

HOTS (Higher Order Thinking Skills)

Q.1. “A relief feature has a major role to play in determining the climate of a place. Support the statement with any three relevant examples.

Ans. (i) Altitude: As one moves up to the higher altitudes, the atmosphere becomes less dense and temperature decreases. Therefore, hills cool down during summers.

(ii) Relief: High mountains act as barriers for cold and hot winds. They may also cause precipitation if they lie in the path of rain bearing winds. The Leeward sides of mountains remain dry, whereas windward side is able to receive rain.

(iii) North Eastern hills: The maximum rainfall of the season is received in the north eastern hills. Garo, Khasi and Jaintia Hills located in Meghalaya traps the South West monsoon clouds and cause world’s highest rainfall in Mawsynram in Meghalaya.

Q.2. Is it correct to say that India would have been an arid land without monsoon? Support your answer with five arguments.

Ans. India’s climate depends entirely on Monsoons.

Five reasons are:

(i) Since Western Rajasthan do not receive rainfall, it is an arid and sandy region.

(ii) North Eastern winds which are prevailing in India are moving from land to sea, therefore they are dry. But due to deflection in the winds coming from South West direction, India does receive rains.

(iii) Without Monsoons we might not be having thick forests level.

(iv) Without Monsoon, Indian farmers might not be able to irrigate their lands in Peninsular India, as Peninsular rivers are seasonal and totally dependent on rains.

(v) The North Eastern Hills and Western Ghats are covered with lush green forests only because of Heavy rain in both these areas, or these areas might have been arid.

Q.3. What would have been the climate of India if the Himalayas were not in existence along the Northern Borders of India?

Ans. (i) India has Himalayas located at its north which have an average height of 6,000 mts.

(ii) The Himalayas prevent the cold winds from Central Asia from entering India.

(iii) Himalayas are also able to stop the South West monsoon winds, which cause rainfall in the northern plains of India.