



**Question and answer**

**Chapter- Relief features of continents**

**III. Answer the following questions in brief.**

**1. Name the three main processes that lead to the formation of mountains.**

The three main processes that result in the formations of mountains are:

- a. Folding
- b. Faulting
- c. Volcanic eruption

**2. What is the difference between a syncline and an anticline?**

In folding, the upward folds or ridges are known as anticlines, while the downward folds or valleys are called synclines.

**3. What is a rift valley?**

The rift valley is formed when the land between the faults sinks down.

**4. What is the significance of a plateau?**

Significance of a plateau are:

- a. Most of the plateaus are rich in minerals.
- b. Plateaus are made up of black soil hence good for the cultivation of cotton and sugarcane.
- c. Plateaus have a series of waterfalls hence ideal for generating hydroelectricity.

**5. What makes the plains fertile?**

Most of the plains are formed as the rivers and their tributaries carry materials from mountains which are rich in sand, silt and clay called alluvium and deposit it making them very fertile.

**IV. Answer the following questions in detail.**

**1. Differentiate between young and old fold mountains.**

Young Fold Mountains	Old Fold Mountains
They are recently formed, approximately 40 million years ago	They are formed 200-300 million years ago
They are high, have conical peaks covered with snow and ice.	They are old. low and have dissected peaks
Example-Mt. Everest	Example-Aravallis

**2. What is faulting? Give examples of landforms formed by this process.**

- a. The part of the lithospheric plates, that gets uplifted by push or pull movements as a result of, is known as a block mountain or horst.

b. Example: The Harz Mountains of Germany and the mountain ranges of Nevada and Utah in the USA, are block mountains that were caused as a result of faulting.

c. Similarly, a rift valley or graben, is formed when the land between the faults sinks down.

### 3. How are volcanic mountains formed?

Volcanic Mountains are formed when hot molten rock (magma) found deep inside the Earth, erupts through openings or vents in the crust, and piles up on the surface. Magma is called lava when it breaks through the crust and comes to the surface of the Earth. When the ash and lava cools, it builds a cone of rock. Rock and lava pile up. layer upon layer, often forming a mountain. Some examples of volcanic mountains are Mt Fujiyama (in Japan), Mt Vesuvius (in Italy).

### 4. How are plateaus different from mountains?

Plateaus	Mountains
A plateau is a flat land that is raised much higher than the surrounding areas.	Mountains are landforms that are raised steeply forming peaks, above the surrounding land.
Plateaus are formed by geological forces such as tectonic or volcanic action.	Mountains are formed by folding, faulting or volcanic eruption.
Plateaus are rich in minerals, and suitable for growing cotton.	Mountains are rich in water resources, and famous for tourism and horticulture.
Example: The Tibetan plateau, the Peninsular Plateau	Example: Himalayas, Alps

### 5. Why are plains so densely populated?

a. Flat land favours easy construction of houses.

b. Flat land and fertile soil are good for practicing agriculture.

c. They have a favourable climate for human habitation.

d. Water is easily available for domestic and industrial activities.

e. Flat land also favours easy construction of roadways and railways.

### My Geography Corner

Be a Reporter

You are a news reporter who is accompanying a team of geologists. Write a short report on how and why people constantly try to change the surrounding landscape.

Did you mention; housing: mining: agriculture: transport-in your report?

In recent times, no colonised landmass has remained the same. This is because man is constantly changing landforms to suit his needs and requirements, whether it be flattening land to build houses or practice agriculture; carve out roads on mountains and build runnels for road or rail transport; alter landscapes for mining or build dams to conserve water. If we could obtain images of landscapes before and after man colonised areas we would see a stark contrast and easily identify how we changed the landscapes we reside in. Man is the only species on earth who has widely altered landscapes to suit his needs rather than adapting to what land and nature has to offer. We have to see whether in the future such activities continue to be a boon or may become the bane of our existence.

### **Skill Focus**

Look at the three photographs of different landforms of the Earth given below. Identify the type of landform and write one characteristic feature of each in the following table.

	Name of the Landform	Characteristic Feature
Photograph 1	Volcanic Mountain	Volcanic mountains are formed when hot molten rock (magma) found deep inside the Earth, erupts through openings or vents in the crust and piles up on the surface.
Photograph 2	Plateau	A plateau is a flat area of land that is raised much higher than the surrounding area.
Photograph 3	Plain	Plains are flat and low-lying areas, not more than 200 m above the sea level.

If there were no landforms on the Earth, it might look like any one of the following:

A flat shapeless and featureless mass of land surrounded by water.

A world filled with water as there would be no continents that would have risen above sea level.