velocity and angularity while at position B the grain velocity decrease and its angularity convert into roundness.

"C" How do loose sediments at become change into solid rock?

Ans:- At stage C ~~the~~ sediments convert into solids rocks due to lithification process which is compaction and cementation.

"D" Rocks that are deeply buried in the Earth's crust may undergo metamorphism. Describe two change that happen in rocks during metamorphism & explain Point D?

Ans:- When rock undergoes burial condition then metamorphism occur. The change may be new texture, new mineral assemblages or both at point D due to high temperature the rock start melting and magma generation occur due to crustal anatexis.

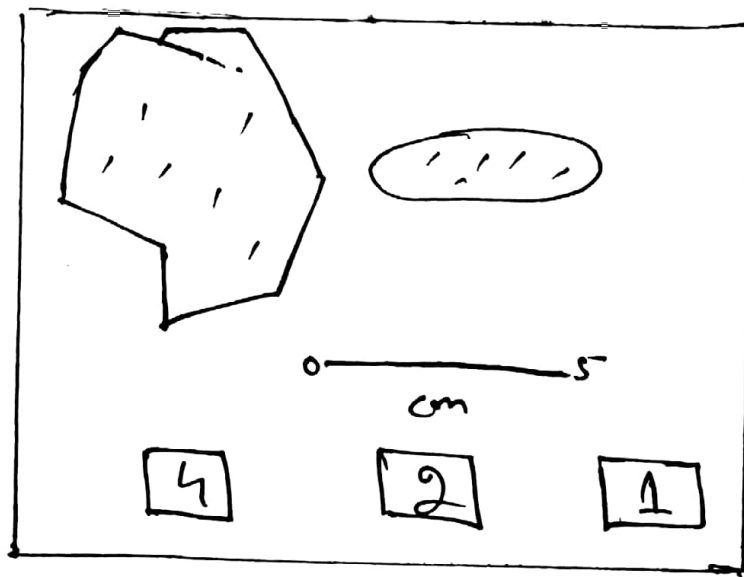
Question # 02

Shows the size and shape of typical sediment particles from the deposit produced.

- 1) Angular boulders, 2) clay mud
- 3) Rounded pebbles and sand, 4) Sloping and layers

i) In each box, write down the most likely number from the Deposit Produced Column in the table above.

Ans:-



ii) In your own words, explain how sediment particles change as they are transported downstream by a river.

Ans The sediment change due to transportation in a river. when sediment detaches from the source then its initial position is angular after that when it move downstream then its edges and angularity decrease.

Question #03

show the structure of a volcano and the rock layers beneath.

i) What type of volcano is shown in the figure by shape and if eruption is more often which category it fits?

Ans cinder cone volcanoes

If the eruption take place more than one time than it will be composite or stratovolcano.

"Q" Explain how gases trapped in the magma help produce the ash column.

Ans:- Magmas contain varying amounts of dissolved gases (volatiles) held in the molten rock by confining pressure. Just as carbon dioxide is held in can and bottles of soft drinks.

Question #4:-

i) In the table below are statements that refer to either weathering or erosion. Complete the table by writing weathering or Erosion in the spaces provided.

Ans:- Statement

| Statement | weathering / erosion |
|----------------------------------------------------------------|----------------------|
| Breakdown of rock without it being moved | weathering |
| Weathering away of rock during transport of rock particles | Erosion |
| A process caused by wind, running water and moving ice | Erosion |
| An effect of plants roots growing in rock joints and fractures | weathering |

ii)

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Ans:- The lime stone erosion occurs quickly as compared to sandstone due to their chemical composition which is suitable for chemical weathering. Water having carbonic acid when it passes from atmosphere in which CO_2 is present it makes water acidic and weathering of lime stone happens quickly.

iii)

Ans:- The igneous rocks formed from lava/magma which possess high temperature which melt the living things - so organisms cannot be preserved at that temperature.

iv)

Ans:- Granitic magma takes place long time in subsurface for crystallization which results in large crystals while in contrast the basaltic lava cools rapidly which takes short time for crystallization and forms small crystals.

v)

Ans:- The large sediments in a scree are due to less transportation and less erosion.