

Chapter – 4 (Geography)

Class-- 7

AIR

Structure of the atmosphere

Our atmosphere is divided into five layers which are: Troposphere, Stratosphere, Mesosphere, Thermosphere and Exosphere.



Troposphere: It is the most important layer of the atmosphere. The air we breathe exists here. It has the following features:

(1) Its average height is 13 km.

(2) Almost all the weather phenomena occur in this layer. The weather phenomena include: Rainfall, Fog, Hailstorm etc.

Stratosphere: This layer is just above the troposphere and has the following features:

(1) It extends to a height of 50 km.

(2) It is almost free from clouds and associated weather phenomena that occur in the troposphere.

(3) It is most ideal for flying aeroplanes since it is free from weather phenomena.

(4) It contains a layer of ozone gas which protects us from the harmful effect of ultraviolet rays from the sun. The

depletion of the ozone layer of late is a serious concern for all of us.

Mesosphere: It is the third layer of the atmosphere and it lies above the stratosphere. It extends upto a height of 80 km. The burning of meteorites on entering from space occurs in this layer.

Thermosphere: It is the fourth layer and the layer above the mesosphere. In this layer, temperature rises very rapidly with increase in height. Ionosphere is a part of this layer. Thermosphere has the following features:

(1) It extends between 80 to 400 km.

(2) It helps in radio transmission. This layer is responsible for reflecting back of the radio waves that are transmitted from the earth.

Exosphere: It is the uppermost layer of the atmosphere. It has very thin air. Light

gases like helium and hydrogen float into the space from here.

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