Q.1. How is carbon dioxide useful?

Ans. (i) Green plants use carbon dioxide to make their food and release oxygen.

(ii) Humans or animals release carbon dioxide.

(iii) The amount of carbon dioxide released by humans or animals seems to be equal to the amount used by the plants which make a perfect balance.

(iv) However, the balance is upset by burning of fuels, like coal and oil. All this affects earth's weather and climate.

Q.2. How does air pressure get affected due to layers of atmosphere?

Ans.

- The pressure falls rapidly as we go up the layers of the atmosphere.
- The air pressure is highest at the sea level and decreases with height.
- Horizontally, the distribution of air pressure is influenced by temperature of air at a given place.
- In areas where temperature is high, the air gets heated and thus rises.
- This creates a low-pressure area, which leads to cloudy skies and wet weather.
- In areas with low temperature, air is cold and pressure is heavy.
- Heavy air sinks and creates a high-pressure area.
- High pressure is associated with clear and sunny skies.
- Air moves from high-pressure to low pressure areas.

Q.3. How are winds classified?

Ans. Winds are classified into three types:

(i) **Permanent winds:** It consists of trade winds, westerlies and easterlies. These blow constantly throughout the year in a particular direction.

(ii) Seasonal winds: These winds change their direction in different seasons, like monsoons in India.

(iii) Local winds: These blow only during a particular part of the day or year in one area or the whole area; for examples, land and sea breeze or winds in North India.