

UNIT 4 - ATMOSPHERE

Class : V

Subject : Social Science

I. Fill in the blanks.

- The atmosphere is divided into _____ layers.
a) four
b) **five**
c) six
d) seven
- The Earth receives heat energy from the _____.
a) Moon
b) Mars
c) **Sun**
d) Venus
- World Meteorological Day
a) March-20
b) March -21
c) March-22
d) **March-23**
- The study of weather is called _____.
a) **Meteorology**
b) Ecology
c) Archaeology
d) Sociology
- Zone located in between Tropic of cancer and Tropic of Capricorn is _____ zone
a) Temperate
b) Subtropical
c) Cold
d) **Torrid**
- _____ is used to measure pressure in the air.
a) Barometer
b) **Thermometer**
c) Anemometer
d) Wind vane
- Monsoon is derived from the _____ word.

- a) Greek **b) Arabian** c) English d) Latin

8. Vertical cloud is called _____.

- a) Cirrus cloud b) Stratus clouds
c) Cumulus clouds **d) Nimbus clouds.**

9. _____ clouds give convectional rainfall.

- a) Cirrus b) Stratus **c) Cumulus** d) Nimbus

10. Statement I - The instrument used to measure wind direction is wind vane.

Statement II - Light travels faster than sound.

- a) Statement I is True, II is False**
b) Statement I, II are True
c) Statement I, II are False
d) Statement I is False, II is True

II. Fill in the blanks.

1. The instrument used to measure temperature is Thermometre .
2. The imaginary lines drawn parallel to the surface of the earth are Latitude.
3. Sea breeze blows from Land in the evening.
4. Nimbus are rain clouds.

III. Match the following.

- | | | | |
|-------------------|---|------------------|----------|
| 1 .Cirrus clouds | - | Grey sheet | 2 |
| 2 .Stratus clouds | - | Storm cloud | 4 |
| 3 .Cumulus clouds | - | do not give rain | 1 |

4 .Nimbus clouds - Looks like Puffy White cotton 3

IV. State True/ False.

1. All weather changes occur in the Troposphere. (True)
2. Latitudes and Longitudes help us to locate a country. (False)
3. Atmosphere gets heated by conduction than solar radiation. (False)
4. The main reason for the change of wind direction is to Earth rotation. (True)
5. Cyclone moves in anti-clock-wise direction. (False)

V. Answer the following.

1. What is climate?

Climate is the average weather condition of a vast area over more than 30 years

2. Name the atmospheric layers.

- Troposphere,
- Stratosphere,
- Mesosphere,
- Thermosphere and
- Exosphere.

3. Write a short note on the Nimbus clouds.

Nimbus cloud appears as dark or grey in colour. It gives heavy Rain fall. It is called vertical or rain clouds.

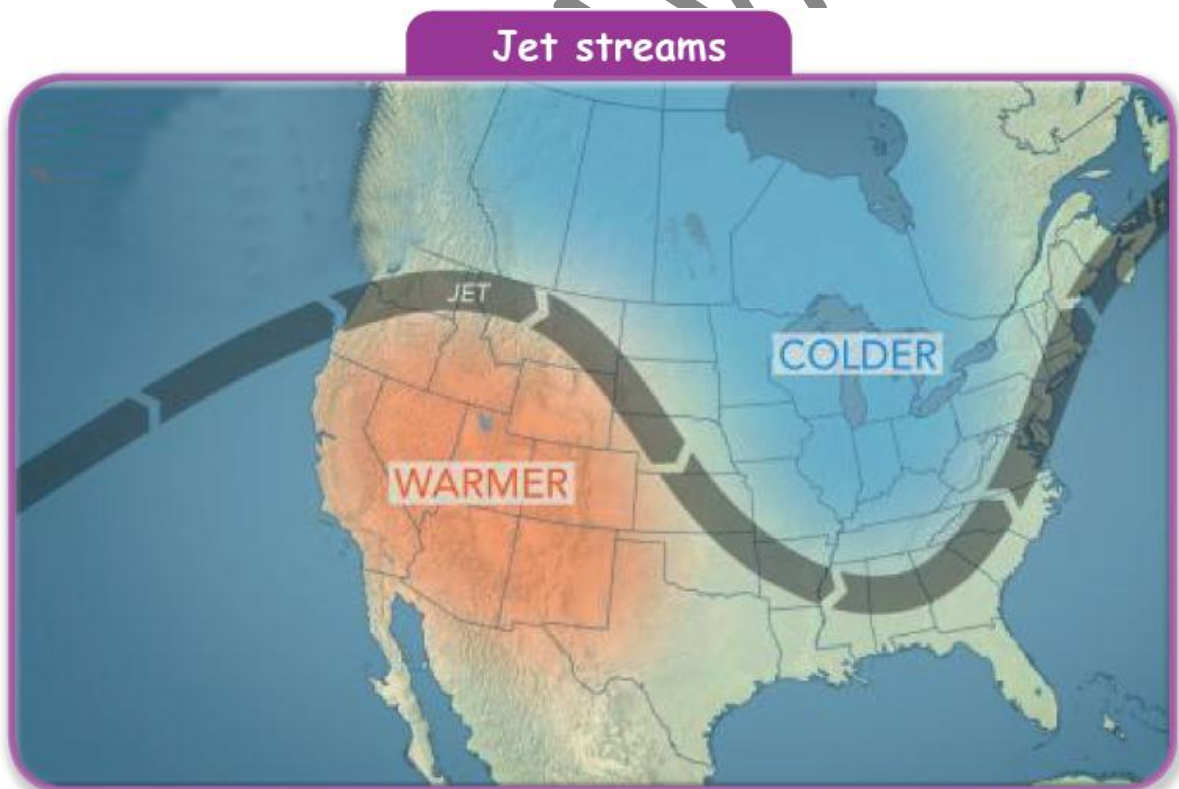
4. Write a short note on the orographic rainfall.

When the moisture laden winds from the sea rises as it moves over a mountain range, it becomes cool and causes heavy rainfall. The opposite side of the mountain is called Leeward side. It receives very little rainfall.

VI. Answer in detail.

1. Write about Jet Streams.

Air currents in the upper layers of atmosphere is known as Jet streams. It could determine the arrival and departure of monsoon winds in India.



2. Explain the types of winds.

Different types of wind

Planetary wind

This wind blows in the same direction throughout the year.

Monsoon wind

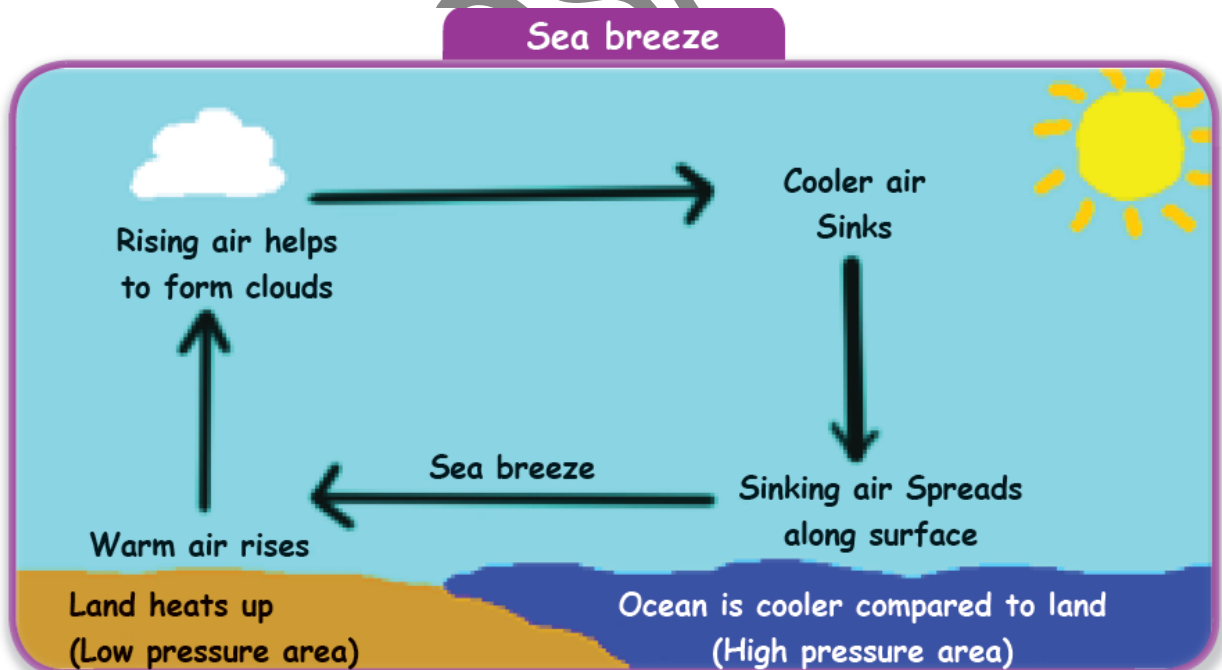
The word monsoon is derived from the Arabic term 'mausim' which means season. Monsoon wind is the seasonal wind.

Types of Monsoon winds in India

- South West monsoon wind
- North East monsoon wind

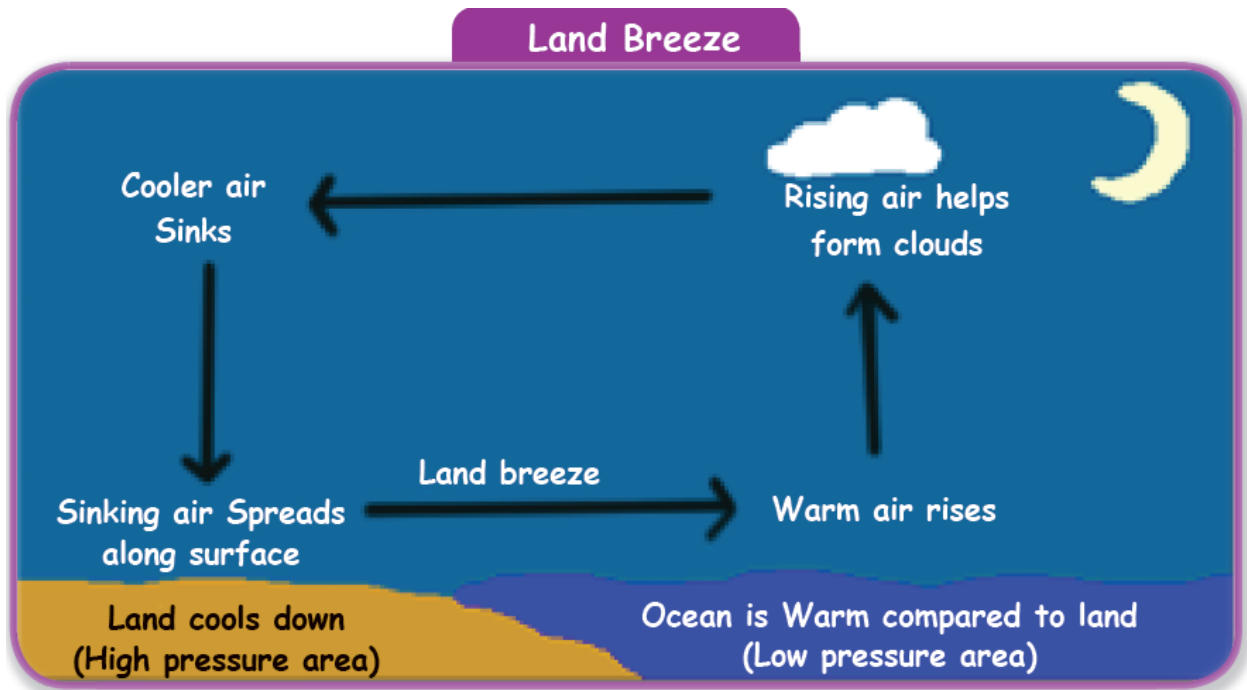
Sea breeze

Sea breeze blows from sea to land in the evening.



Land Breeze

Land Breeze blows from land to sea in the morning.



Local wind

Local wind affects the weather.

- Warm local wind – North West India. E.g. Loo
- Cool local wind – North East India E.g. Norwesters.