



### Daily Subjectwise Quiz Day 3 Geography III (Online Prelims Test)

1) Consider the following statements with respect to Earthquake Waves?

1. P-waves are body waves and are more destructive than surface waves.
2. P-waves travel only through solid medium whereas S-waves can travel through both solid and liquid medium.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : d

### Earthquake Waves

- P-waves move faster and are the first to arrive at the surface, these are also called 'primary waves'.
- The P-waves are similar to sound waves, they travel through gaseous, liquid and solid materials.
- S-waves arrive at the surface with some time lag, these are called secondary waves.
- An important fact about S-waves is that they can travel only through solid materials.
- The surface waves are the last to report on seismograph, These waves are more destructive.
- They cause displacement of rocks, and hence, the collapse of structures occurs.

2) Consider the following statements with respect to Volcanoes?

1. Volcanoes occur only where ocean crust collides with continental crust.
2. Shield volcanoes are mostly made up of basalt, a type of lava that is very fluid when erupted.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : b

### Volcanoes

- Earth quakes are usually associated with volcanoes, since both are related to plate movements.
- Volcanoes can also happen with ocean-ocean crust collision. Best example is South East Asian

### Archipelago

- The shield volcanoes are the largest of all the volcanoes on the earth
- These volcanoes are mostly made up of basalt, a type of lava that is very fluid when erupted.

3) Consider the following statements with respect to Intrusive Volcanic Landforms?

1. Batholiths are formed due to the solidification of hot magma inside the earth's crust.
2. Dykes are almost perpendicular to the earth's crust, are commonly found in the western Maharashtra region.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

## Intrusive Volcanic Landforms

### Batholiths

- Batholiths are formed due to the solidification of hot magma inside the earth's crust, they are in the form of large domes.
- They are the large granitic rock bodies formed at the core of the huge mountains.

### Dykes

- At the time of the volcanic eruption, the magma finds its way out through all possible ways like cracks and fissures in the land.
- This magma present in the cracks and the fissures gets cooled in the same position and forms a wall-like structure called Dykes.
- The Dykes are almost perpendicular to the earth's crust.
- The Dykes are commonly found in the western Maharashtra region.

4) Which of the following is/are correct about Types of Earthquakes?

1. Tectonic earthquakes are generated due to the sliding of rocks along the fault line.
2. Collapse earthquakes occur due to chemical or nuclear device explosions.

Select the correct answer using the codes below

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

## Types of Earthquake

- Among different types of earthquakes, the most common ones are the tectonic earthquakes, these are generated due to sliding of rocks along a fault plane.
- A special class of tectonic earthquake is sometimes recognized as volcanic earthquake, however, these are confined to areas of active volcanoes.

- In the areas of intense mining activity, sometimes the roofs of underground mines collapse causing minor tremors, these are called collapse earthquakes.
- Ground shaking may also occur due to the explosion of chemical or nuclear devices, Such tremors are called explosion earthquakes.
- The earthquakes that occur in the areas of large reservoirs are referred to as reservoir induced earthquakes.

5) Which of the following is/are correct about Volcanic Eruptions?

1. Basaltic eruption occurs at mid oceanic ridge and andesitic eruption occurs at volcanic arcs and mountains.
2. Andesitic eruption is more fluid and mobile than basaltic eruptions.

Select the correct answer using the codes below

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

## Volcanic Eruptions

- Basaltic eruptions are characterized by low gas content and low viscosity magmas.
- If the viscosity is low, non-explosive eruptions usually begin with fire fountains due to release of dissolved gases.
- They occur at mid-oceanic ridge and hot spot volcanism. Basalt is highly fluid -mobile and spread across quietly.
- Explosive or andesitic eruptions are favored by high gas content and high.
- Explosive bursting of bubbles will fragment the magma into clots of liquid that will cool as they fall through the air.
- Andesitic is less fluid mobile and solidifies at short distance due to intense pressure developed inside.