3/9/2020
THURSDAY

SOCIAL SCIENCE II

STD - X
class - 18

Assignment

1) Observe the distribution of isobars in the given figure and mark H and L at places experiencing high pressure and low pressure respectively. [Text book page no : 23]

Ans) * The isobars in the picture A shows that atmospheric pressure increases from south to north. so (H) can be marked in this picture.

* The isobars in the picture B show that the atmospheric pressure decreases from south to north. so (L) can be marked in this picture

2) Complete the following table by incorporating the names of different pressure belts and their latitudinal Extent.

Ans)

Pressure belt	Latitudinal extent
Equatorial low pressure belt	Between 5° north and south latitudes
Subtropical high pressure belt	North and south of 30° latitudes in 10° extent
Sub-polar low pressure belt	North and south of 60° latitudes in 10° extent
Polar high pressure belt	The region close to 90° latitude.

3) Describe how the Coriolis Effect causes the deflection of winds ?

Ans) Due to the rotation of the earth winds curve as they blow. This curving motion of wind is called coriolis effect. According to this any freely moving bodies get deflected to the right in the Northerth Hemisphere and to the left in the southern Hemisphere. winds that blows from sub-tropical high pressure belt to equatorial low pressure belt are called trade winds. In Northern Hemisphere trade winds blows from North East direction due to deflection. so it is called North East trade winds.

In Southern Hemisphere trade winds blows from South East direction hence it is called South East trade winds. Westerlies winds blow from the sub-tropical high pressure to sub-polar low pressure. Due to coriolis effect in Northern Hemisphere it is from south west direction and in Southern Hemisphere North west direction. westerlies are just opposite of trade winds in terms of their direction so westerlies are also called anti trade winds.

4) Which are the factors that influence the speed and direction of wind ?

Ans) * Pressure gradient force
* coriolis force
* Frictional force