Various Landforms

Mainly there are three types of landforms - Mountains, Plateaus, Plains.

Mountains:
The height of mountains is over 600 m and have conical peaks. On the basis of origin there are four types of mountains: Block Mountains, Residual Mountains, Accumulated Mountains and Fold Mountains.

Block Mountains

- The middle part of such mountains is lower and the parts on both the sides are higher. The middle lower portion is called as **Rift valley**. The longest rift valley is the valley of the Jordan river.
- Black Forest (Germany) Vindhyachal and Satpura (India), Salt Range (Pakistan) are some examples of block mountains.

Residual Mountains

- Such mountains are formed as a result of weathering. Examples - Aravalli, Nilgiri, Parasnath, Hills of Rajmahal (India), Siera (Spain).

Accumulated Mountains

- These are formed due to accumulation of sand, soil, rocks, lava etc. on the Earth's Crust., e.g. Sand Dunes.

Fold Mountains

- These are formed because of the folds in the rocks due to internal motions of the earth. These are wavelike mountains which have numerous peaks and lows, e.g. Himalayas, Ural, Alps, Rockies, Andes etc.

Plateaus:

- Plateaus are extensive upland areas characterised by flat and rough top surface and steep walls which rise above the neighbouring ground surface at least for 300 m.
- Generally, the height of plateau ranges from 300 to 500 feet.
- **Intermountainous Plateaus:** Plateaus formed between mountain, Example - Tibetan Plateau.
- **Mountainstep Plateaus:** The flat region between a plain and the base of a mountain.
- **Continental Plateaus:** These are formed when the Lacolith inside the Earth comes to the surface due to weathering, e.g.

the Southern Plateau.

- **Bank Plateaus:** These are the plateaus on the banks of the oceans.
- **Domelike Plateaus:** These are formed due to the movement of man and animals on the surface. e.g. Ramgarh Plateau.

Some plateaus having more than average height	
Tibetan Plateau	16,000 ft
Bolivian Plateau	11,800 ft
Columbian Plateau	7,800 ft

Plains:

Plains can be defined as flat areas with low height (below 500 ft.)

- **Weathered Plains:** The plains formed due to weathering by rivers, glaciers, winds etc.
- **Loess Plains:** These are formed by the soil and sands brought by winds.
- **Karst Plains:** Plains formed due to the weathering of limestone.
- **Erosional Plains:** Plains near the river banks formed by river erosion
- **Glacial Plains:** Marshy plains formed due to the deposition of ice.
- **Desert Plains:** These are formed as a result of the flow of rivers.
- **Deposition Plains:** Large plains are formed due to the silt brought by the rivers. Such plains are plains of Ganga Sutlej, Mississippi, Hwang - Ho.

Pastures (or Grasslands):

They can be divided into two types:

(i) Tropical Pastures and

(ii) Temperate Pastures

Tropical Pastures: They have different names in different countries. Savanna in Africa, Campos in Brazil, Lanos in Venezuela and Columbia.

Temperate Pastures: They are known by the following names - Prairies in USA and Canada, Pampas in Argentina Veld in South Africa, Rangelands or Downs in Australia and New Zealand, Steppes in Eurasia (Ukraine, Russia).

Land forms created by the river system V - shaped valley:

- A river flows with a greater velocity in the mountainous region and big pointed fragments of rock also flow with a great speed along with the water.
- The river bed is scoured and down cutting starts, ultimately giving rise to a deep valley with steep sides.
- This valley is called a v - shaped valley.
- These valleys are found in mountainous regions.
- A deep and narrow valley with steep sides is called a gorge.
- The gorge of the river Ulhas in Thane district in Maharashtra and the gorge of the river Narmada at Bhedaghat near Jabalpur

in Madhya Pradesh are well known.
- There are many gorges in the Himalayas.

Waterfall

- If there are both hard (resistant) and soft (less resistant) rocks in the course of the river, the less resistant rock is eroded faster
- The resistant rock does not erode so easily. That is why, the river falls with a great speed from a cliff - like part of hard rock. This is called a waterfall.
- The **Niagara Falls** on the Niagara river is in North America.

Potholes

- In areas where the river bed consists of hard rock, the stones carried along with the river water due to the whirling impact of water.
- That is why holes of various shapes are formed in the rocky river bed. Such holes are called potholes.
- Many potholes are observed in the river bed of the Kukadi, Krishna, Godavari etc. in Maharashtra.

Fan - shaped plains

- In the region near the source of a river the tributaries joining the main river deposit materials carried by them on the banks of the main river.
- This deposition creates fan - like plains. They are called **fan - shaped** plains or alluvial fans.

Flood plains

- When, during the floods, the river - water overflows its banks and spreads in the surrounding areas, the silt carried by the water gets deposited in those areas. This creates flat plains on both the banks of the river. Plains created by this depositional work done during floods are called **flood plains**.
- The Gangetic Plain is a flood plain.