

Major Landforms of the earth

(1)

E.1. Name the four types of mountains. Give an example of each.

Ans - They are:

- (a) Young Fold Mountains - The Himalayas, The Andes, The Alps, The Rockies.
- (b) Old Fold Mountains - The Aravallis, The Ural and the Appalachians.
- (c) Block Mountains - Vosges, Black Forest, Vindhya and Satpura.
- (d) Volcanic Mountains - Mt. Vesuvius, Mt. Fuji and Mt. Kilimanjaro.

2. Define a plateau. By what other name is it called?

Ans - A plateau is a large mass of comparatively flat land that rises abruptly from the surrounding area. It is also called a tableland.

3. Distinguish between an intermontane plateau and a Piedmont plateau.

Ans. Intermontane Plateau

i) They are enclosed by mountain ranges.
example - Tibet, Bolivia, Iran

Piedmont Plateau

i) They are formed at the foot of the mountains.
example - Patagonia in Argentina

4. How are volcanic plateaus formed? Give an example.

Ans - They are formed due to cooling and solidification of hot molten lava. For example, Mt Vesuvius, Mt Kilimanjaro.

5. How are erosional plains and depositional plains different from each other?

Ans - Erosional Plains

i) These plains have been formed as a result of the continuous wearing down of highlands by the agents of erosion.
Example - West Siberian.

Depositional Plains

i) These plains have been formed by the deposition of silt, sand, clay by rivers in low-lying areas.
Example - Northern Plains of India.

F.I. Distinguish between endogenic processes and exogenic processes.

Ans. Endogenic Processes

Exogenic Processes

i) These processes are also called tectonic processes and the forces act from inside the earth.

i) These processes are also called external processes and they act on the surface of the earth.

ii) They occur suddenly and cause upliftment and subsidence of the earth's crust, leads to folding, faulting, volcanic eruptions and earthquakes.

ii) Running water, moving ice, wind and waves help in weathering, erosion, transportation and deposition of the weathered and eroded material.

2. Explain the formation of fold mountains. Differentiate between young fold mountains and old fold mountains giving examples of each.

Ans - They are formed due to compression and folding of horizontal layers of sediments.

Young Fold Mountains

Old Fold Mountains

i) They are high, with steep slopes and sharp, pointed peaks.

i) They are low in ~~height~~ height, with gentle slopes and rounded peaks.

ii) They consist of parallel ranges and are snow peaked.

ii) They have undergone erosion for millions of years and have been worked out.

Example - The Himalayas, the Alps, the Rockies and Andes.

Example - Aravallis, Urals and Appalachians.

3. How are residual plateaus formed? Give examples.

Ans - They are formed when old fold or block mountains are worn down by millions of years of erosion and sometimes get converted to plateaus. For example - Fjeld in Scandinavia, Cumberland in the USA, Central Rhine in Germany.

4. Explain how rift valleys are formed. Name the three major rift valleys of the world.

Ans - During the process of faulting, the Earth's crust breaks down into several blocks. These blocks either get uplifted or subside along the plane of fault. The uplifted blocks are called block mountains and the subsided blocks

are called rift valleys. They are deep with steep, vertical walls. (3)

The three major rift valleys of the world are the African Rift Valley, the Rhine River Valley and the Narmada River Valley.

5. Compare erosional and structural plains. Give examples.

Ans - Erosional Plains

i) These plains have been formed as a result of the continuous wearing down of highlands by the agents of erosion.

Example - West Siberian.

Structural Plains

i) These plains have been formed in those areas where the rock layers on the Earth's crust are aligned almost horizontally.

Example - Russian Platform.

Q.1. Compare block mountains with volcanic mountains. State their formation and characteristics. Give relevant examples of each.

Ans - Block mountains

i) Due to upliftment or subsidence of blocks along the faults formed on the crust due to forces of compression or tension.

ii) They are shaped like a block.

Example - Vosges, Vindhya, Satpura, Black Forest.

Volcanic mountains

i) They are formed due to cooling and solidification of hot, molten lava.

ii) They are shaped like a cone.

Example - Mt Vesuvius, Mt Kilimanjaro, Mt Fuji.

2. Explain why mountains are considered an important natural resource.

Ans - i) Mountains give rise to many perennial rivers which provide water for irrigation, electricity and other uses.

ii) They provide minerals for industries and stones for construction.

iii) The dense forest of mountains are home to a variety of wildlife.

iv) They act as a climatic barrier and are also famous for their scenic beauty.

3. How are plateaus useful to us?

Ans - Plateaus are useful to us in the following ways:

- i) They are a storehouse of minerals.
- ii) Waterfalls formed in the plateau regions are utilised for generating hydroelectricity.
- iii) Volcanic plateaus are extremely fertile and good for cultivation of cotton and sugarcane.
- iv) The natural beauty of the plateau areas also attracts many tourists.

4.1. Old fold mountains have rounded peaks while young fold mountains have sharp, pointed peaks.

Ans - i) Old fold mountains have rounded peaks because they have undergone erosion for millions of years and have been worked out.

ii) Young fold mountains have sharp, pointed peaks because they are formed quite recently according to earth's geological history.

2. Volcanic plateaus are suitable for the cultivation of cotton and sugarcane.

Ans - i) It is because soil found in these plateaus are black lava soil which is good for growing cotton and sugarcane.

ii) These plateaus are also extremely good for the cultivation of these crops.

3. A number of hydel power stations are located in the plateau regions.

Ans - i) It is because rivers in the plateau regions form a number of waterfalls as they drop abruptly down the steep slopes.

ii) These waterfalls are utilised for generating hydro-electricity.

4. Plains are the most thickly populated regions of the world.

Ans - i) It is because most plains have fertile soil and provide ideal conditions for agriculture.

ii) The flat surface of plains helps in the construction of transport networks, buildings and industries.

Extra Questions

- 1) What does endogenic processes leads to ?
- 2) Give examples of exogenic processes.
- 3) What is a mountain ?
- 4) Mention the three ranges of the Himalayas.
- 5) Define - (a) Fault line (b) Block mountain (c) Valleys (d) Gorges
- 6) Name the longest rift valley in the world.
- 7) Mention the importance of valleys.
- 8) Differentiate between mountains and plains (3 points)
- 9) Mention the importance of plateaus and plains.
- 10) Define - Tectonic Plateaus, mountains and Peak.