Chapter 6 Major Landforms of the earth

Landforms

- Landforms are a result of various processes on the earth.
- The internal processes take place in the form of continuous movements within the earth.
- They lead to the upliftment and sinking of the earth's surface at different places.
- External processes cause the wearing down and rebuilding of the earth's surface through erosion and deposition.
- The agents of external processes are running water, ice and wind.
- Landforms are divided as mountains, plateaus and plains on the basis of elevation and slope.

The three landforms

Mountains

- Mountains are the natural elevations of earth's surface with a broad base, steep slopes and a small summit.
- Some mountains have permanent frozen rivers of ice called glaciers.
- Mountains are mostly arranged in a linear form called range.
- The harsh climate and topography of mountains is not ideal for human settlement and agriculture.
- ➤ The three types of mountains on the basis of their formations are fold mountains, block mountains and volcanic mountains.

Fold Mountains

- Fold Mountains are formed by the process of folding of landforms.
- They have high conical peaks and rugged relief.
- ➤ Himalayan mountains and the Alps are young fold mountains.
- Aravali range in India is the oldest fold mountain in the world that has been worn down by erosion.

Block Mountains

- ➤ Block mountains are formed when large areas are broken and displaced vertically in the form of blocks.
- The uplifted blocks and lowered blocks are known as horsts and graben respectively.
- ➤ The Rhine Valley and the Vosges Mountain in Europe are examples of block mountains.

Volcanic Mountains

- Volcanic Mountains are formed due to volcanic activities.
- Examples of volcanic mountains are Mt. Kilimanjaro in Africa and Mt. Fujiyama in Japan.

Advantages

- ➤ Mountain glaciers are the source of many rivers that are harnessed, used for irrigation and for the generation of hydro-electricity.
- ➤ The river valleys and terraces are good for cultivation.
- Mountains have forests that are rich in flora, fauna, minerals and other products.
- Mountains are tourist spots and suitable for adventurous sports.

Plateaus

- ➤ Plateaus are elevated flat table lands with height varying from a few hundred meters to several thousand meters.
- The Tibetan plateau is the highest plateau in the world with a height of 4000 to 6000 meters above the mean sea level.
- ➤ Plateau regions are rich in minerals and black soil that is good for cultivation.
- Waterfalls also occur on the plateaus.
- ➤ Plateaus have scenic spots which encourage tourism.

Plains

- ➤ Plains are large stretches of flat land which are generally not more than 200 meters above mean sea level.
- ➤ Plains are formed due to deposition of sediments and eroded materials by rivers.
- ➤ The level topography of plains encourages human settlement, transportation and construction of houses.
- The soil in the plains is very fertile and good for cultivation.
- ➤ Plains formed by River Ganga and Brahmaputra in India and by River Yangtze in China are examples of largest plains formed by rivers.