

## Geography Part 8 to 10

### 8. Weather and Climate

1. How are daily routine prevails?

Based on Weather

2. How is human activity determined?

By weather.

3. How is world climate defined?

It is defined as the weather averaged over a long period of time and over large area.

4. What is the standard average period of weather?

30 years

5. Where is the word climate derived?

It is derived from the word `Klima` which means inclination

6. What is weather?

It is the physical state of the atmosphere within 24 hours described by weather elements such as temperature, atmospheric pressure, humidity, rainfall, cloudiness, winds speed and winds direction.

7. Which area is hotter?

Areas near the equator

8. Why is places located in higher altitudes are cooler?

It is because when the altitude increases, temperature decreases. Ex. Ooty and Kodaikanal are cooler than Chennai.

9. How is weather modified in coastal areas?

In coastal areas it is cool wet air that is derived from sea. It modifies the weather.

10. What is maritime climate?

In coastal areas they have uniform weather both in summer and winter this is called as maritime climate.

11. How is temperature decreasing?

It is decreasing at rate of 6.5 degree Celsius for every 1000 meters high on Earth's surface.

12. How are ocean currents classified based on temperatures?

Warm ocean currents and cold ocean currents.

13. Which is the major area of fishing grounds?

The meeting places of warm and cold ocean currents are the areas of major fishing grounds.

14. Why is winds from sea are wet?

Because it contains moisture

15. How leads to global warming?

Clearing of forest, transport facility, concrete buildings, industrialization.

16. What is El Nino?

It means the Christ child in Spanish. It is formed in Christmas. During this time the temperatures rises rapidly and a low pressure is formed along the coast of Peru and Euador.

17. What is terrestrial radiation?

It refers to the heat energy emitted from the Earth.

18. Which is the sources of light and heat to earth?

The sun

19. What is insolation?

The incoming solar radiation

20. What is diurnal range of temperature?

The difference between the maximum and minimum temperatures of a day is called as diurnal range of temperature

21. How is heat energy from solar radiation is received by Eart?

By three mechanism, namely, radiation in the atmosphere, conduction over land and convection.

22. Which gas occupies major space in Earth?

Nitrogen (78%)

23. What is the percentage of oxygen in Earth?

28%

24. Where does troposphere begins?

At the surface of the earth and extends up to 8km at the poles and 18km at the equator.

25. What is tropopause?

It is a thin layer that lies between the troposphere and stratosphere.

26. What is meteorology?

It is the scientific study of the atmosphere, focusing on weather process for short term and it is a study of lower layer of the atmosphere.

27. What is stratosphere?

It extends approximately for about 80km. this is the layer where jet and planes fly.

28. Which is the uppermost layer of atmosphere?

Exosphere

29. Which is very important for living being on earth?

Ozone layer

30. What is isothermal layer of ozonosphere?

Layer of Ozone

31. What is stratopause?

It is the layer above the statopshere.

32. What it isnosphere?

It is a part where the sun`s radiation is ionized.

33. What is aerologic?

It is branch of meteorology which involves observation and research of atmosphere using air balloons, radio sounds and airplanes.

34. What is thermometer?

Instrument used for measuring temperature.

35. What are isotherms?

The imaginary lines that join different places with same temperature on the map is called as isotherms.

36. What are the scales for measuring temperatures?

Celsius, Fahrenheit and Kelvin

37. What is air pressure?

It is the pressure trust by the weight of air on earth`s surface.

38. What are isobars?

The imaginary lines joining different places with the same pressure on a map is isobars.

39. What is wind?

The air in horizontal motion is called wind.

40. What is Ferral`s law or coriolis force?

All moving objects including winds and ocean currents tend to get deflected towards right in the northern hemisphere and left in the southern hemisphere due to the rotation of earth. This is called as Ferrel's law or Coriolis force

41. What is planetary wind?

The wind that blows from a particular direction throughout the year.

42. What is anemometer?

It is an instrument used to measure the velocity and direction of wind.

43. How are winds classified?

Planetary wind, seasonal and periodic wind, local winds and variable wind.

44. Where do the trade winds blow?

Tropics

45. What is monsoon?

It means season

46. What is cyclone?

They are the centers of low pressure they attract wind from all directions.

47. Which is the eye of the cyclones?

Centre of the cyclones

48. Warm local wind	location
Brick fleder	Australia
Chinook	USA
Fohn	Northern Italy
Sirocco	Sahara dessert
Loo	Thar dessert
49. Cool Local wind	Location
Harmattam	Central Africa
Mistral	Alps region
Purga	Russia
Norte	Gulf of Mexico
Pampero	Argentina

50. What is cloud?

It is a mass of small water droplets or ice crystals formed by water vapour.

51. Which is the high clouds?

Cirrus clouds

52. Which is the low clouds?

Stratus clouds

53. What are vertical clouds?

Nimbus

54. What are the classification of rainfall?

Conventional rainfall, relief or orographic rainfall, cyclonic rainfall.'

55. What is lightening?

It is the atmospheric discharge of electricity.

56. How are thunderstorm produced?

By cumulonimbus clouds

## **9. Climate of Tamil Nadu**

1. Which determine the climatic condition of any region?

Physiographic, nearness to sea and geographical location.

2. What is weather?

It refers to a state of any atmosphere over an area at any particular point of time.

3. What is climate?

It refers to the average weather conditions and variations over a large area in lone period of time.

4. What are the major climatic elements?

Temperature, pressure, wind, humidity, clouds and perception.

5. What kind of climate do Tamil Nadu have?

Tropical climate

6. What is the hottest part of summer called in Tamil Nadu?

Agni Nakshatram or Kathiri Veyyil

7. What are the seasons and months they occur?

Summer from april to august, Rainy from August to December and Winter from December to April.

8. What are tamil names of various seasons?

For summer it is Illavenil and Muduvenil, for rainy season it is khar season and Khulir, for winter it is mun pani and pin pani.

9. How is rainy season grouped as?

South west monsoon, north east monsoon, cyclonic rainfall.

10. From where is the word monsoon derived?

It is derived form the Arabic word `mausim` which means seasons.

11. When do the northeast monsoon occurs?

Between October and December

12. Which is the month of cyclonic rainfall?

November

13. Which districts receives rain from all rainy seasons?

Kanyakumari

14. Which districts gets low rainfall during rainy seasons?

Tirupur and Coimbatore

15. What is natural vegetation?

Vegetation that grows naturally without the effort of human beings is called as natural vegetation.

16. What is the percentage of forest to be there in region?

33%

17. What is the percentage of forest in Tamil Nadu?

17%

18. What are the types of forest?

Tropical evergreen forest, tropical deciduous forest, thorny shrub forests, mangrove forest and hill forest.

19. What is largest number of plantation in Tamil Nadu?

Sandal wood for about 5,88,000 hectares

20. What is ever green forest?

Those forest which stays every green or whose leaf will not fall is called as ever green forest.

21. What is the variation in trees?

Some are short, tall, soft, hard, sal, sandal wood, teak wood, bamboo etc

22. Where is thorny shrub forest found?

At places where there are long dry periods and low rainfall.

23. Where are mangrove forest found?

At tropical and sub-tropical

24. Where is hill forest found?

It is found at hill slopes where rainfall is heavy.

25. Name some forest products?

Building construction, making of furniture, boat building, plywood, hard wood, matches, pulp, paper industries, packing boxes, wooden toys, pencils and wood carvings.

## 10. India Climate

1. What is the one of the basic elements of natural environment?

Climate

2. What do climate determines?

It determines the landforms, soil, vegetation and agriculture of a place.

3. What is weather?

It is day to day condition of the atmosphere at any place in regard to temperature, pressure wind, humidity and rainfall.

4. What is the relationship between temperature and altitude?

Temperature decreases with increasing altitude from the earth surface at the rate of 1 degree Celsius for every 165 meters.

5. How is climate of a place determined?

By latitude, altitude, distance from the sea, wind, position of mountains

6. What is continental climate?

The places to the north of tropic of cancer experience this kind of climate where the summer is extremely hot and winter is very cold.

7. Which areas have equitable climate?



Coastal areas.

8. What is sea breeze?

The wind that blows from sea to land is called as sea breeze.

9. What is jet streams?

Air currents in the upper layers of the atmosphere is known as jet streams.

10. Which determines climate of a place?

Position of mountains

11. Who used the term monsoon?

Seamen

12. What kind of climate do India experience?

Tropical monsoon climate.

13. What is EL Nino?

It is a complex weather process that appears once in every 5 to 10 years bringing drought, floods, and other weather extremes to different parts of the world.

14. What kind of climate do great Himalayan range has?

Bitter cold winds

15. What kind of climate do Aravalli has?

Dessert where they have less rainfall

16. What are the features of tropical monsoon climate?

- It is classified into southwest monsoon and northeast monsoon on the basis of the direction they blow
- They are caused due to differential heating of land and sea
- It change seasons and determines climate

17. How are seasons recognized?

Monsoon

18. What are the different seasons in India?

- Summer (March to May)
- South west monsoon (June – September)
- North east monsoon (October – November)
- Winter (December- February)

19. How is sun rays during summer?

It is vertical over Tropic of cancer

20. What is the highest temperature during summer?

50 Degree Celsius

21. What is monsoon burst?

When the monsoon comes to southern part they give rain during summer with thunderstorms and lightening. This is called as monsoon burts

22. What is mango showers?

Thunderstorms

23. What is local thunderstorms?

Norwesters

24. What is Kaibaisakhi?

Thunderstorms during the calamity of month of Baisakhi in Punjab

25. What happens to the moisture laden wind?

It is forced to ascend the slopes, condenses and gives heavy rainfall.

26. What happens to the second part of wind?

It flows through the Vindhya-Satpura ranges and strikes against the Rajmaham hills and causes heavy rainfall in the Chotnagpur Plateau region.

27. What is the movement of third part of wind?

It moves towards Rajasthan where the Aravallio Mountains stand parallel to the direction.

28. What is moisture bearing wind?

The branch of monsoon blowing from the Bay of Bengal is called as moisture bearing wind.

29. Where to the moisture bearing wind strike?

Kasi, Garo and Jaintia hills

30. Why do Mawsynram have heavy rainfall?

The moisture laden wind takes a sudden rise over the funnel shaped hills it cause sudden rainfall in Mawsynram

31. What is windward slide?

The wind striking side of the mountain is called windward side of mountain, which receives heavy rainfall.

32. What is leeward side?

The other side of the mountain which is sheltered from the wind is called Leeward side of mountain. It receives less rainfall.

33. When do south west monsoon begins?

Second week of September

34. Which causes frequent damage in coastal area?

Cyclones

35. Where is sun during winter?

Overhead in the Tropic of Capricorn

36. Which causes 80 percent of rainfall during June to September?

South West Monsoon

37. Which influence rainfall?

Orographic feature

38. What is retreating monsoon wind?

The wind that flows from high pressure area of north west India to South India is called a retreating monsoon.

39. What is western disturbance?

A low pressure depression that originates over the Mediterranean Sea and travels eastwards across Iran and Afghanistan is known as western disturbance.

40. How is intensity and distribution of rainfall determined?

By tropical depressions

41. Give example for drought prone areas?

Gujarat and the Deccan plateau

42. How are hydro electricity power plants affected?

During low rainfall

43. What are the factors distributing rainfall?

- 1) The direction of the rain bearing winds
- 2) The position of the mountain ranges

44. What is the areas with rainfall between 200 to 300 cm?

Middle Ganga Valley

45. What is the area with rainfall between 100cm to 200cm?

Upper Ganga Valley

46. What are the basic requirements of water conservation?

- The total involvement co-operation and participation of all local people
- All the family members should know the importance of managing household water
- The most important aspect in water conservation is to treat water as economic commodity
- In the distribution of this economic good both equity and quality .

47. How can we conserve water ?

Rainwater harvesting