

Q: Name the four types of mountains based on their mode of formation , and also describe briefly

A: The four main types of mountains, classified by their formation, are:

1. **Fold Mountains:** These are formed by the compression of Earth's tectonic plates. As plates collide, the edges of the plates are forced upwards and folded, creating long mountain ranges. The Himalayas and the Alps are classic examples of fold mountains. They are characterized by their layered structure and often have parallel ridges and valleys.

2. **Fault-Block Mountains:** These mountains form when large areas of Earth's crust are fractured (faulted) and then raised or lowered along the faults. This creates blocks of land that are elevated, forming mountains with steep sides and relatively flat tops. The Sierra Nevada mountains in California are a good example.

3. **Dome Mountains:** These are formed by the upwelling of magma beneath the Earth's surface. The magma doesn't reach the surface to erupt as a volcano, instead, it pushes the overlying rock layers upwards, creating a dome-like structure. Erosion then wears away the top layers, exposing the underlying rock and creating a circular or elliptical mountain range. The Black Hills of South Dakota are an example.

4. **Volcanic Mountains:** These are formed by the accumulation of lava, ash, and other volcanic materials erupted from a volcano. They can be single, cone-shaped mountains (like Mount Fuji) or part of larger, more complex volcanic ranges. The Hawaiian Islands are a prime example of volcanic mountains.

Q: any three economic benefits of mountains . (4 + 6) = 10

A: Three economic benefits of mountains are:

1. **Tourism:** Mountains offer stunning scenery, opportunities for outdoor recreation (hiking, skiing, climbing), and unique cultural experiences, attracting tourists who spend money on accommodation, food, transportation, and activities, boosting local economies.
2. **Hydropower:** Mountainous regions often have significant water resources, enabling the construction of hydroelectric dams that generate clean energy, a valuable commodity sold to consumers or used to power industries.
3. **Mineral Resources:** Mountains can be rich in mineral deposits (e.g., gold, silver, copper) which are extracted and processed, creating jobs and generating revenue through export and domestic use.

Q: Describe briefly five major characteristic of traditional Agriculture in India . (10x1) = 10

A: 1. **Small and fragmented landholdings:** Traditional Indian agriculture is characterized by a large number of small and scattered land parcels, limiting economies of scale and efficient farming practices.

2. **Dependence on monsoon:** Rainfall is highly unpredictable, making crop yields vulnerable to monsoon variations and leading to significant income instability for farmers.

3. **Low use of technology and inputs:** Traditional methods often rely on manual labor, low-yielding seed varieties, and limited use of fertilizers and pesticides, resulting in lower productivity.

4. **Subsistence farming:** A significant portion of Indian agriculture is focused on producing food primarily for the farmer's family's consumption, rather than for commercial sale.

5. **High labor intensity:** Farming relies heavily on manual labor, particularly during crucial periods like sowing and harvesting, employing a large portion of the rural workforce.

Q: Distinguish between land breeze and sea breeze . Give five distinctive features of each . (10x1)
= 10

A: **Land Breeze:**

1. **Direction:** Blows from land towards the sea.
2. **Time of occurrence:** Occurs during night and early morning hours.
3. **Temperature:** Cooler air moves from land to sea.
4. **Cause:** Land cools down faster than the sea at night, creating a higher pressure area over land. Air flows from high to low pressure.
5. **Scale:** Usually a smaller-scale, localized breeze.

Sea Breeze:

1. **Direction:** Blows from sea towards the land.
2. **Time of occurrence:** Occurs during the day.
3. **Temperature:** Warmer air moves from sea to land.
4. **Cause:** Land heats up faster than the sea during the day, creating a lower pressure area over land. Air flows from high to low pressure.
5. **Scale:** Can be a more extensive breeze than land breeze, affecting larger coastal areas.