NCERT SOLUTIONS

CLASS - 11th



aglasem.com

Class : 11th

Subject : Geography

Chapter : 4

Chapter Name : Climate

Q1 Choose the right answer from the four alternatives given below.

(i) What causes rainfall on the coastal areas of Tamil Nadu in the beginning of winters?

(a) South-West monsoon

(b) Temperate cyclones

(c) North-Eastern monsoon

(d) Local air circulation

(ii) What is the proportion of area of India which receives annual rainfall less than 75 cm?

(a) Half

(b) One-third

(c) Two-third

(d) Three-fourth

(iii) Which one of the following is not a fact regarding South India?

(a) Diurnal range of temperature is less here.

(b) Annual range of temperature is less here.

(c) Temperatures here are high throughout the year.

(d) Extreme climatic conditions are found here.

aglasem.com

(iv) Which one of the following phenomena happens when the sun shines vertically over the Tropic of Capricorn in the southern hemisphere?

(a) High pressure develops over North-western India due to low temperatures.

(b) Low pressure develops over North-western India due to high temperatures.

(c) No changes in temperature and pressure occur in north-western India.

(d) 'Loo' blows in the North-western India.

(v) In which of the following states in India do we find 'As' type of climate as per Koeppen's classification?

(a) In Kerala and coastal Karnataka

(b) In Andaman and Nicobar Islands

(c) On Coromandel coast

(d) In Assam and Arunachal Pradesh

aglasem.com

Answer.

(i) (c) North-Eastern monsoon

(ii) (b) One-third

(iii) (d) Extreme climatic conditions are found here

(iv) (a) High pressure develops over North-western India due to low temperatures

(v) (c) On Coromandel coast

Page : 56 , Block Name : Exercise

Q2 Answer the following questions in about 30 words.

(i) What are the three important factors which influence the mechanism of Indian weather?

(ii) What is the Inter-Tropical Convergence Zone?

(iii) What is meant by 'bursting of monsoon'? Name the place of India which gets the highest rainfall.

(iv) Define 'climatic region'? What are the bases of Koeppen's classification?

(v) Which type(s) of cyclones cause rainfall in north-western India during winter? Where do they originate?

Answer.

(i) These important factors are:

- Distribution of wind and air pressure on earth's surface.
- Upper air circulation caused due to factors that control global weather & inflow of air masses and different jetstreams.
- Inflow of western cyclones called disturbances during winter season and during south-west monsoon period tropical monsoon

(ii) The low pressure zone located in the Equator region where trade winds converge and air tends to ascend. It is known as Inter-Tropical Convergence Zone (ITCZ).

(iii) Once there is sudden onset of wind laden with moisture along with lightning, it is termed as 'bursting of monsoon.' Cherrapunji and Mawsynram are examples of places that face 'bursting of monsoon.'

(iv) A climatic region consists of homogenous climatic condition and is a result of a combination of different factors. The bases of Kpeppen's classification are:

- Precipitation
- Temperature

(v) During the winter season, western cyclonic disturbances are responsible for causing rain in North-Western India. These disturbances originate from Medeterrenian sea.

Page : 56 , Block Name : Exercise

Q3 Answer the following questions in not more than 125 words.

(i) Notwithstanding the broad climatic unity, the climate of India has many regional variations. Elaborate this statement giving suitable examples.

(ii) How many distinct seasons are found in India as per the Indian Meteorological Department? Discuss the weather conditions associated with any one season in detail.

Answer.

(i) Due to monsoon's influence, India has a broad climatic unity as a whole. India's climate has several regional variations which is expressed in patterns of temperature, wind and rainfall, degree of wetness or dryness and rhythm of seasons. Few examples are :

- Rainfall: Mawsynram and Cherrapunji in Meghalaya's Khasi hills receives rainfall of more than 1080 cm per year. During the same time, Rajasthan's Jaisalmer gets 9 cm of rain per year.
- Temperature: During summer, western Rajasthan's regions temperature touches 55 degrees while in Leh the temperature could be as low as -45 degrees.
- Monsoon: Orissa's coastal plains and Gangetic delta have to face strong rain based storms during July & August while Coromandal plain in South remains dry during the same period.

aglasem.com

(ii) As per the Meteorological Department, there are four seasons in India:

- Cold Weather Season
- Hot Weather Season
- Southwest monsoon season
- Retreating monsoon season

Cold Weather Season: It starts during the mid-November month in North India. The coldest months are December and January. The average temperature remains around 20 degrees. The temperature during the night can be below 5 degrees.

The Peninsular region doesn't witnesses much change during winters. There is little change in temperature's distribution pattern since it is close to the Equator and sea weather have moderating influence. During this time, the shallow cyclonic depressions that originates from over east of Medeterrenian Sea creates heavy rainfall in Coastal regions and Northwest India. It is due to anti cyclonic circulation.

Page : 56 , Block Name : Exercise

aglasem.com