

Revision Notes

Chapter – 7

Weather, Climate and Adaptations to Climate

- **Weather:** Weather is the day-to-day condition of the atmosphere at a place influenced by factors like humidity, temperature, wind speed, etc.
- **Humidity** is the amount of water vapour present in the atmosphere and is measured by a hygrometer.
- **Climate:** It is the average weather conditions at a specific place over a longer period of time.
- **Factor affecting climate:**
- **Topography:** It means the shape of a land.
- **Sea level:** Distance from the sea and nearby water bodies are one of the influential factors that affect the climate of a region.
- **Ocean currents:** Ocean currents can transfer heat energy from land to sea or vice versa thus affecting the temperature of the region
- **Prevailing winds:** Winds distribute particular air masses. The direction of the wind can determine the climate of a region.
- **Human influence:** While all the above are natural factors, we the humans are one of the most devastating factors that have triggered this climate change.

Adaptations to Climate: The features and habits that help animals to live in a habitat are called adaptations.

- **Three regions are classified according to adaptation:**
 - (i) **Polar Regions:** Polar regions have extreme climate. Sun does not rise at poles for 6 months and does not set for the other 6 months.
 - (ii) **Tropical Rainforest:** Having hot summers and plenty of rainfall. Days and nights are almost equal in length throughout the year.
 - (iii) **Desert:** Have extreme climate. Receive less rainfall and large amount of sunlight.
- **Migration:**
 - (i) It is the mass movement of animals, mostly birds, from colder places to warmer regions to escape the cold, to breed or due to shortage of food.

(ii) Birds are guided by the sun during the day and the stars at night.

Example: Siberian crane comes to India from Siberia every year.