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- ↳ Answer the following:-
 (ii) In the below there are statements that refer to either weathering or erosion complete the table by writing weathering or erosion.

Statement	Reason
(i) Beating of rock with out is being moved.	(i) Weathering
(ii) Wearing away of rock during transport of rock particles.	(ii) Erosion.
(iii) A process caused by wind turning water & moving ice.	(iii) Erosion.
(iv) An effect of plant rock growing in rock joint & fractures.	(iv) weathering.

(b) Many people around the world live close to volcano. So, when a volcano erupts, thousands of lives may be at risk.

(i) Suggest one sign that might indicate if a volcano is about to erupt.

Ans: An increase in the frequency and intensity of felt earth quakes.
 * Small changes in heat flow.
 Subtle swelling of the ground surface.

(ii) Suggest two dangers that might result from ash fall near a volcano.

Ans: Health concerns after a volcanic eruption include infectious disease, respiratory illness, burns, injuries from falls, and vehicle accidents related to the slippery, hazy condition caused by ash.

D - Figure 4b

① In the table below are statements that refer to either weathering or

C- figure 3:-

Show the Structure of a volcano and the ~~Rock~~ layer beneath.

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

Ans: Composite volcano.

- (ii) The eruption shown in figure 3 is producing an "ash column" that rises thousand of meter above the volcano Summit.

- (a) Explain how gases trapped in the magma help produce the ash column.

Ans: The Composition of the gases in magma are:

* Mostly H_2O (water vapor) and some CO_2 .

* Minor amount of Sulfur, Chlorin and fluorine gases.

(This is the reaction that turns the indicator yellow. When you blow into water. The dilute carbonic acid then attacks limestone.

(iii) Why igneous rock never contain fossils?

Ans:- If the magma cools slowly large crystal form in the rock they are intrusive igneous rock because they form from magma underground. Unlike sedimentary rock, igneous rock do not contain any fossils. This is because any fossils in the original rock will have melted when the magma formed.

(iv) How and why is the size of the crystal in granite different from the size of the crystal in basalts?

Ans:- Igneous rock contain randomly arranged interlocking crystals. The size of the crystal depend on how quickly the molten magma solidified; magma that cools slowly form an igneous rock with large crystal. Lava that cools quickly will

① Break down of rock without being moved.

Ans:- Weathering.

(2) Wearing away of rock during transport of rock particle.

Ans:- Erosion.

(3) A process caused by wind, ~~sun~~ water and moving ice.

Ans:- Erosion.

(4) An effect of plant roots grow in rock joint and fracture.

Ans:- Weathering.

(ii) A Statue was made from limestone weather more quickly than Sandstone. What substance in the rainwater causes this?

Ans:- Carbon dioxide dissolves in rain forming very dilute ~~Carbonic dioxide~~ Carbonic acid.

Q.2 (i) In each box, write down the most likely mineral from the Deposit produced column in the table.

- ① clay mud.
- ② Rounded pebbles And Sand
- ③ Sloping Sand layers.
- ④ Angular boulders.

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

Ans: Sediments are most often transported by water, but also wind and glaciers. Beach Sands deposits are caused by river transport and deposition. Sediment also often settling out of slow-moving or standing water in lakes and oceans. when sediments is transported and deposited.

The changes occurs in Sediments are during erosion process and also the process of deposition in which factors are:

- ① The Settling rate.
- ② The boundary layer Shear Stress.

Examples Example of Sediments are breccia, conglomerate, Sandstone, and Siltstone are mechanical weathering of rock Salt. Some lime stones, are form where the materials participates from solution.

① What type of volcano is shown in the figure by shape and its eruption is more often, which category it fits?

Ans: The type of volcano shown in the given figure is composite volcano. Its eruption is more often. Composite volcano fits this figure.

viii) The eruption shown in figure 3 is producing an "Ash column" that ~~is~~ rises thousand of meters about the volcano summit. When the boiling fragments of liquid's magma hit the cold air they freeze in to individual dust particles, driven upwards.

② Explain how gases trapped in to the magma help produce the ash column.

form igneous rock with small
crystal.

- (v) Describe one process that might be responsible for producing the large, angular, poorly sorted fragment in the scree sedimentary collecting at the bottom of the cliff.

Ans: Sedimentary process that might be responsible for producing the large, angular, poorly sorted fragment in the scree sedimentary collecting at the bottom of the cliff.

Figure # "A"

- A: Weathering.
- "B" Grain changes due to erosion.
Grain size reduces and angularity decreases from B to C.
- "C" Deposition followed by overburdening & cementation.
- D: Rock density increases & metamorphic fabric develop with increasing grade of metamorphism. And at point D with increased temperature molten rocks rise up in the form of plutons due to decreased density.

Figure # "B"

- (i) Box one - 4
Box two - 2
Box three - 1

(ii) Grain changes due to erosion.
Grain size reduces & angularity decreases.

⇒ Figure # "C"

- (i) Cinder cone.
- (ii) low - More gases more explosive eruption more ash.
- ii b i. Hot gases & smoke comes out.
- ii b ii. Acid rain and lahar.

(i) weathering
erosion
erosion
weathering.

(ii) H_2SO_4 and H_2CO_3

(iii) igneous rocks forms in the subsurface
where organisms cannot sustain.

(iv) Slow cooling makes time for minerals
to accumulate and create larger
crystals. As basalt cools suddenly
so there is no time for crystal
formation, whereas a granitic
pluton has the potential to
grow crystalline.

(v) Land Sliding.

Day: MTWTFSS

Date: ___/___/___

Ans Three signs may include very small earthquakes beneath the volcano, slight inflation, or swelling, of the volcano and increased emission of heat and gas from vents on the volcano.

Q 2:-(i) In each box