

(1)

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SEMESTER 2<sup>nd</sup>, SECTION-"B"

A. Figure 1.

(a) Answer.

At point "A" in figure 1, the rock is broken down by frost, rain and sun, by the process of "weathering" of rocks. And then the weathering of rocks leads to the process of erosion.

(b) Answer

The sediments grains in a river river changed during transport from point "A" to "B" in figure 1, in such a way that the sediments collides with each other and with lill, so that the grains of sediments changed. (p.t.o)

②



### TWO DIFFERENCES IN GRAINS:

(1). The grains texture will firstly changed, from rough to smooth textures.

(2). Secondly the grain's size will reduced, because of collision.

### (c) Answer

The loose and inactive sediments at "c" in the results of weathering of rocks will changes into solid rocks by the process of sedimentation (accumulation of sediments) after taking time.

### (d) Answer

### TWO CHANGES IN BURIED ROCKS DUE TO

### METAMORPHISM:

Metamorphism in buried rocks in earth's crust may leads to the following changes; in rocks;

(1). The original color of the rocks may be changed.

(2). The textures, pores, and sizes may be changed. (p.t.o)

→

③

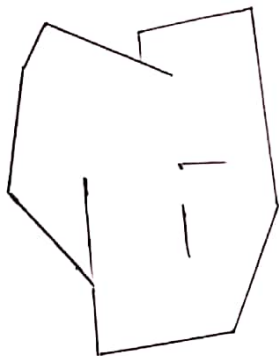
POINT "D" In 1.

The point "D" in figure 1, indicates that after different processes upon rocks, they reaches magma's and then they recycles and the cycle continues, which means that they form igneous rocks again. And the process/cycles completed again and again.

\* \_\_\_\_\_ \*

"B" Figure . 2.

(i) Answer



4



0 \_\_\_\_\_ 5  
cm

1



2

(p.t.o)

(4)

## (ii) Answer

When the sediments particles are about to transfer during the movement of downstream river, the sediments particles changes its size and texture due to movement and collision with each other.

During the transportation of these sediments particles, they may leads to the formation of sedimentary rocks. The size of these particles decreases gradually when they move downstream in a river.

After the geological weathering of rocks, these sediments have rough textures and gradually the texture of the sediments changes into smoothness, due to the collision of particles with each other.



(5)

## D: Statement!

### (i) Answer

STATEMENTS	WEATHERING / EROSION
Statement 1.	Weathering
Statement 2.	Erosion
Statement 3	<del>at</del> <sup>x</sup> Erosion
Statement 4	Weathering

### (iii) Answer.

Igneous Rock never contain fossils, because of high temperature of lava and magma, which approximately reaches 4000 degree-centigrade, And fossils can not survive in such a high temperature like that of lava and magma. And we know that igneous rocks are formed as a result of lava and magma. That's why igneous rocks never contain fossils.

(p.t.o)

⑥

(iv) Answer.

As we know that Granite is an example of intrusive igneous rock, and basalt is the example of extrusive igneous rock. So if Granite is underground of earth's crust and basalt occurs above the earth's surface, therefore the size of these two rocks will be different, because size depends upon the time of cooling of lava.

And that time of cooling results in changes in crystals sizes of granite and basalt. Also the air play an important role in the crystals formation of the rocks, which may be the cause of the change in size in the granite and basalt's crystals.

Due to that reason the sizes of crystals in granite and basalt differs from each other.

(p.t.o)

(7)

(v) Answer.

The process of weathering may be responsible for the formation of large, angular and poorly sorted fragments found at the bottom of the cliffs, which may be caused due to natural disasters, like earthquake etc.

Weathering and erosion of rocks leads to the formation and producing these fragments at the bottom of hills and cliffs.

(ii) Answer.

The presence of carbon-monoxide, and carbon dioxide, and Nitrogen etc in the rainwater causes the limestone weather more quickly than sandstone. Which can be chemically react with water and make rainwater more acidic, which leads to that situation.



(8)

### C. Figure 3

#### (I) Answer.

The volcano shown in the figure 3, is shield volcano. by shape because it seems like a shield cover upon earth's crust surface, and it fits its primarily type of shield volcano. shield volcano has no viscous lava and can come out from the magma easily and cover the earth's crust surface. It erupts more quietly and easily from magma.

#### (II)

#### (a) Answer

Gases inside magma leads to produces, bubbles after eruption, but sometimes due to highly pressure and temperature that trapped gases causes to produce "ash column" which has high speed and and temperature.

(p.t.o)



(9)

### (b) (i) Answer

The most common sign of volcanic eruption in the area of its eruption is the swelling of that specific area near the volcano path. Other signs may be detected like a small earthquake nearby, and steam eruption etc. but I suggest swelling of that area.

### (b) (ii) Answer

The people can not normally lives near the volcanic eruption, but the ash may be transported due to air very far away, which can cause the following two main dangers;

1. Respiratory problems.
2. Skin's and eye's problems. etc.

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Completed.