6/11/21 OPM CONNECT HW

Q1. Describe the El Nino mechanism in your own words.

Ans) During the normal years, usually the western coast of the continents do not recive much rainfall as the peruvian current carry the cold currents from the Southern Ocean reach the equator, where the cold current gets heated up and then it changes into warm current, trade winds at this time have strong intensity so, they carry this warem current to flow in different direction not in the western coast of the continents, but in El Nino, Once in a 4 years the peruvian current after carrying the cold current from southern Ocean, reach the equator and gets heat, so now the warm current are not get carried by trade winds, because due to the apparent position of the earth, it gets distracted trade winds intensity become less, so it becomes weak dee to this the warm water back flow and go towards all the western coast of the continents, having low pressure in those regions rainfall happens once in in 4 years. This is El Nino Mechanism.

Q2. How does the presence of Tibetan plateau influence the arrival of Monsoon in India?

Ans) The Tibetan plateau gets intensely heated during summer, which results in strong vertical air currents and the formation of low pressure over the plateau

at about 9km above sea level.

* Tibetan plateau attract most amount of insulation, i.e the amount of sun rays that we receive from the sun, Tibetan plateau heated up quickly because these plateaus are located in certain heights, in Himalayas there are tapered or pointed ends, so insulation received it is very less there, but in Tibetan plateau the surface area is not so pointed. it's plain for which it gets heated up to high extent creating up low pressure on Tibetan plateau hence the high pressure in the ocean attracts the low pressure in the land

* It's height is also 9km above sea level, just near to Himalaya.

these are influence of Tibetan plateau for the arrival of Monsoon in India

q3. What are 'Jet streams'?

Ans) These are a narrow belt of high altitude (above 12,000 m) westerly winds in the troposphere. Their speed varies from about 110 Km/h in summer to about 184 Km/h in winter. A number of separate Jet streams have been identified. The most constant are the mid-latitude and the subtropical jet stream.