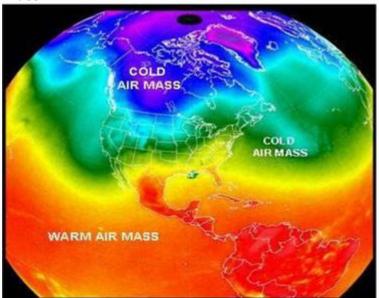
## VIDYA BHAWAN BALIKA VIDYPITH SHAKTI UTTHAN ASHARAM LAKHISARAI Class XIth Subject Geography Date 13.2.2021.

Mass



When the air remains over a homogenous area for a sufficiently longer time, it acquires the characteristics of the area. The homogenous regions can be the vast ocean surface or vast plains. The air with distinctive characteristics in terms of temperature and humidity is called an air mass.

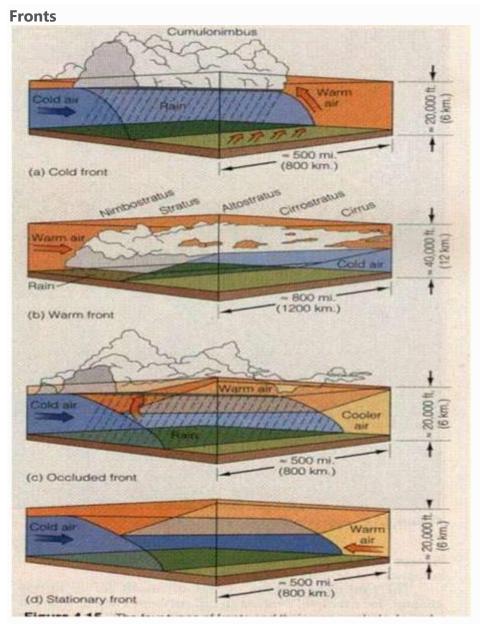
It is defined as a large body of air having little horizontal variation in temperature and moisture. The homogenous surfaces, over which air masses form, are called the source regions.

The air masses are classified according to the source regions. There are five major source regions. These are:

- (i) Warm tropical and subtropical oceans;
- (ii) The subtropical hot deserts;
- (iii) The relatively cold high latitude oceans;
- (iv) The very cold snow covered continents in high latitudes;
- (v) Permanently ice covered continents in the Arctic and Antarctica. Accordingly,

## following types of air masses are recognised:

- (i) Maritime tropical (mT);
- (ii) Continental tropical (cT);
- (iii) Maritime polar (mP);
- (iv) Continental polar (cP);
- (iv) Continental arctic (cA).
- (v) Tropical air masses are warm and polar air masses are cold.



When two different air masses meet, the boundary zone between them is called a front.

The process of formation of the fronts is known as frontogenesis. There are four types of fronts:

- (a) Cold;
- (b) Warm;
- (c) Stationary;
- (d) Occluded.

When the front remains stationary, it is called a stationary front. When the cold air moves towards the warm air mass, its contact zone is called the cold front, whereas if the warm air mass moves towards the cold air mass, the contact zone is a warm front.

If an air mass is fully lifted above the land surface, it is called the occluded front.

