

Short Questions

Q1. Identify two lands in coastal areas and tell how these are formed by waves.

Ans: Sea Cliff: When waves strike a rising hard rock continuously, its parts are torn down. The rock piece thus gets a steeper face and called a Sea cliff.

Bays: At places the waves advance on an area of soft and hard rocks. The soft rocks are eroded earlier. Thus appear bays.

Q2. Write how an Ox-bow lake is formed by river?

Ans:

- Sometime a meander becomes much large and outside bend of the bank becomes almost a complete circle.
- Soon after, the river cuts through the narrow neck of the loop.
- The river thus begins to flow straight again; leaving the loop filled with shallow water.
- It is called an Ox-bow lake.

Q3. Define continental glacier?

Ans: The kind of glacier covering extensive area such as the whole continent or a large part of it is called continental glacier.

Q4. What are sand dunes?

Ans: Dune is a heap of sand which is continuously modified by the blowing winds.

Q5. Which agent of landform change makes moraines? Give examples of an area where moraines are spread over surface.

Ans:

- A glacier moving over mountain slopes carries much rock materials called moraines.
- Rock materials that fall on the side of a glacier are called lateral moraines.
- When such material belongs to two merging glaciers, it is termed as medial moraines.

Q6. How a "barchans" is shaped in a desert?

Ans:

- Sand dunes that are formed by constantly blowing over a shrub or tree, soon assume a crescent like shape.
- Barchans are formed slanting to the direction of the blow wind.

- When two or more barchans meet, they can form compound barchans dunes with varied shapes in the desert.

Q7. Which features appear as a result of wave action at the sea coast made up of hard rocks.

Ans:

- The continued erosion of rock surface leads to formation of cave.
- When two caves are cut from different sides their ultimate joining makes an arch.
- With the passage of time the arch falls, and rock remains standing as a pillar called stack.

Q8. What are the different stages of river?

Ans: Mountain stage: At this stage, river is more active as an agent of erosion. Hence features that carved out are V-shape valley, Gorge and waterfalls etc.

Plain Stage: At this stage, work of the river is mainly transportation.

Features that carved out are Gently- Sloping valley, meanders and Ox-bow lake, flood plain and levees.

Delta Stage: At this final stage, water now flows out through small channels called distributaries. Thus emerges a typical landform much in shape with Greek letter (Δ) called delta.

Q9. What is wave?

Ans: wave is the up and down movement of water in lakes, seas or Oceans.

Q10. What is waterfall?

Ans: when waterfalls from sufficient height it is said to have formed a waterfall.

Long question

Q1. Give detail of Erosional and depositional landforms formed by glacier?

Ans. Erosional landforms: As glacier moves, its rate of movement is faster at the middle, Following are the features carved out by glacial erosion:

1. **Cirque:** At the head of valley a glacier cuts its base deeper, and appears a semi-circular hollow, known as cirque.
2. **V-shaped valley:** There appears a flat floor with very steep slopes. Here it very much looks like v known as v-shaped valley.
3. **Hanging valley:** Bed of a tributary glacier valley that was not cut deep, appear hanging and called hanging valley.

4. **Flord:** Glacier continues cutting its valley onto the sea bed. Soon it causes formation of steep sided inlet of the sea called flord.

Depositional landforms: A glacier carried much heavier and also lighter materials to greater distances. This material is deposited as a glacier melts recedes.

Following are the features carved out by depositional landforms.

1. **Erratic:** A massive ice-sheet advancing in the ice-age carried much large lumps of rock called boulder (erratic).
2. **Till:** A mixed variety of glacier (ice-sheet) left material is known as till.
3. **Moraines:** A glacier moving over mountain slopes carries much rock materials called moraines.
4. **Drumlins:** In some areas a ice-sheet leaves its material in small heaps of sand-clay mixture called drumlins.
5. **Icebergs:** when glacier flows right down to a sea, it drops its load of moraines in the sea. Here its end piece breaks off from the main glacier forming an iceberg.

Q2. Discuss erosional landforms of wind?

Ans. The horizontal movement of air over the earth surface is called wind. Wind is also a strong agent of landform change.

Following are some of the important erosional landform change.

1. **Blow out:** Strong winds blow away the loose and fine materials in the derest areas. Consequently a bowl shaped depression is formed which is known as blow out.
2. **Mushroom rocks:** Sometimes a block of hard rock's is surrounded by soft rocks. The blowing winds change it into a structure like mushroom called mushroom rock.
3. **Yardangs:** In some places, the wind erodes the soft rock while the hard rock remain intact. As a result steep sided ridges are formed. Such structures are known as yardange.

Depositional landforms of wind:

1. **Sand dunes:** Dune is a heap of sand, which is continuously modified by the blowing winds. The dunes can be classified into the following types.
2. **Barchans:** These are the crescent shaped dunes with tips pointing in the direction of wind.
3. **Longitudinal dunes:** Blowing winds arrange the sand deposits in a series of parallel ridges resulting into the formation of longitudinal ridge resulting into the formation of longitudinal dunes.
4. **Transverse Dunes:** There are also long ridges of sand lie at right angle to the direction of winds.
5. **Loess plain:** A plain formed by the deposition of fine yellowish sand and dust is called loess plain.