

TASK-1

WEATHER AND CLIMATE

S.No.	Topic Elaboration
1.	Weather
2.	Climate
3.	Climatic Controls
4.	ITCZ

TASK-2

WEATHER

Weather refers to the state of the atmosphere over an area at any point of time.

The elements of weather and climate are the same, i.e. temperature, pressure, wind, humidity and precipitation.

The weather conditions fluctuate very often even within a day. But there is some common pattern over a few weeks or months, i.e. days are cool or hot, windy or calm, cloudy or bright, and wet or dry.

On the basis of the monthly atmospheric conditions, the year is divided into seasons such as winter, summer or rainy seasons.

In Summer, the mercury touches 50°C in some parts of Rajasthan desert, whereas it may be around 20°C in Jammu and Kashmir.

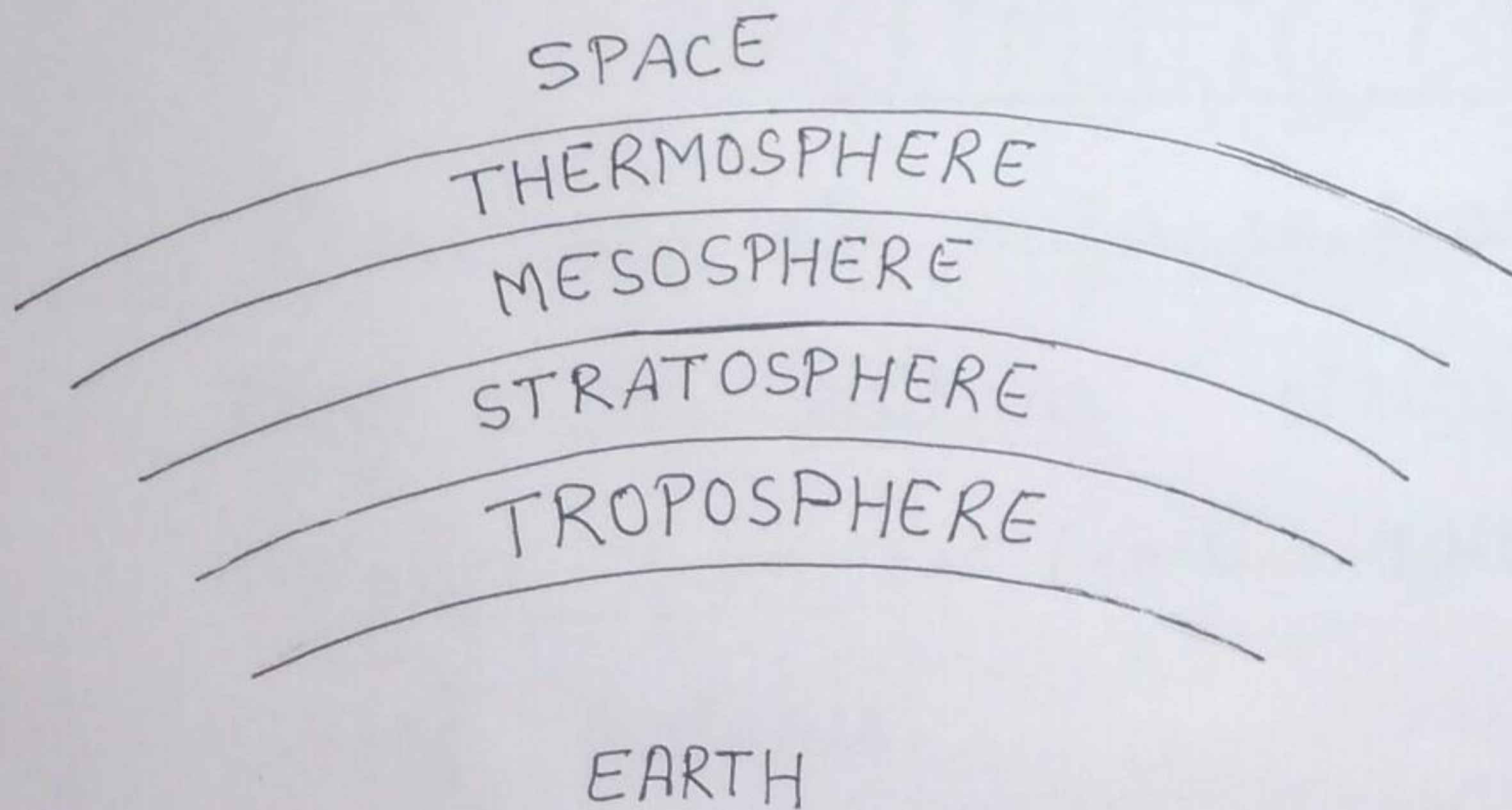
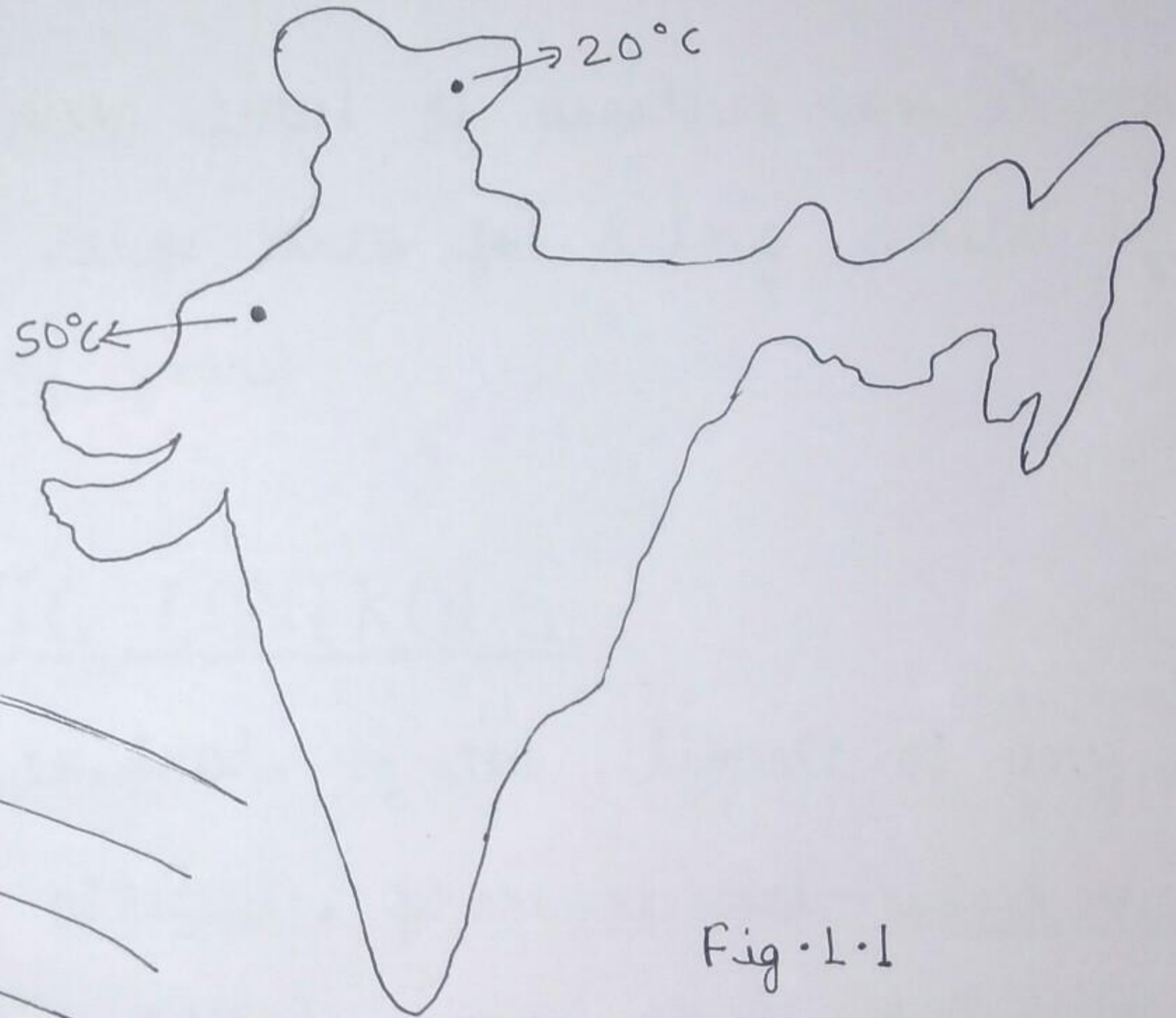


Fig. 1.1

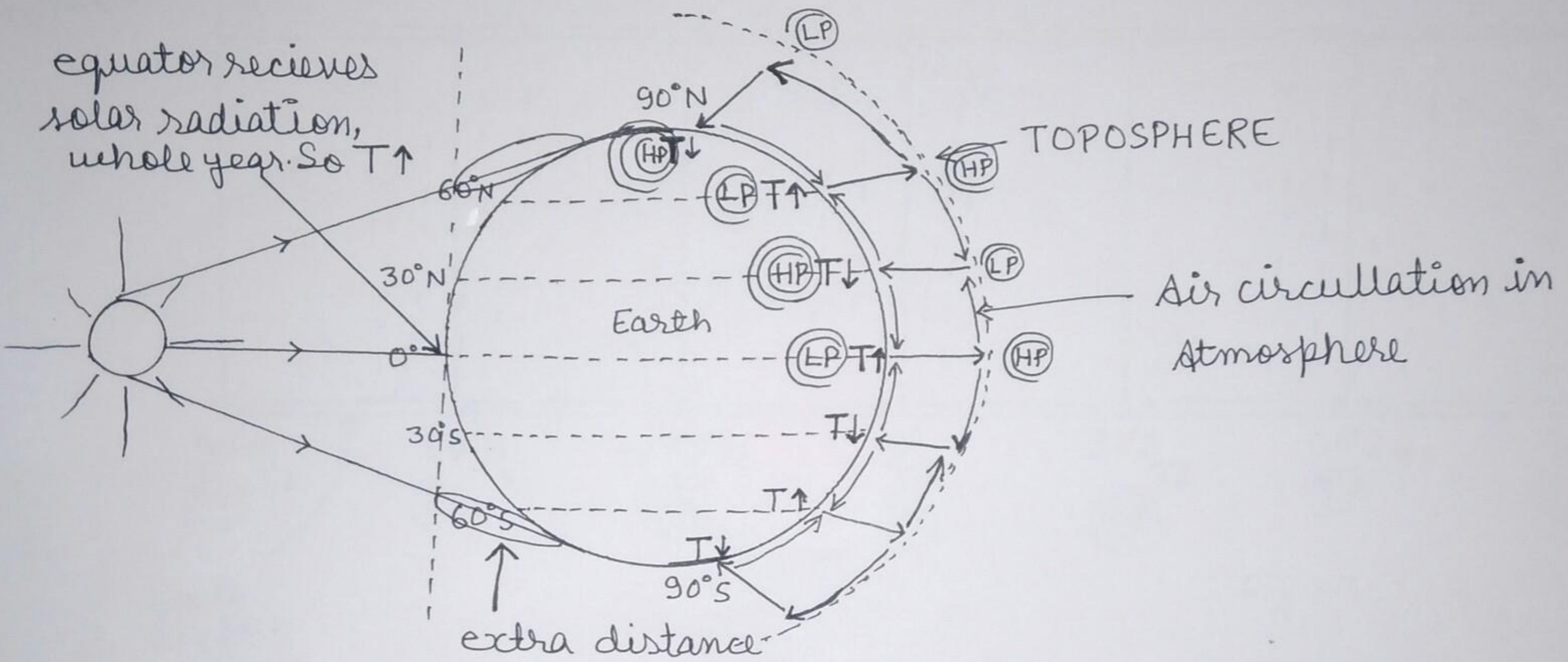
CLIMATE

Climate refers to the sum total of weather conditions and variations over a large area for a long period of time (more than thirty years).

CLIMATIC CONTROLS

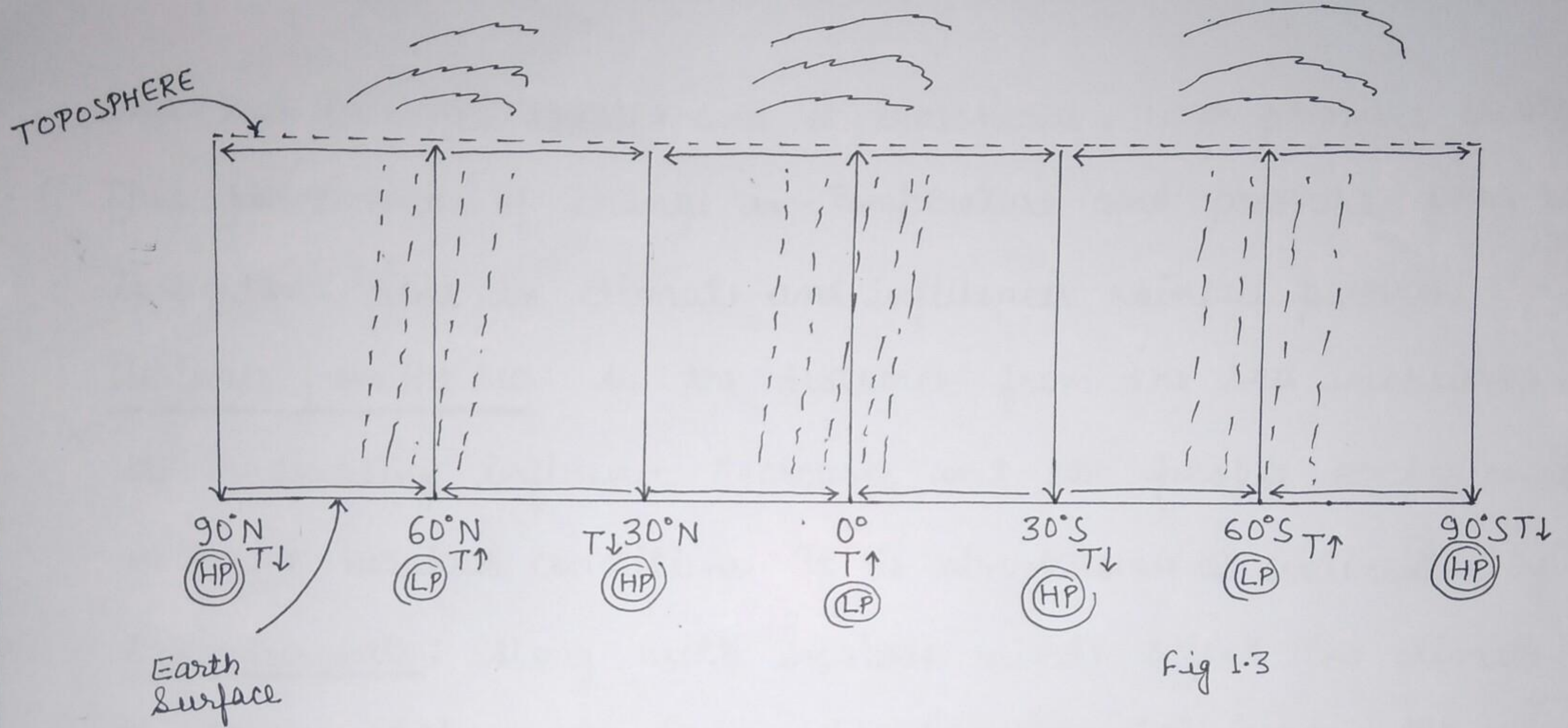
There are six major controls of the climate of any place. They are: latitude, altitude, pressure and wind system, distance from sea (continentality), ocean currents and relief features.

Let us try to understand by various fig..



travelled by solar radiation and observed by atmospheric gases and other particles. So temperature is low at pole

Fig. 1.2



Latitude: As we go from equator to pole, temperature decreases and precipitation also decreases.

Altitude: As we go upwards to Toposphere temperature decreases.

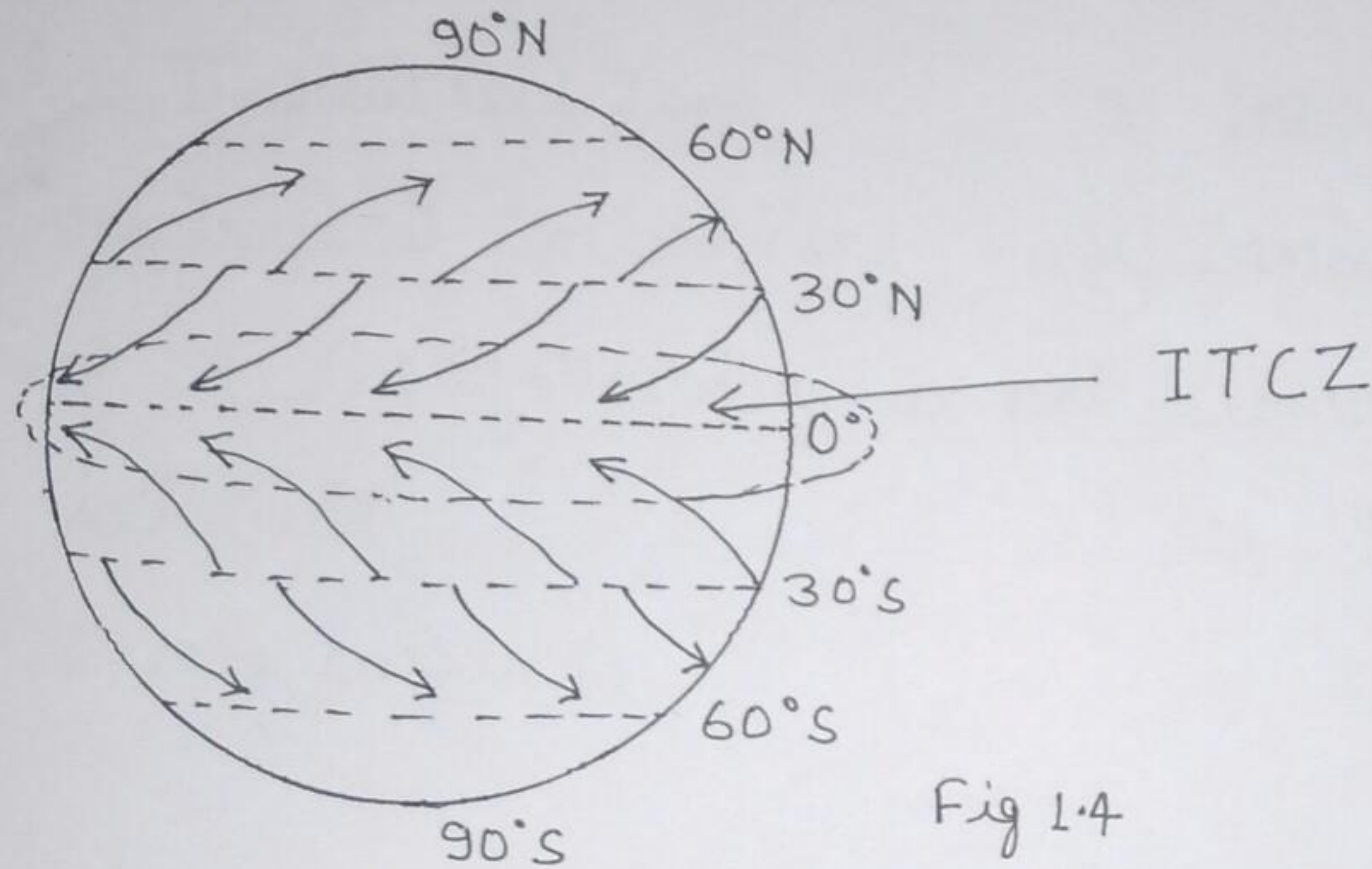
Pressure: At earth surface, where temperature become high, at that place air/wind get warm and moves towards Toposphere

and low pressure created and at toposphere, High pressure created. This phenomenon of change in temperature and pressure play an important role in climate and influences rainfall pattern.

Distance from the sea: As the distance from the sea increases, its moderating influence decreases and the people experience extreme weather conditions. It is also known as continentality.

Ocean Currents: Along with onshore winds affect the climate of the coastal areas, for example, any coastal area with warm or cold currents flowing past it, will be warmed or cooled if the winds are onshore.

ITCZ (InterTropical Convergence Zone)



ITCZ : It is known as doldrums because of its monotonous, windless weather, is the area where the northeast and southeast trade winds converge. It encircles earth near the thermal equator, though its specific position varies seasonally.

EXERCISE

Q.1. What is the full name of ITCZ?

(a) Inter Tropical Cool Zone

(b) Inter Tropical Convergence Zone

(c) Inter Tropical Convent Zone

(d) Inner Tropical Convergent Zone

Q.2. Which of the following is not climatic controls?

(a) Latitude

(b) Pressure

(c) Ocean currents

(d) Temperature