

## 2. India-Climate

### Exercise

#### 1 A. Question

India Experiences \_\_\_\_\_

- A. Temperate climate
- B. Tropical Monsoon Climate
- C. Tropical Climate
- C. Cold Climate

#### Answer

India experiences Tropical Monsoon Climate

#### 1 B. Question

The Coastal areas enjoy \_\_\_\_\_ climate

- A. Continental
- B. Equable
- C. Humid
- D. Hot

#### Answer

The coastal areas enjoy Equable climate.

#### 1 C. Question

The place that gets rain from Western disturbance is \_\_\_\_\_

- A. Punjab
- B. Mumbai
- C. Allahabad
- D. Chennai

#### Answer

The place that gets rain from western disturbance is Punjab.

#### 1 D. Question

The mountains which lie parallel to the direction of the Southwest Monsoon wind is \_\_\_\_\_

- A. Aravali
- B. Satpura
- C. Vindhya
- D. Maikala Range

#### Answer

The mountain which lie parallel to the south west monsoon wind is Aravali.

#### 1 E. Question

The local storms in the northeastern part of India during hot weather season are called \_\_\_\_\_

- A. Norwesters

- B. Loo
- C. Mango showers
- D. Monsoon

### Answer

The local storm in the northeastern part of India during hot weather season are called Norwesters.

## 2. Question

Match the following:

1.	Burst of monsoon	December - February
2.	Norwesters	October to November
3.	Water conservation activities	Northern and northwestern part of India.
4.	The north east monsoon	Local storms in north east India
5.	Highest rainfall place	June to September
		Mawsynram
		Involvement of local people

### Answer

1.	Burst of monsoon	<u>June to September</u>
2.	Norwesters	<u>Local storms in north east India</u>
3.	Water conservation activities	<u>Involvement of local people</u>
4.	The north east monsoon	<u>October to November</u>
5.	Highest rainfall place	<u>Mawsynram</u>

## 3 A. Question

Windward side and leeward side of the mountains.

### Answer

Windward Side	Leeward Side
Windward side of the mountain refers to the wind striking side of the mountains because of which they receive heavy rainfall.	Leeward side of the mountain refers to the other side which do not get struck by the winds and this results in very less rainfall.
Flood type conditions may arise on the windward side of the mountains.	Draught type conditions may arise on the leeward side of the mountains.

## 3 B. Question

South west monsoon and north east monsoon.

### Answer

South West Monsoon	North East Monsoon
These monsoon winds blow northward from the Arabian sea and the Bay of Bengal.	These monsoon winds blow from northeast towards the sea-side.
These monsoon winds blow from the month of June to September.	These winds blow from the month of October to November.
These winds are reason for rainfall throughout the country.	These winds cause rainfall only in Coromandal coast and also in Tamil Nadu when these winds strike the wetlands of the eastern Ghats.
They blow from the high-pressure areas (ocean) to low pressure areas (land)	These winds blow from land to sea as a result of reversal in the direction of wind or start of retreating monsoon season.
These winds blow during the advancing monsoon season.	These winds blow during retreating monsoon season.

### 3 C. Question

Western disturbance and tropical cyclones.

#### Answer

Western Disturbance	Tropical Cyclone
Western disturbance refers to the low-pressure depression which originates over the Mediterranean Sea and travels eastwards across Iran and Afghanistan and reaches India.	The intensity and distribution of rainfall are determined by a series of tropical depressions. On an average 8 such cyclonic depressions may pass from the Bay of Bengal into the land area between June and September

### 3 D. Question

Weather and climate.

#### Answer

Weather	Climate
Weather is a day to day condition of atmosphere at any place.	Climate is the average state of weather for a longer period of time at any place.
Weather can be determined with regard to temperature, pressure wind, humidity and rainfall.	Climate can be determined with regard to latitude, altitude, distance from the sea, wind, position of mountains,

### 3 E. Question

Loo and Norwesters.

#### Answer

Loo	Norwesters
Loo winds are the strong hot winds that blow during daytime over northern and northwest parts of India.	The local storms experienced by northeastern part of India are called Norwesters. They are also called KALBAISAKHI in Punjab.

### 4 A. Question

Name the factors determining the climate of India.

**Answer**

The factors which determine the climate of India are:

- (a) Latitude
- (b) Altitude
- (c) Distance from the sea
- (d) Wind
- (e) Position of the mountains

**4 B. Question**

What do you mean by monsoon?

**Answer**

The word monsoon basically refers to the seasonal reversal in the direction of winds over a large area during a year. In summer, it brings moist air from the oceans to the lands and in winter it blows dry air offshore.

**4 C. Question**

What are the main features of tropical monsoon type of climate?

**Answer**

The main features of tropical monsoon type of climate are:

- (a) On the basis of the direction of winds the monsoon winds are classified into southwest monsoon and northeast monsoon.
- (b) The reason for tropical monsoon climate is differential heating of land and sea.
- (c) Change of season which determines the climate of India is the main feature of monsoon winds.

**4 D. Question**

What are jet streams and how do they affect the climate of India?

**Answer**

Jet stream refers to the air currents in the upper layers of the atmosphere. Jet streams can determine the arrival and departure of monsoon winds in India. The westerly flow of jet streams are responsible for the western disturbances experienced in the north and north-western parts of the country whereas the easterly jet streams cause tropical depressions during monsoon as well as October-November months.

**4 E. Question**

Name the regions of heavy rainfall in India.

**Answer**

The regions of heavy rainfall in India are those areas which have rainfall between 200 cm to 300 cm. These areas are the Middle Ganga Valley, Western Ghats, Eastern Maharashtra, Madhya Pradesh and Odisha.

**4 F. Question**

What do you mean by the term 'burst of monsoon'?

**Answer**

'Monsoon Burst' refers to the happening of wet and dry spells during the rainy season. The monsoon rain takes place only for a few days at a time.

**5 A. Question**

Analyze any two factors, determining the climate of India.

**Answer**

Two factors determining the climate of India are:

(a) Distance from the sea: areas near the coast have equable or maritime climate. On the other hand, interior locations are not affected by the moderating influence of the sea and they experience extreme or continental climate. For example, the annual range of rainfall at Kolkata is 119 cm which falls to a low amount of 24 cm in Bikaner.

(b) Winds: the wind that blows from sea to land is called sea breeze and the wind that blow from land to sea is called land breeze. Sea breeze is cooler in comparison to land breeze which is warmer.

### 5 B. Question

Explain any two characteristic features of monsoon winds.

#### Answer

Two characteristic features of monsoon winds are:

(a) Uneven distribution of rainfall during the year: the southwest monsoon causes over 80 percent of the rainfall over the country during June to September. The duration of monsoon varies from two to four months. At some parts of the country there is very heavy rainfall whereas in other parts there is less or scanty rainfall.

(b) Influence of mountains: the rainfall is very much influence by the mountains. The wind brings very less rainfall over Gujarat and Rajasthan due to absence of mountains. Along the west coast, the winds strike the Western Ghats and bring heavy rainfall on the windward side.

### 5 C. Question

Describe any one of the branches of southwest monsoon.

#### Answer

There are two branches of southwest monsoon- ARABIAN SEA BRANCH AND BAY OF BENGAL BRANCH.

The Arabian Sea branch is explained as follows:

This branch of monsoon winds brings heavy rainfall. These winds blow from the Arabian Sea where the first part of the wind strikes the Western Ghats. These winds are moisture laden winds which gives heavy rainfall to western coastal region.

The second part of this wind blows through the Vindhya- Satpura ranges and strikes against the Rajmahal Hills which causes heavy rainfall in the Chotanagpur region.

The third part of the wind moves towards Rajasthan where the Aravalli Mountains stand parallel to the direction of the winds which results in no rain to Rajasthan.

The wind then reaches the Himachal Pradesh and gets combined with the winds of Bay of Bengal.

### 5 D. Question

Describe rain water harvesting.

#### Answer

Rainwater harvesting is an activity of direct collection and storage of water for our purpose or it can be recharged into the ground for withdrawal later. Rainwater harvesting is an excellent way of making optimum use of rainwater.

### 5 E. Question

What is water management? Give the basic requirement of water conservation.

#### Answer

Water management is the activity of planning, developing, distributing and managing the optimum use of water resources.

The basic requirements of water conservation are:

(a) Ensuring availability of water for future generations.

(b) Conservation of energy.

(c) Minimizing human water use to help preserve freshwater habitats for local wildlife.

## 6. Question

(A) Direction of southwest monsoon and northeast monsoon winds.

(B) Show areas receiving more than 200 cm of rainfall and less than 50 cm of rainfall.

## Answer

- **MONSOON –SEASON**
- **SEASONAL WINDS-WINDS THAT BLOW FROM A PARTICULAR AREA TOWARDS A PARTICULAR REGION IN A PARTICULAR DIRECTION**
- **SOUTHWEST MONSOON**    **SEA**  $\longrightarrow$  **LAND**
- **NORTHEAST MONSOON**    **LAND**  $\longrightarrow$  **SEA**

