

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

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

1. **Fold Mountains:** These mountains are formed by the collision of two tectonic plates. The immense pressure causes the Earth's crust to buckle and fold upwards, creating long, often parallel ranges. The Himalayas and the Alps are prime examples of fold mountains.

2. **Fault-Block Mountains:** These mountains are formed by tectonic forces that cause large blocks of the Earth's crust to be uplifted or down-dropped along faults (fractures in the Earth's crust). The Sierra Nevada mountains in California are a classic example. They are characterized by steep, straight sides and relatively flat tops.

3. **Dome Mountains:** These mountains form when magma pushes upward from below the Earth's surface, but doesn't actually erupt. The pressure causes the overlying rock layers to dome upwards. Black Hills in South Dakota are an example. Erosion then carves the dome into a mountain range.

4. **Volcanic Mountains:** These mountains are formed by the accumulation of lava, ash, and other volcanic materials erupted from a volcano. Mount Fuji in Japan and Mount Rainier in the US are examples. They can be characterized by their conical shape, although erosion can alter their appearance over time.

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

A: Mountains offer several economic benefits. Here are three:

1. **Tourism and Recreation:** Mountainous regions attract significant tourism revenue through activities like skiing, hiking, climbing, and scenic viewing. This generates income for local businesses (hotels, restaurants, equipment rentals, guides), creates jobs, and boosts regional economies.
2. **Hydropower Generation:** Mountains often have significant water resources from melting snow and glaciers. This facilitates the construction of hydroelectric dams, providing a clean and renewable source of energy that can be sold to power grids, creating jobs in construction and operation and reducing reliance on fossil fuels.
3. **Mineral and Resource Extraction:** Mountains frequently contain valuable mineral deposits (e.g., gold, copper, coal) and other resources. The extraction and processing of these resources create jobs, generate revenue through export and taxes, and contribute to national economies, although this benefit must be carefully weighed against potential environmental costs.

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 fragmented landholdings, limiting economies of scale and efficient farming practices.
  2. **Dependence on monsoon:** Rainfall is highly unpredictable, making agriculture heavily reliant on the monsoon season, leading to vulnerability to droughts and floods.
  3. **Low technology adoption:** Traditional methods dominate, with limited use of modern machinery, high-yielding varieties (HYVs), and fertilizers.

4. **Labor-intensive practices:** Farming relies significantly on human and animal labor, resulting in low productivity compared to mechanized agriculture.

5. **Subsistence farming:** A large proportion of farmers practice subsistence agriculture, producing primarily for their own consumption rather than for market sale.

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 at night.
3. **Temperature:** Cooler air moves from land to sea.
4. **Pressure:** Higher pressure over land (colder air is denser).
5. **Scale:** Typically a smaller-scale, local wind system.

**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. **Pressure:** Higher pressure over sea (colder air is denser).
5. **Scale:** Typically a smaller-scale, local wind system, similar to land breeze.