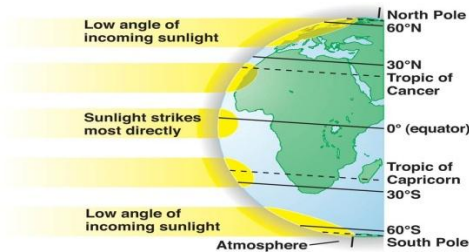
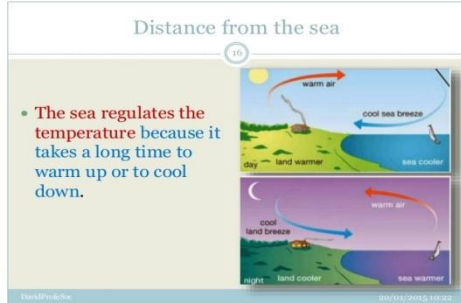




INDIAN SCHOOL AL WADI AL KABIR

Class: IX	Department: Social Science	Subject: Geography
Chapter 4 Worksheet No: 4	Topic: Climate	Year:2025-26

A. Answer the following questions:

1. A	Briefly describe the phenomenon of “mango showers.”? <ol style="list-style-type: none"> Towards the close of the summer season, pre-monsoon showers are common, especially in Kerala and Karnataka. They help in the ripening of mangoes and are often referred to as “mango showers”.
2. A	Why do the south-westerly winds cause rain in India? <ol style="list-style-type: none"> The south-east trade winds cross the equator and blow in a south-westerly direction, entering the Indian peninsula as the south-west monsoon. As these winds blow over warm oceans, they bring abundant moisture to the subcontinent.
3. A	The Deltas of Godavari, Krishna, and Kaveri are frequently struck by cyclones. Give reasons. <ul style="list-style-type: none"> ➤ The low-pressure conditions over north-western India get transformed to the Bay of Bengal by early November with the occurrence of cyclonic depressions, which originate over the Andaman Sea. ➤ These cyclones generally cross the eastern coasts of India, causing heavy and widespread rain, and are also destructive. ➤ The thickly populated deltas of the Godavari, Krishna, and the Kaveri are frequently struck by cyclones, which cause great damage to life and property.
4 A	Explain how Latitude and Distance from the sea affect the climate of a place? <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>1. Latitude</p>  <p>2. Distance from the sea</p>  </div> <div style="width: 45%;"> <p>Due to the curvature of the earth, the amount of solar energy received varies according to latitude. As a result, air temperature generally decreases from the equator towards the poles.</p> <p>The sea exerts a moderating influence on climate: As the distance from the sea increases, its moderating influence decreases and the people experience extreme weather conditions. This condition is known as continentality (i.e. very hot during summers and very cold during winters).</p> </div> </div>

5 A	<p>“Monsoon acts as a unifying bond”. Explain.</p> <ul style="list-style-type: none"> ➤ The seasonal alteration of the wind systems and the associated weather conditions provide a rhythmic cycle of seasons. ➤ The Indian landscape, its animal and plant life, its entire agricultural calendar and the life of the people, including their festivities, revolve around this phenomenon. ➤ Year after year, people of India from north to south and from east to west, eagerly await the arrival of the monsoon. ➤ These monsoon winds bind the whole country by providing water to set the agricultural activities in motion. ➤ The river valleys which carry this water also unite as a single river valley unit.
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B. Multiple choice questions (1 mark)

1.	<p>Which of the following terms refers to the sum total of weather conditions and variations over a large area for a long period of time (more than thirty years)?</p> <p>(a) Atmosphere (b) Annual range of temperature (c) Climate (d) Monsoons</p>
2.	<p>Which of the following is not an element of weather and climate?</p> <p>(a) Atmospheric pressure (b) Temperature (c) Humidity (d) Altitude</p>
3.	<p>Which of the following statements defines weather?</p> <p>(a) Envelope of air surrounding earth (b) State of the atmosphere over an area at any point of time (c) Atmospheric conditions over a large area for a long period of time (d) Generalised monthly atmospheric conditions.</p>
4.	<p>The western coast of India receives heavy rainfall during which season?</p> <p>(a) Winter (b) Summer (c) Monsoon (d) Spring</p>
5.	<p>The Indian subcontinent experiences comparatively milder winters as compared to Central Asia due to which of the following factors?</p> <p>(a) The Tropic of Cancer (b) The surrounding seas (c) The Himalayas (d) Ocean currents</p>
6.	<p>Which of the following places receive highest rainfall in India as well as in the world?</p> <p>(a) Silchar (b) Cherrapunji (c) Mawsynram (d) Guwahati</p>
7.	<p>Most of the parts in India receive rainfall during which of the following months?</p> <p>(a) December to February (b) March to May (c) June to September (d) October to November</p>
8.	<p>Which of the following places in India experiences a very high diurnal range of temperature?</p> <p>(a) Kolkata (b) Jodhpur (c) Chennai (d) Delhi</p>

C) Assertion/Reason Questions:-

In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice:

1.	<p>Assertion (A): The monsoon in India is characterized by breaks in rainfall.</p> <p>Reason (R): The monsoon rains occur continuously throughout the season without interruption.</p> <p>A) Both A and R are true and R is the correct explanation of A B) Both A and R are true but R is not the correct explanation of A C) A is true but R is false D) A is false but R is true</p>
2.	<p>Assertion (A): By the beginning of October, the south-west monsoon withdraws from the Northern Plains.</p> <p>Reason (R): The high-pressure system over northern India strengthens, causing a reversal of wind direction.</p> <p>A) Both A and R are true and R is the correct explanation of A B) Both A and R are true but R is not the correct explanation of A C) A is true but R is false D) A is false but R is true</p>

D) Read the extract and answer the questions that follows:

	<p>A characteristic feature of the cold weather season over the northern plains is the inflow of cyclonic disturbances from the west and the northwest. These low-pressure systems, originate over the Mediterranean Sea and western Asia and move into India, along with the westerly flow. They cause the much-needed winter rains over the plains and snowfall in the mountains. Although the total amount of winter rainfall locally known as ‘mahawat’ is small, they are of immense importance for the cultivation of ‘rabi’ crops. The peninsular region does not have a well-defined cold season. There is hardly any noticeable seasonal change in the temperature pattern during winters due to the moderating influence of the sea</p> <p>Q1. What is the characteristic feature of the cold weather season over the northern plains of India?</p> <p>Ans. The characteristic feature is the inflow of cyclonic disturbances from the west and northwest.</p> <p>Q2. Where do these low-pressure systems originate, and how do they reach India?</p> <p>Ans. They originate over the Mediterranean Sea and western Asia and move into India with the westerly flow.</p> <p>Q3. What is the impact of these cyclonic disturbances on the weather of India?</p> <p>Ans. They bring winter rains to the northern plains and cause snowfall in the Himalayan mountains.</p> <p>Q4. Why is the ‘mahawat’ rainfall important despite being small in amount?</p> <p>Ans. It is important because it provides essential moisture for the growth of rabi crops like wheat and mustard.</p> <p>Q5. Why does the peninsular region not experience a well-defined cold season?</p> <p>Ans. Because the surrounding seas have a moderating influence, which keeps the temperature almost uniform throughout the year.</p>
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E) The table given below summarizes the monthly rainfall data for each city.(Class Activity)

City	Latitude	Altitude (m)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Rainfall (cm)
Bengaluru	12°58'N	909	0.7	0.9	1.1	4.5	10.7	7.1	11.1	13.7	16.4	15.3	6.1	1.3	88.9
Mumbai	19° N	11	0.2	0.2	–	–	1.8	50.6	61.0	36.9	26.9	4.8	1.0	–	183.4
Kolkata	22°34'N	6	1.2	2.8	3.4	5.1	13.4	29.0	33.1	33.4	25.3	12.7	2.7	0.4	162.5
Delhi	29° N	219	2.5	1.5	1.3	1.0	1.8	7.4	19.3	17.8	11.9	1.3	0.2	1.0	67.0
Jodhpur	26°18'N	224	0.5	0.6	0.3	0.3	1.0	3.1	10.8	13.1	5.7	0.8	0.2	0.2	36.6
Chennai	13°4'N	7	4.6	1.3	1.3	1.8	3.8	4.5	8.7	11.3	11.9	30.6	35.0	13.9	128.6
Nagpur	21°9'N	312	1.1	2.3	1.7	1.6	2.1	22.2	37.6	28.6	18.5	5.5	2.0	1.0	124.2
Shillong	24°34'N	1461	1.4	2.9	5.6	14.6	29.5	47.6	35.9	34.3	30.2	18.8	3.8	0.6	225.3
Thiruvananthapuram	8°29'N	61	2.3	2.1	3.7	10.6	20.8	35.6	22.3	14.6	13.8	27.3	20.6	7.5	181.2
Leh	34°N	3506	1.0	0.8	0.8	0.5	0.5	0.5	1.3	1.3	0.8	0.5	–	0.5	8.5

Now find out -

- Why are Thiruvananthapuram and Shillong rainier in June than in July?
- Why is July rainier in Mumbai than in Thiruvananthapuram?
- Why are southwest monsoons less rainy in Chennai?
- Why is Shillong rainier than Kolkata?
- Why is Kolkata rainier in July than in June unlike Shillong which is rainier in June than in July?
- Why does Delhi receive more rain than Jodhpur?

Now think why -

- Thiruvananthapuram has equable climate?
- Jodhpur has a hot desert type of climate?
- While in Delhi and Jodhpur most of the rain is confined to nearly three months, in Thiruvananthapuram and Shillong it is almost nine months of the year?