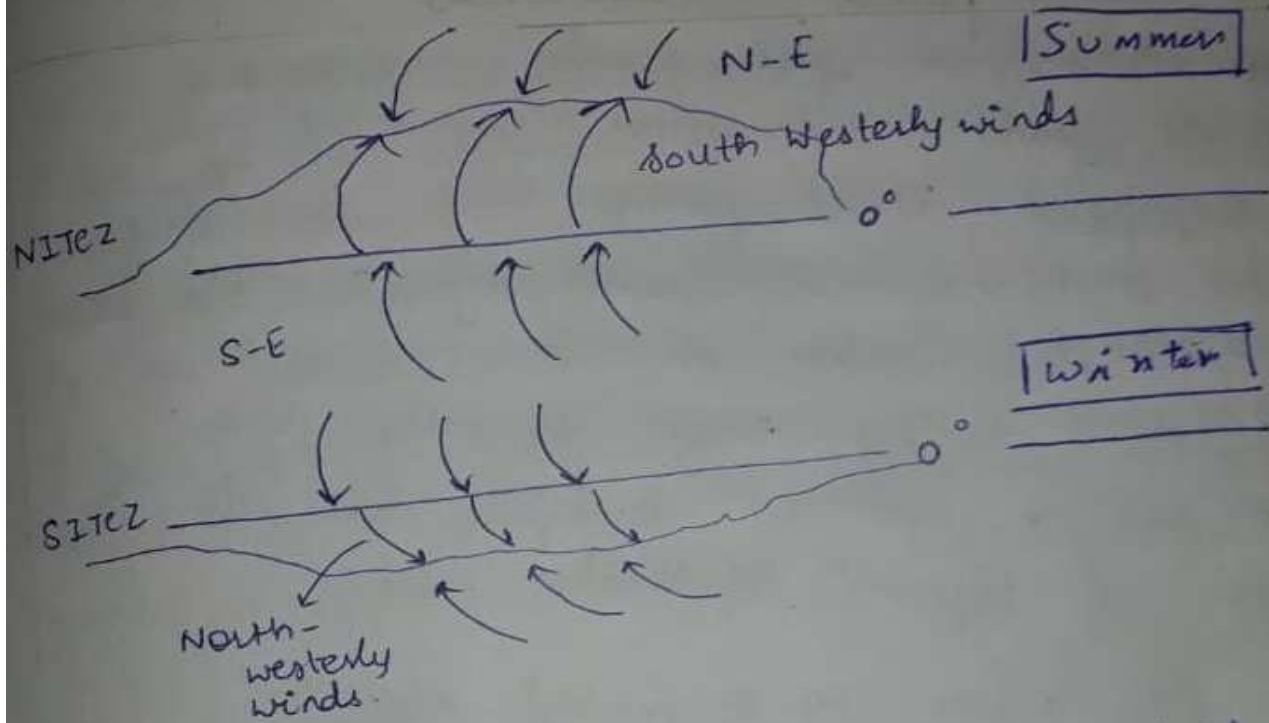


Q. What is ITCZ? What is its significance in the seasonal changes on earth? (250 words)

Ans ITCZ or Inter-tropical convergence zone is a zone of convergence of South-East and North-East trade winds which is mainly located about 5°S to 5°N or near the equator. The movement of ITCZ is according to the apparent movement of sunlight falling on the tropics.

It is significant in determining rainfall distribution in northern and southern hemisphere. Shifting of ITCZ results in advancement and retreatment of monsoons. The shift of ITCZ is more in continental masses as compared to oceans hence more shifting of ITCZ in northern hemisphere as compared to southern hemisphere.

When sun rays fall perpendicular on tropic of cancer ITCZ shift northwards and wind coming from south converges as south westerly winds due to Coriolis effect bringing South-West monsoon in Northern Hemisphere. Same phenomenon when happens in southern hemisphere causes North-east monsoon in southern hemisphere.



ITCZ is the wettest area on planet, which does not have a dry season. It is a narrow zone where convergence of winds causes thunderstorms, rains and change in weather patterns. It is a zone where convergence shifting causes the occurrence of hot and dry seasons in tropics as compared to hot and cold seasons in upper latitudes.

Apart from monsoon, it also helps in formation of cyclone as it is a zone of hot wind change and speed. Its prolonged period can cause severe floods and droughts in regions affecting daily life and livelihood. Hence, ITCZ not only plays important role in seasons but also indirectly in lives of people.

Erudite!