

Unit 6

Physical Geography of Tamil Nadu

I) Choose the correct answer.

1. The latitudinal extent of Tamil Nadu is _____

- a) $8^{\circ}5'N$ to $13^{\circ}35'N$
- b) $8^{\circ}5'S$ to $13^{\circ}35'S$
- c) $8^{\circ}0'N$ to $13^{\circ}5'N$
- d) $8^{\circ}0'S$ to $13^{\circ}05'S$.

Ans \rightarrow a) $8^{\circ}5'N$ to $13^{\circ}35'N$

2. The longitudinal extent of Tamil Nadu is _____

- a) $76^{\circ}18'E$ to $80^{\circ}20'E$
- b) $76^{\circ}18'W$ to $80^{\circ}20'W$
- c) $86^{\circ}18'E$ to $10^{\circ}20'E$
- d) $86^{\circ}18'W$ to $10^{\circ}20'W$.

Ans \rightarrow a) $76^{\circ}18'E$ to $80^{\circ}20'E$.

3. The highest peak in Tamil Nadu is

- a) Anaimudi
- b) Doddabetta
- c) Mahendragiri
- d) Serwarayan.

Ans \rightarrow b) Doddabetta

4. Which of the following passes is not located in the Western Ghats of Tamil Nadu?

- a) Palghat
- b) Shenkottah
- c) Bhorghat
- d) Achankoil

Ans \rightarrow c) Bhorghat

5. Which of the following rivers flow into Arabian sea?

- a) Periyar
- b) Cauvery
- c) Chittar
- d) Bhavani

Ans \rightarrow a) Periyar

6. The district with largest mangrove forest cover in Tamil Nadu is —

- a) Ramanathapuram b) Nagapattinam
c) Cuddalore d) Thanjavur

Ans → **c) Cuddalore**

7. Retreating monsoon wind picks up moisture from,

- a) Arabian Sea b) Bay of Bengal
c) Indian Ocean d) Timor Sea

Ans → **b) Bay of Bengal**

8. Which of the following district is affected by sand dunes to a large extent?

- a) Thanjavur b) Madurai c) Thanjavur d) Ramanathapuram

Ans → **d) Ramanathapuram**

9. The district which has largest forest cover in Tamil Nadu is —

- a) Dharmapuri b) Vellore c) Dindigul d) Erode

Ans → **a) Dharmapuri**

II] Fill in the blanks.

1. The Plateau which lies between the Nilgiris & Dharmapuri districts is **Bharamahal**.

2. **Selakkaradu** is the highest peak in the southern most part of the Eastern Ghats.

3. The riverine island of Srirangam is located between northern and southern branches of cauvery.

4. Laterite soil is suitable for the cultivation of tea and coffee plants.

5. Niligiri Tahre is the Tamil Nadu state animal which is found in Niligiri Hills.

III] match the following.

- | | |
|------------------------|-------------------------|
| 1. Winter season | a) Pre monsoon |
| 2. Summer season | b) June to September |
| 3. Southwest monsoon | c) March to May |
| 4. North east monsoon. | d) January & February |
| 5. Mango shower | e) October to December. |

Ans → 1 → d ; 2 → c ; 3 → b ; 4 → e ; 5 → a

IV] Assertion type question.

1. Assertion (A): Tamil Nadu does not receive much rainfall from southwest monsoon.

Reason (R): It is situated in the rain shadow area of Western Ghats.

- Both (A) and (R) are true and (R) explain (A).
- Both (A) and (R) are true but (R) does not explain (A)
- (A) is true but (R) is false
- (R) is true but (A) is false.

Ans → (a) Both (A) and (R) are true and (R) explain (A).

v) Answer the following in brief.

1. State the boundaries of Tamil Nadu.

→ Tamil Nadu is bounded by Bay of Bengal in the East, Kerala in the west, Andhra Pradesh in the north, Karnataka in north-west and Indian Ocean in the south.

2. What is 'Teri'?

→ The sand dunes formed along the coast of Ramanathapuram and Thoothukudi districts are called Teri.

3. How is the coastal plain formed?

→ Coastal plain is formed by the rivers that flow towards east and drain in the Bay of Bengal.

4. Name the major islands of Tamil Nadu.

→ Pamban, Hare, Karukkadai, Nallathanni Theeru, Pullivasal, Srirangam, Upputanni, Island groups, Kattupalli Island, Quibble Island and Vivekananda rock memorial are major islands of Tamil Nadu.

5. Name the tributaries of river Thamirabarani.

→ Karaikayar, Sevalar, Manimuthar, Gadananathi, Pachaiyar, Chittar and Ramanathi are tributaries of river Thamirabarani.

Page No.
 Date

6. Define: Disaster Risk Reduction.

→ According to United Nations Office for Disaster Risk Reduction, Disaster Risk Reduction (UNDRR) is the concept and practice of reducing disaster risks through systematic efforts to analyse and reduce the causal factors of disasters.

- This includes reducing exposure or exposure to hazards, lessening the vulnerability of people and property, wise management of land and environment and improving preparedness and early warning for adverse events.

7. During cyclone, how does the meteorological department warn the fishermen?

-
- During disturbed weather over the seas, the ports likely to be affected are warned by concerned ACWCs/CWCs [Area Cyclone Warning centres / cyclone warning centres] by advising the port authorities to hoist appropriate storm warning signals.
 - The department also issues a "fleet forecast" for the Indian Navy. Coastal Bulletins for Indian coastal areas covering upto 75 km from the coastline & sea area bulletins for the sea areas beyond 75 km.
 - The special warnings are issued by for fishermen four times a day in normal weather and every three hourly in accordance with four stage warning in case of disturbed weather.
 - The fishermen are warned through state government officials and broadcast of warnings through All India Radio and National Television telecast programs in national & regional hook up.
 - A system of warning dissemination for fishermen through a World Space Digital Based radio receiver is being planned.

VI] Distinguish between the following :

1. Thamiraparani & Cauvery

| <u>Thamiraparani</u> | <u>cauvery</u> |
|--|---|
| <ul style="list-style-type: none"> • Thamiraparani / Tamraparni or Perunai - is a perennial river. | <ul style="list-style-type: none"> • Cauvery (also spelled as 'Kaveri') known as 'Ponni' in Tamil, is the fourth largest river in south India. |
| <ul style="list-style-type: none"> • Originating - from the Agastya-koodam peak of Pothigem hills of western ghats. | <ul style="list-style-type: none"> • Originating - in the western ghats at Talakaveri in Karnataka's Kodagu district, it passes through Tamil Nadu. |
| <ul style="list-style-type: none"> • Flows through Tirunelveli & Thoothukudi districts of the Tamil Nadu dist state of southern India into Gulf of Mannar. | <ul style="list-style-type: none"> • The river bisects the state into the north & south & finally reaches the Bay of Bengal at Poompuhar also known as Kaveripoompattinam in Tamil Nadu. |
| <ul style="list-style-type: none"> • Only Perennial river in Tamil Nadu. The river flows towards North direction initially. However changes to east direction later. | <ul style="list-style-type: none"> • Cauvery basin is in states of Karnataka, Tamil Nadu and Kerala and the Union Territory of Puducherry. |

vii] Give reasons for the following.

1. Eastern Ghats are not a continuous range.

→ Due to dissection at many places by the rivers flowing towards the east that drain into Bay of Bengal, Eastern Ghats are not a continuous range.

2. Tamil Nadu receives low rainfall during southwest monsoon.

→ During southwest monsoon, Tamil Nadu is located in the rain shadow region for the wind, which blows from the Arabian sea. As a result, Tamil Nadu receives only a meagre rainfall from this monsoon. Rainfall during southwest monsoon therefore decreases from west to east.

3. Cuddalore is a multiphase disaster zone.

→ Cuddalore district is prone to natural calamities having experienced landfalls of major cyclones formed in Bay of Bengal region.

Apart from the cyclones, 2004 Tsunami caused major damages to life and property in Cuddalore and its adjacent Nagapattinam district. Cyclone Thane which made landfall here caused major loss to life and property.

vii] Answer the following in paragraph.

1. Describe the nature of plateau region of Tamil Nadu.

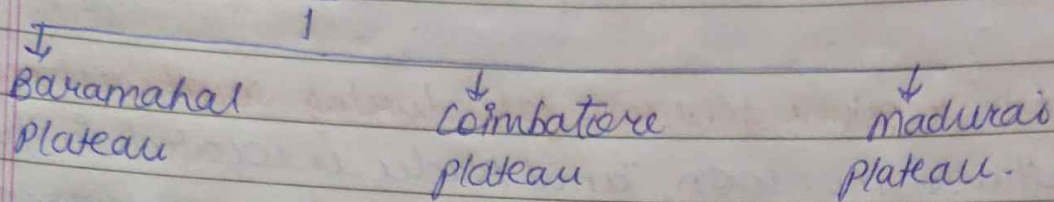
→ a) Location: Plateaus of Tamil Nadu are located between Western Ghats and Eastern Ghats.

b) Area & Shape: covers an area of 60,000 sq. km.
Roughly triangular in shape.

c) Slope and height: It is broader in the North & very narrow in the south.

Its height increases from East to West ranging between 150 + and 600 metres.

d) Sub-divisions:



2. Write an account on river Cauvery.

- • The river Cauvery originates at Talacauvery in the Brahmagiri hills of Kodagu (Coorg) district of Karnataka in the Western Ghats.
- Total length of Cauvery river → 805 km.
- About 416 km of its course falls in Tamil Nadu.
- It serves as a boundary between Karnataka & Tamil Nadu for a distance of 64 km.
- A tributary called Bhavani joins Cauvery on the right bank about 45 km from the Mettur Reservoir.
- Cauvery & its distributaries in its lower course drain the districts of Nagapattinam, Thanjavur, Thiravur and Thiruchirappalli.
- The ~~to~~ head of the Cauvery delta is near the islands of Suixangam, Kallidam branches off from Cauvery at Grand Anicut, also called as Kallanai was built across the river Cauvery.
- After Kallanai, the river breaks into large number of distributaries & forms a network all over the delta.

- The network of tributaries within the delta of Cauvery in the coast is called as 'Garden of Southern India'.
- It merges into Bay of Bengal to the south of Cuddalore. Cauvery along with its tributaries Bhavani, Noyyal, Moyar and Amravathi is the most important source of canal irrigation.

3. Explain the characteristic features of summer and winter seasons of Tamil Nadu.

- • Tamil Nadu lies to the south of Tropic of Cancer, which is near the equator.
- As it receives vertical sun rays, the temperature of the state is relatively high throughout the year.

Characteristic features of summer season of Tamil Nadu:

- The apparent migration of the sun towards the north during March, April and May results in reception of vertical sun's rays by south India.
 - There is a steady rise in temperature from south to north.
 - Generally the temperature varies from 30°C to more than 40°C .
 - Summer falls in months of March, April & May.
- Hottest month is May.
- In this season particularly in the month of May, southern part of the state receives some rainfall from pre-monsoon showers and some parts experience convectional rainfall.

Winter season characteristics:

- During January and February Tamil Nadu receives the slanting rays of sun.
- So the weather is slightly cooler.
- The difference between summer & winter temperature is not

very high.

- Winter temperature in the state varies from 15°C to 25°C .

However in hill stations it ranges from 5° to 0°C forming thick mist & frost.

- The season is generally dry.

4. Bring out the types and distribution of soils in Tamil Nadu.

→ a) Alluvial soil

distribution - found in river valley regions and coastal plains.

Thanjavur, Tiruvarur, Nagapattinam, Villupuram, Cuddalore, Tirunelveli and Kanniyakumari

b) Black soil

distribution - found extensively in districts of Coimbatore, Madurai, Virudhunagar, Tirunelveli and Thoothukudi.

c) Red soil

distribution - found particularly in central districts of the state.

It is dominantly found in Sivagangai & Ramanathapuram districts.

d) Laterite soil

distribution - Kancheepuram, Tiruvallur and Thanjavur districts & source patches over the mountain region in Nilgiris.

e) Saline soil distribution - confined to coromandel coast and vedarevnyam.

5. What are the risk reduction measures taken before and after cyclone.

→ * Risk reduction measures taken before:-

- Ignore rumours, stay calm, don't be panic, keep your mobile phone charged to ensure connectivity; use sms; listen to radio; watch TV; read newspapers for weather updates.
- Keep your documents and valuables in waterproof coat containers; prepare an emergency kit with essential items for survival; secure your house, carry out repairs, don't leave sharp objects loose; untie cattle/animals for their safety.
- Fishermen should keep the radio set with extra batteries handy; keep boats and rafts tied up safely and don't venture out in the sea.

* After cyclone risk reduction measures.

Those who shifted to cyclone centres must remain there till instructions are received; strictly avoid loose electrical wires after the cyclone; beware of snakes and other animals immediately after the cyclone; clear debris and carcasses from/near the premise after the cyclone and report losses truthfully & accurately to the authorities.