



MIND MAP



**POINTS TO REMEMBER**

- India observed 2018 as national year of millets.
- Nammazhvar was celebrated for his work on propagation of ecological and organic farming.
- TANTEA is one of the Biggest black tea producers in India.
- Goat is also known as 'poor man's cow'
- Coimbatore is also known as 'Manchester of Tamilnadu'.
- Hinduism, Christianity and Islam are the major religions in the state.
- Percentage of people with unstated religion is 0.26%.
- Human geography is the branch of geography dealing with how human activity affects or is influenced by the nature.
- Disaster emergency contact number is 1077.
- Sivakasi is considered the Fireworks capital of India.

ABBREVIATIONS

◆ TANTEA	- Tamil Nadu Tea Plantation Corporation Limited.
◆ TNPC	- Tamil Nadu Newsprint and Papers Limited.
◆ TANCEM	- Tamil Nadu Cements Corporation Limited.
◆ NASSCOM	- National Association of Software and Services Companies.
◆ CLRI	- Central Leather Research Institute.
◆ SEZ	- Special Economic Zone.

I. Choose the correct answer:**TEXTUAL QUESTIONS**

1. **The delta which is known as Granary South India is**
a) Cauvery delta b) Mahanadi delta c) Godavari delta d) Krishna delta
2. **Second staple food of the people of Tamil Nadu is**
a) Pulses b) Millets c) Oilseeds d) Rice
3. **Literacy rate of Tamil Nadu as per 2011 census is**
a) 80.32% b) 62.33% c) 73.45% d) 80.33%
4. **A major hydro-electric power project of Tamil Nadu is**
a) Mettur b) Papanasam c) Sathanur d) Thungabahadra
5. **Number of major and minor ports in Tamil Nadu are**
a) 3 and 15 b) 4 and 15 c) 3 and 16 d) 4 and 15



ADDITIONAL QUESTIONS

6. The largest software exporter in India.
a) Karnataka b) Andhra Pradesh c) Gujarat d) West Bengal
7. _____ is extensively cultivated in Cuddalore district.
a) Cashew b) Pepper c) Rubber d) none of the above
8. Marine fishing is also called _____.
a) Inshore fishing b) off-shore fishing c) net fishing d) none of the above
9. The least populated district in Tamil Nadu is
a) Karur b) Namakkal c) Nilgiris d) Theni
10. Mullaiperiyar dam was built by the British administration in _____.
a) 1859 b) 1895 c) 1869 d) none of the above
11. There are ____ sugar mills in Tamilnadu.
a) 43 b) 64 c) 34 d) none of the above
12. Disaster emergency contact number is _____.
a) 1077 b) 1078 c) 1079 d) none of the above
13. _____ is the major oilseed of the state.
a) Groundnut b) pea c) Castor d) none of the above
14. The state which leads in the number of road accidents in India is
a) Tamil Nadu b) Kerala c) Karnataka d) Maharashtra
15. Leather tanneries are located in
a) Salem b) Erode c) Vaniyambadi d) Thoothukudi

ANSWER

- | | | |
|---------------------|-----------------------|--------------------|
| 1. a) Cauvery delta | 6. a) Karnataka | 11. c) 34 |
| 2. b) Millets | 7. a) Cashew | 12. a) 1077 |
| 3. d) 80.33% | 8. a) Inshore fishing | 13. a) Groundnut |
| 4. a) Mettur | 9. c) Nilgiris | 14. a) Tamil Nadu |
| 5. a) 3 and 15 | 10. b) 1895 | 15. c) Vaniyambadi |

II. Fill in the blanks:



TEXTUAL QUESTIONS

1. Agriculture of Tamil Nadu constitutes _____ % of its economy.
2. Sathanur dam is constructed across the river _____.
3. Tamil Nadu ranks _____ in India with a share of over 20% in total road projects under operation in the Public-Private Partnership (PPP).
4. _____ is the third largest airport in India after Mumbai and Delhi.
5. The difference between the value of exports and imports is called _____.

**ADDITIONAL QUESTIONS**

6. The word “agriculture” is derived from the Latin words _____ and _____, which means field and growing.
7. _____ was a Tamil, Indian green crusader, agricultural scientist.
8. _____ district leads in inland fish production.
9. India observed the year 2018 as _____.
10. To promote organic farming, a central scheme named _____ was launched.
11. Goat is also known as _____.
12. The headquarters of the Southern Railways is at _____.
13. _____ is notable for the significant population of mugger crocodiles.
14. Periyar river originates from _____.
15. The surname of Vaigai dam is _____.
16. The Papanasam Dam is also known as _____.
17. _____ project is located near Ottanchatram.
18. In Tamil Nadu ilmenite is found in the sands of _____ beach.
19. _____ has large lignite resources.
20. Oil and gas are found in _____.
21. _____ is known as Textile capital of Tamil Nadu.
22. _____ is known as the ‘Manchester of Tamil Nadu’.
23. The state that ranks first in the cultivation of coffee is _____.
24. The state that ranks first in the cultivation of tea is _____.
25. TNPL is located at _____ in Karur district
26. The highest sex ratio is found in the _____ district .
27. The lowest sex ratio is found in _____ district.
28. The literacy rate of India as per 2011 census is _____.
29. The highest literacy rate is in the _____ district.
30. _____ district has the lowest rate of literacy.
31. _____ is the longest National Highway in Tamil Nadu.
32. NH-44 runs from _____ to _____.
33. _____ is the shortest National Highway in Tamil Nadu.
34. NH-785 runs from _____ to _____.
35. _____ is the artificial harbour in Tamil Nadu.



ANSWER

- | | |
|---|--------------------------|
| 1. 21% | 19. Neyveli |
| 2. Thenpennai | 20. Cauvery basin |
| 3. Second | 21. Karur |
| 4. Chennai International airport | 22. Coimbatore |
| 5. balance of trade | 23. Karnataka |
| 6. ager and cultura | 24. Assam |
| 7. G. Nammazhvar | 25. Kagithapuram |
| 8. Vellore | 26. Nilgiris |
| 9. National year of millets | 27. Dharmapuri |
| 10. National Project on Organic Farming | 28. 74.04% |
| 11. Poor man's cow | 29. Kanyakumari |
| 12. Chennai | 30. Dharmapuri |
| 13. Amaravathi Dam | 31. NH-44 |
| 14. Thekkady hills of Kerala | 32. Hosur to Kanyakumari |
| 15. Little Brindavan | 33. NH-785 |
| 16. Karaiyar dam | 34. Madurai to Natham |
| 17. Parappalar | 35. Chennai |
| 18. Kanyakumari | |

III. Match the following:



TEXTUAL QUESTION

A)

1. Bauxite
2. Gypsum
3. Iron
4. Limestone

- a. Salem
b. Servaroy hills
c. Coimbatore
d. Tiruchirapalli

Ans:

- 1) b
2) d
3) a
4) c



ADDITIONAL QUESTIONS

B)

- Millets & Pulses
1. Sorghum
2. Ragi
3. Bajra
4. Bengal gram
5. Green gram

Districts

- Dharmapuri
Coimbatore
Kambam valley
Thoothukudi
Tirunelveli

Ans:

- 1) c
2) a
3) e
4) b
5) d

C)

- Crops
1. Sugarcane
2. Cotton
3. Tea
4. Rubber
5. Pepper

Districts

- Coimbatore
Kanniyakumari
Wester Ghats
Tiruvallur
Nilgiris

Ans:

- 1) d
2) a
3) e
4) b
5) c



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Ques:

D)

Dams		Districts	
1. Mettur	a.	Erode	1) e
2. Bhavani Sagar	b.	Tirunelveli	2) a
3. Krishnagiri	c.	Madurai	3) d
4. Manimuthar	d.	Dharmapuri	4) b
5. Vaigai	e.	Salem	5) c

Ans:

E)

Industry		Districts	
1. Textile	a.	Kancheepuram	1) d
2. Silk	b.	Karur	2) a
3. Leather	c.	Ariyalur	3) e
4. Paper	d.	Coimbatore	4) b
5. Cement	e.	Vellore	5) c

Ans:

F)

Postal District		Headquarters	
1. Chennai	a.	Coimbatore	1) d
2. Western	b.	Tiruchirappalli	2) a
3. Central	c.	Madurai	3) b
4. Southern	d.	Chennai	4) c

Ans:

IV. Assertion type question:

TEXTUAL QUESTIONS

1. **Assertion (A) :** Coimbatore, Tiruppur and Erode region is called as The Textile Valley of Tamil Nadu.

Reason (R) : They contribute a major share to the state's economy through textiles.

- a) Both (A) and (R) are true and (R) explain (A)
- b) Both (A) and (R) are true and (R) does not explain (A)
- c) (A) is true but (R) is false
- d) (A) is false but (R) is true

2. **Assertion (A) :** The Nilgiris is the least populated district of Tamil Nadu.

Reason (R) : It is located in the western most part of Tamil Nadu.

- a) Both (A) and (R) are true and (R) explains (A)
- b) Both (A) and (R) are true but (R) does not explain (A)
- c) (A) is true but (R) is false
- d) (A) is false but (R) is true



ADDITIONAL QUESTIONS

3. **Assertion (A) :** Fishing is the major occupation in the state.

Reason (R) : Tamilnadu is a coastal state.

- a) Both (A) and (R) are correct. 'R' explains 'A'.
- b) Both (A) and (R) are correct. 'R' does not explain 'A'
- c) A is correct and R is wrong.
- d) A is wrong and R is correct



4. Assertion (A) : Manimuthar Dam is located in Tirunelveli.

Reason (R) : Pleasure boating and waterfalls are additional tourist attractions near the dam.

- a) Both (A) and 'R' are correct. R explains A.
- b) Both (A) and (R) are correct. R does not explain A.
- c) A is correct and R is wrong.
- d) A is wrong and R is correct

ANSWER

1. (a) Both (A) and (R) are true and (R) explains (A)
2. (b) Both (A) and (R) are true but (R) does not explain (A)
3. (a) Both (A) and (R) are correct. 'R' explains 'A'.
4. (b) Both (A) and (R) are correct. R does not explain A.

V. Answer the following in brief:



TEXTUAL QUESTIONS

1. Explain the cropping seasons of Tamil Nadu.

Cropping seasons:

- Sornavari (Chittirai pattam)
- Samba (Adipattam)
- Navarai (Karthigai pattam)

2. Why is Coimbatore called the Manchester of Tamil Nadu?

- A large number of textile mills are concentrated in Coimbatore. Hence Coimbatore is called the 'Manchester of Tamilnadu'.

3. Name the important multipurpose projects of Tamil Nadu.

Multipurpose projects of Tamilnadu are:

- | | | |
|---------------------|---------------------|-------------------------------|
| ➤ Mettur Dam | ➤ Sathanur Dam | ➤ The Papanasam Dam |
| ➤ Bhavani Sagar dam | ➤ Mullaiperiyar Dam | ➤ Parampikulam Aliyar Project |
| ➤ Amaravathi Dam | ➤ Vaigai Dam | |
| ➤ Krishnagiri Dam | ➤ Manimuthar Dam | |

4. What is MRTS?

- Chennai has a well established sub urban railway network, a Mass Rapid Transport System (MRTS).
- It is currently developing a Metro system with its underground stretch in operation since May 2017.

5. List out the airports and seaports of Tamil Nadu.

Airports:

- Tamil Nadu has four major international airports.
- Chennai International Airport is currently the third largest airport.
- Other international airports in Tamil Nadu are Coimbatore, Madurai and Tiruchirapalli airports.
- It also has domestic airports at Tuticorin and Salem.

**Sea ports:**

- Tamil Nadu has three major ports. They are in Chennai, Ennore and Tuticorin.
- It has an intermediate port at Nagapattinam and 15 other minor ports.

6. **Have you heard about any stampede in your district? Write about that incident briefly.**
(Self attempt by students.)

**ADDITIONAL QUESTIONS**

7. **Define: Human geography.**

Human geography refers to the study of ways of development of human societies and their operation in relation to their physical environment.

8. **What is Agriculture?**

Agriculture is a practice of farming that includes the cultivation of crops, rearing of animals, birds, forestry, fisheries and other related activities.

9. **What are the major commercial crops of Tamilnadu?**

- | | | | |
|-------------|------------|-------------|------------|
| ➤ Sugarcane | ➤ Coconut | ➤ Gingelly | ➤ Coffee |
| ➤ Cotton | ➤ Cashew | ➤ Groundnut | ➤ Cardamom |
| ➤ Sunflower | ➤ Chillies | ➤ Tea | ➤ Rubber |

10. **What are the types of farming?**

- Subsistence intensive agriculture
- Plantation Agriculture
- Mixed farming

11. **What are the factors that determine agriculture?**

- Land form
- Climate
- Soil
- Irrigation

12. **Mention the areas where mixed farming is practised.**

Banks of river Cauvery and Thenpennai.

13. **Name the important pulses grown in Tamilnadu.**

- Bengal gram
- Black gram
- Green gram
- Cowpea
- Horse gram

14. **What are the climatic conditions required for the cultivation of pulses?**

- Pulses are grown mostly in drier regions with or without irrigation
- Mild cool climate and a low to moderate rainfall are best suited for these crops.

15. **Write the uses of oil seeds.**

It is used in,

- food preparation,
- industries as lubricant,
- manufacture of varnish, soaps, candles, cosmetics and pharmaceuticals.

16. **What are the climatic conditions required for the cultivation of sugarcane?**

- It requires high temperature and heavy rainfall.
- It grows well in the tropical region.



17. Write the major sugarcane producing districts of Tamilnadu.

- Tiruvallur ➤ Erode ➤ Tiruchirapalli ➤ Vellore
- Cuddalore ➤ Kancheepuram ➤ Tirunelveli ➤ Coimbatore

18. What are the climate conditions required for the cultivation of cotton?

- It requires black-soil, long frost-free conditions, warm and humid weather for its cultivation.
- Humid weather in the early stages and hot, dry weather during harvest period is suitable for cotton.

19. Write the major industries of Tamilnadu.

Textiles, sugar, paper, leather, cement, electrical equipment, automobiles, information technology and tourism are the major industries of Tamil Nadu.

20. What is GI?

GI(Geographical Indication) is a name or sign used on products which corresponds to a specific geographical location.

21. What is SEZ?

A Special Economic Zone is an area in which the business and trade laws are different from the rest of the country.

22. Where are SEZs located?

SEZs are located within a country's national border.

23. What is the aim of SEZ?

Its aims include increased trade balance, employment, increased investment, job creation and effective administration.

24. List the IT parks in Tamilnadu.

Tidel Park, Ascendas, Mahindra world city 4 IT & ITES SEZ TIDEL-II, IT & ITES SEZ TIDEL- III, Coimbatore SEZ - Tidel Park

25. Mention the major automobile manufacturers who have their manufacturing base in TamilNadu.

- Ford ➤ TAFE ➤ Ashok Leyland
- HM-Mitsubishi ➤ Hyundai

26. Define: Population.

The term 'population' refers to the number of people living in a defined area.

27. What is demography?

The statistical study of the characteristics of human population is called demography.

28. Name the most populous districts of Tamilnadu.

Coimbatore, Chennai, Tiruvallur, Kancheepuram, Villupuram, Dharmapuri, Salem, Madurai and Tirunelveli are the most populous districts of Tamil Nadu.

29. Write the regions of moderate population.

Tiruvannamalai, Cuddalore, Tiruchirapalli, Thanjavur, Vellore, Dindugal, Virudhunagar and Thoothukudi districts have moderate population.



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30. **Write the regions of sparse population.**

The coastal districts like Nagapattinam, Tiruvarur, Pudukottai, Ramanathapuram and Sivagangai have a sparse population.

31. **Define: Sex ratio.**

The sex ratio represents the number of females per 1000 males.

32. **What are the means of communication? What are its type?****Communication:**

The act of conveying or exchanging information is called means of communication. There are 2 types of communication. They are mass communication and personal communication.

33. **Define: Export.**

Export means goods and services sold for foreign currency.

34. **Define: Import.**

Import refers to goods and services brought from overseas producers.

35. **Write the major exports of Tamilnadu.**

- i) Agricultural Products - tobacco, cereals, cotton, sugarcane, paddy, groundnut, spices and vegetables.
- ii) Leather Products - wallets, purses, pouches, handbags, belts, footwear and gloves
- iii) Gems and Jewellery - pearls, precious stones, gold jewellery, decorations and antiques
- iv) Chemicals and related products - paper, chemicals, rubber and glass.

36. **What are the major imports of Tamilnadu?**

Machineries like transport equipment, machine tools, non-electrical machinery, electrical machinery, pharmaceutical products, petroleum, fertilizers and newsprint are its major imports.

37. **Define: Man-made disaster.**

A disastrous events caused directly or indirectly by human actions are called manmade disaster.

38. **Give some examples for man-made disaster.**

Man-made disaster includes hazardous material spills, fires, groundwater contamination, transportation accidents, structure failures, mining accidents, explosions and acts of terrorism.

39. **Define: Industrial disaster.**

Disasters caused by industrial companies either by accident, negligence or incompetence fall under industrial disasters.

40. **What are the main factors contributing to the increasing fire accidents in industries?**

Overheating, aging of the material and use of sub-standard quality of electrical gadgets have been the main factors contributing to the increasing fire accidents in industries.

41. **What is stampede? (or) What is stamping?**

A situation in which a large number of animals or people running in the same direction in an uncontrolled way causing injuries and deaths is called stamping.

42. **What are the factors that determine the growth of agriculture?**

- Landform
- Soil
- Climate
- Irrigation



43. Write the types and regions of agriculture practices in Tamilnadu.

Farming type	Area practiced
Subsistence intensive agriculture	Practiced all over Tamil Nadu with few exceptions.
Plantation Agriculture	Hill slopes of Eastern and Western Ghats
Mixed farming	Banks of River Cauvery and Thenpennai.

44. What are the major millets of Tamilnadu?

- Sorghum(Cholam)/Jowar
- Ragi (Kezhvaragu)
- Bajra(kambu)

45. Name some of the oil seeds which are grown in Tamil Nadu.

- Groundnut
- Coconut
- Mustard
- Gingelly
- Sunflower
- Castor

46. Write the major plantation crops of Tamilnadu.

- Tea
- Coffee
- Rubber
- Cinchona

47. Write short notes on Second Green Revolution. (or)

What is Eco farming? (or)

What is organic farming?

In organic farming synthetic fertilizers, pesticides, growth regulator and livestock feed additives are not used. This type of farming rely on crop rotation, crop residues, animal manure, off-farm organic wastes and biological pest control to maintain soil productivity. This farming method is being adopted by very few farmers in the state. It has to be increased in number.

48. What are the types of roads?

- National Highways
- State Highways
- Corporation & Municipalities Road
- Panchayat Union
- Village Panchayat Union
- Forest roads
- Commercial roads
- Non-commercial roads

49. What is Mitigation?

Hazard mitigation refers to any sustained action taken to reduce or eliminate the long term risk to human life and property from hazardous conditions.



VI. Distinguish Between:



TEXTUAL QUESTIONS

1. MARINE FISHING AND INLAND FISHING.

Marine fishing	Inland fishing
1. It is carried out in oceans and seas.	It is carried out in lakes, rivers, ponds, estuaries, back waters and swamps.
2. Large mechanized boats are used for fishing.	Catamaran, diesel boats and floating nets are used in fishing.
3. The fish varieties caught are sharks, flying fish, cownose, cat fish, silver bellies and crabs.	Oysters and prawns are cultured in original nurseries.
4. Chennai, Kanyakumari, Tirunelveli, Nagapattinam, Thanjavur and Ramanathapuram districts contribute about 40% of marine fish production in the state.	Vellore leads with 10% of states production. Cuddalore, Sivagangai and Virudhunagar districts stand second with 9% of inland fish catch each.

2. FOOD CROPS AND NON-FOOD CROPS.

Food crops	Non-food crops
1. Crops which are cultivated for human consumption are called food crops.	Crops which are cultivated for commercial purposes are called non-food crops
2. Rice, wheat and millets are food crops.	Sugarcane, tobacco, cotton and jute, etc. are non-food crops.

3. SURFACE WATER AND GROUND WATER.

Surface Water	Ground water
1. The total surface water potential of the state is about 24,864 mcm.	The utilizable ground water resource of the state is 22,423 mcm.
2. An area of 24 lakh hectares of the land are irrigated by surface water.	About 8875 mcm is the balance water available for use.



ADDITIONAL QUESTIONS

4. EXPORT AND IMPORT.

Export	Import
1. It means goods and services sold for foreign currency.	It refers to goods and services brought from overseas producers.
2. Agricultural products, leather products, gems and jewellery and chemical and related products are the major exports of Tamil Nadu.	Transport equipments, machine tools, electrical machinery, pharmaceutical products, petroleum and newsprint are major imports.
3. By export we earn foreign exchange.	By import we lose foreign exchange.

**VII. Give Reasons:****TEXTUAL QUESTIONS**

1. **Farmers switch over from inorganic to organic farming.**
 - Using pesticides and chemicals affect the crops and the consumers and leads to land degradation.
 - Inorganic farming needs surplus of water while organic farming needs less irrigation.
 - Farmers use cow dung and other natural manure as fertilizers. All these are readily available with the farmers who do not have to buy them. Organic farming maintains soil productivity.
 - Hence , farmers switch over from inorganic to organic farming.

2. Cities are densely populated than the villages.

Agriculture, industrial development, network of transport and employment opportunities are the reasons for dense population in cities.

3. Karur is called the Textile Capital of Tamil Nadu.

Coimbatore, Tirupur and Erode contribute a major share to the state's economy through textiles. So, this region is referred as "Textile valley of Tamilnadu".Karur is known as the textile capital of Tamilnadu.

4. Mostly stampede occurs in Temples.

Mostly stampede occurs in temples mainly due to crowd mismanagement. On special occasions and during festival times people gather in large number. Sometimes they loose patience and it results in stampede.

**ADDITIONAL QUESTIONS****5. Human beings are the most significant resource on the earth surface.**

Human beings use variety of natural resources such as landforms, rivers, soil and natural vegetation with their intelligence and skill. So human beings are the most significant resource on the earth surface.

6. Agriculture is the major occupation in Tamilnadu.

- Agriculture has been the mainstay of the state's economy since independence.
- Agriculture provides employment for rural people on a large scale.
- There is a strong link between agriculture and economic growth.

7. Plains are most suitable for agriculture.

The plains are rich in alluvial soil. It enhances agricultural productivity.

8. Irrigation becomes necessary for successful cultivation of crops in Tamilnadu.

Monsoon rainfall in the state is highly irregular. Further it is seasonal.

9. Goat is also known as 'poor man's cow'.

It forms a very important component in dry land farming system. In the marginal or undulating lands unsuitable for rearing of other types of cattle like cow or buffalo, goat is the best alternative. With very low investments, goat rearing can be made into a profitable venture for small and marginal farmers.



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10. **Automobile industry plays a crucial role in the Tamilnadu's economy.**

Automobile industry has been one of the key driving factors contributing 8 percent to state GDP and giving direct employment to 2,20,000 people.

11. **Tourism is considered as an industry.**

Because of its enormous potential in creating employment for a large number of people, tourism is considered as an industry.

12. **Over population is one of the major problems confronting our nation with all its evil effects.**

The rapid increase of population may be responsible for retarding economic growth. Hence, over population is one of the major problems confronting our nation with all its evil effects.

13. **Sugar industry plays a vital role in the economic development of the state, particularly in rural areas.**

The sugar industry provides large scale direct employment to several thousands and indirect employment to several lakhs of farmers and agricultural labourers in the rural areas who are involved in cultivation of sugarcane, harvesting, transporting and other services. Hence, sugar industry plays a vital role in the economic development of the state, particularly in rural areas.

VIII. Answer the following in a paragraph:**TEXTUAL QUESTIONS**1. **Write about the plantation farming of Tamil Nadu.**

- Tea , coffee, cashew, rubber and cinchona are the major plantation crops of the state.
- Tamil Nadu ranks second in area and production of tea in India next to Assam. Tea plantations are found in the hills of the Nilgiris and Coimbatore.
- Coffee plants are grown in the hills of Western Ghats as well as Eastern Ghats.
- The Nilgiris and Yercaud in Salem are the notable regions for tea plantations.
- It is also found in the hilly slopes of Dindigul, Madurai, Theni and Dharmapuri districts. Tamil Nadu stands second in area and production of coffee next to Karnataka.
- Rubber plantations are significant in Kanyakumari.
- Pepper is confined to the warm and wet slopes of Eastern and Western Ghats of Tamil Nadu.
- Cashew is extensively cultivated in Cuddalore district.

2. **Give an account on water resources of Tamil Nadu.**

- Tamil Nadu has only 2.5% percent of India's water resources. More than 95% of the surface water and 80% of the ground water have already been put into use.
- The state is heavily dependent on monsoon rains.

Surface Water Resources	Numbers
River Basin	17
Reservoirs	81
Tanks	41,127
Tube wells and other wells	4,98,644
Open wells	15,06,919
Total (Million Cubic metres)	2046788 MCM



Surface water resources:

- The total surface water potential of the state is about 24,864 mcm.
- There are 17 major river basins in the state with 81 reservoirs and about 41,262 tanks.
- Most of the surface water has already been tapped, primarily for irrigation, where water use is largest.
- An area of 24 lakh hectares of the land are irrigated by surface water through major, medium and minor schemes.

Ground water resources:

- The utilizable ground water resource of the state is 22,423 mcm.
- The current level of utilization of water is about 13,558 mcm. It is about 60 percent of the available recharge, while about 8875 mcm is the balance available for use.

3. Bring out the mineral distribution in Tamil Nadu.

Tamil Nadu is the leading holder of country's resources of vermiculite, magnetite, dunite, rutile, garnet, molybdenum and ilmenite.

- Important minerals found in the state are as follows: Neyveli has large lignite resources. Coal is also available in Ramanathapuram. Oil and gas are found in the Cauvery basin.
- **Iron:** Iron deposits found in Kanjamalai region in Salem district and Kalvarayan malai region of Tiruvannamalai district.
- **Magnesite:** It is available in Salem.
- **Bauxite:** Bauxite is found in Servarayan Hills, Kotagiri, Udagamandalam, Palani and Kollimalai areas.
- **Gypsum:** Gypsum is obtained in Tiruchirappalli, Tirunelveli, Thoothukudi and Virudhunagar districts.
- Ilmenite and rutile are found in the sands of Kanyakumari beach.
- **Limestone:** It is available in Coimbatore, Cuddalore, Dindigul, Kancheepuram, Karur, Madurai, Nagapattinam, Namakkal, Perambalur, Ramanathapuram, Salem and Tiruvallur districts
- **Magnesite:** It is obtained in Coimbatore, Dharmapuri, Karur, Namakkal, the Nilgiris, Salem, Tiruchirappalli, Tirunelveli and Vellore districts.
- Feldspar, quartz, copper and lead are also found in some parts of the state.

4. State the densely populated regions of Tamil Nadu and account for its high density.

Population density:

- The density of population in Tamil Nadu is 555 per sq.km as per the 2011 census.
- The national average density of population as per the 2011 Census is 382.
- Chennai is the densest district with 26,903 persons per sq.km.
- Kanyakumari, Tiruvallur, Kancheepuram, Madurai, Coimbatore, Cuddalore, Thanjavur, Nagapattinam, Salem, Vellore and Tiruchirappalli are the regions with high density of population.

**Causes for high density of population:**

- Agriculture and industrial development are the main causes for the density of population.
- Job opportunities in large towns and cities attract huge population.

5. Explain the different modes of transport available in Tamil Nadu.**Roadways:**

The State has a total road length of 167,000 km, in which 60,628 km are maintained by state Highways Department.

It ranks second in India with a share of over 20% in total road projects under operation in the Public-Private Partnership (PPP) model.

Railways:

- The present Southern Railway network extends over a large area of India's southern peninsula.
- The headquarters of Southern Railway is at Chennai.
- Tamil Nadu has a total railway track length of 6,693 km with 690 railway stations in the state.
- The system connects it with most of the major cities in India. Main rail junctions in the state include Chennai, Coimbatore, Erode, Madurai, Salem, Tiruchirappalli and Tirunelveli.
- Chennai has a well-established suburban railway network, a Mass Rapid Transport System(MRTS).
- It is currently developing a Metro system, with its first underground stretch in operation since May 2017.

Airways:

- Tamil Nadu has four major international airports.
- Chennai International Airport is currently the third largest airport in India after Mumbai and Delhi.
- Other international airports in Tamil Nadu include Coimbatore, Madurai and Tiruchirapalli airports.
- It also has domestic airports at Tuticorin and Salem connecting several parts of the country.

Waterways:

Tamil Nadu has three major ports. They are in Chennai, Ennore and Tuticorin.

It has an intermediate port at Nagapattinam and 15 minor ports. Ennore intermediate port was recently converted as a major port and it handles the major coal and ore traffic in Tamil Nadu.

6. Write about Road safety rules.

- Aware of the road signals
- Stop, look and cross
- Listen and ensure whether a vehicle is approaching;
- Don't rush on roads;
- Cross roads in pedestrian crossings;
- Don't stretch hands while driving vehicles;
- Never cross road at bends and stay safe in a moving vehicle.



 ADDITIONAL QUESTIONS

7. Explain the Geographical determinants of agriculture.

Landform, climate, soil and irrigation are the factors that determine the growth of agriculture.

Land form:

Tamil Nadu is a land of diverse landscape comprising of hills, plateaus and plains. Among them the plains are most suitable for agriculture. The plains with alluvial soil enhances agricultural productivity.

Example: Plains of Cauvery.

Climate:

Tamil Nadu is situated in the tropical zone, which is nearer to the equator. The state experiences a tropical climate. Hence, the temperature in Tamil Nadu is relatively high almost throughout the year. So, only the tropical crops are cultivated. The rainfall in the Northeast monsoon season and the irrigation facilities affect agriculture to a large extent.

Soil:

Soil is one of the most essential elements of agriculture. It provides essential minerals or nutrients for the growth of crops and vegetation.

8. Write a paragraph on water resource management.

- Water resource management is the activity of planning, developing, distributing and managing the optimum use of water resources.
- The demand for water in Tamil Nadu is increasing at a fast rate both due to increasing population and also due to larger per capita needs triggered by economic growth.
- The per capita availability of water resources is just 900 cubic metres when compared to the national average of 2,200 cubic metres.
- Agriculture is the largest consumer of water in the state using 75% of the state's water resources.
- Demands from other sectors such as domestic and industries have been growing significantly.
- The state is heavily dependent on monsoon rains.
- Since the state is entirely dependent on rains for recharging its water resources, monsoon failures lead to acute water scarcity and severe droughts. So, it is important to save water for us and the future generation.

9. Write a short notes on Paper industry.

Paper Industry:

- Tamil Nadu Newsprint and Papers Limited (TNPL) is a government of Tamil Nadu enterprise.
- It produces newsprint and printing and writing paper at its mill located at Kagithapuram in Karur district.
- It was started in 1979 with an installed capacity of 2.45 lakh MT of production per annum.
- TNPL is one of the most accomplished mills in the world, producing different varieties paper of acceptable quality primarily from bagasse and pulpwood.
- Other paper mills of the state are found in Pukkathurai of Kancheepuram district, Bhavanisagar, Pallipalayam, Paramathi Vellore, Coimbatore, Udamalaipet, Thoppampatti, Nilakkottai and Cheranmahadevi.



HUMAN GEOGRAPHY OF TAMIL NADU

10. **What is Hazard mitigation? Explain in detail.**

Mitigation:

Hazard mitigation refers to any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazardous conditions.

- Regular maintenance of machines and wires may reduce the frequency of accidents,
- Creating awareness and training the workers to be cautious during work hours may help them to reduce risk during disasters.
- Wearing specially designed dresses and other safety materials would help the workers to protect themselves from any serious injuries.
- Conducting periodical medical camps would help them to assess their health status.
- The provision of having life insurance policies will secure their future.
- Besides these, the administration should be employees friendly and ready to extend their help in case of any untoward incidents.

11. **Write a short notes on Industrial disaster. (or) What are the causes for industrial disaster?**

- Disasters caused by industrial companies either by accident, negligence, or incompetence fall under industrial disasters.
- Electrical faults seem to be the major reason for industrial disasters in the country.
- Overheating, aging of the material and use of sub-standard quality of electrical gadgets have been the main factors contributing to the increasing fire accidents in industries.
- Electricity is not just a life line; It can also take away life when handled improperly'.
- Apart from these, explosions, leaking of poisonous gases, injuries and deaths caused by machines are the other causes of industrial disasters.

12. **What is a multi purpose project? Explain with examples.**

Multi purpose river Valley Projects:

Multipurpose river valley projects are basically designed for the development of irrigation for agriculture and hydropower generation. However, they are used for many other purposes as well.

Mettur Dam:

It provides irrigation to Salem, Erode, Karur, Tiruchirappalli, Thanjavur, Tiruvarur and Nagapattinam districts for about 2,71,000 acres of farmland.

Bhavani Sagar dam:

The Bhavani Sagar Dam is located 80 km away from Coimbatore city in the district of Erode. It has been constructed across the river Bhavani.

Amaravathi dam:

The dam was built primarily for irrigation and flood control. A small hydropower station has also been installed recently. This reservoir is notable for the significant population of mugger crocodiles. It is also a familiar tourist spot.

Krishnagiri dam:

This dam drains an area of 5428 sq.km. This is a famous tourist spot too. This dam is flooded with tourists during the weekends. It is also an important tourist spot.



Sathanur Dam:

This dam is across the river Thenpennai. The water-holding capacity of the dam is 7321 million cubic feet (full level: 119 feet). About 7183 hectares of land is drained by the left bank canal and 905 hectares by the right bank canal of this dam. It irrigates the land in Thandrampet and Tiruvannamalai blocks.

Mullaiperiyar dam:

This dam has been constructed across river Periyar. The dam was built mainly for watering the farming land of Tamil Nadu, which is perennially drought-prone.

Vaigai Dam:

This dam is built across the river Vaigai near Andipatti. This dam has a unique garden. It is a popular picnic spot.

Manimuthar dam:

Manimuthar dam is located about 47 km from Tirunelveli. Pleasure boating and waterfalls add beauty to this dam.

Papanasam dam:

The dam is used to irrigate lands in Tirunelveli and Thoothukudi districts. It generates 28 MW of hydro power.

Parampikulam Aliyar projects:

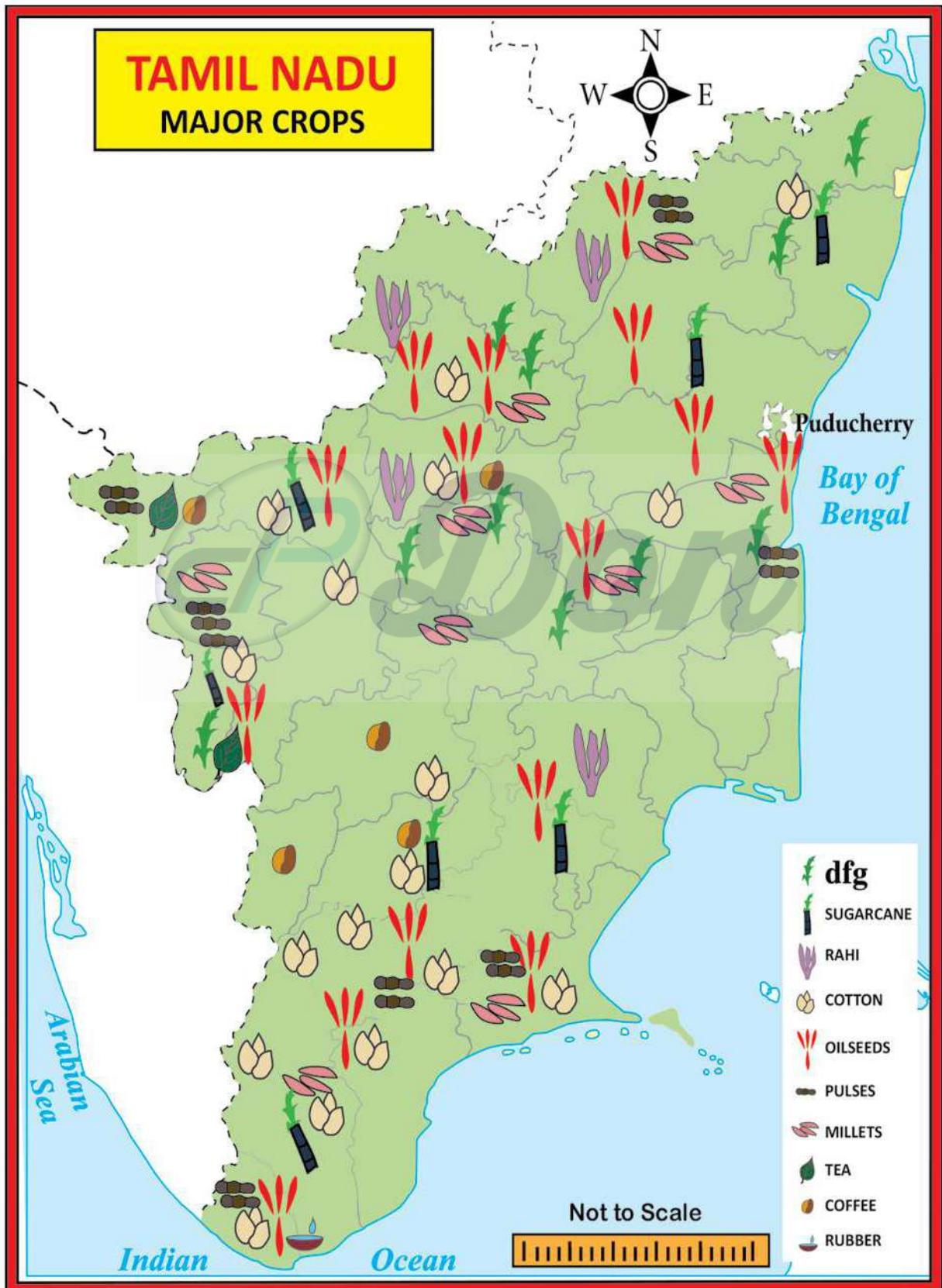
It is a joint venture of Tamil Nadu and Kerala states. It envisages the construction of seven interconnected reservoirs by harnessing the water of seven rivers, which include major rivers of Parambikulam and Aliyar.





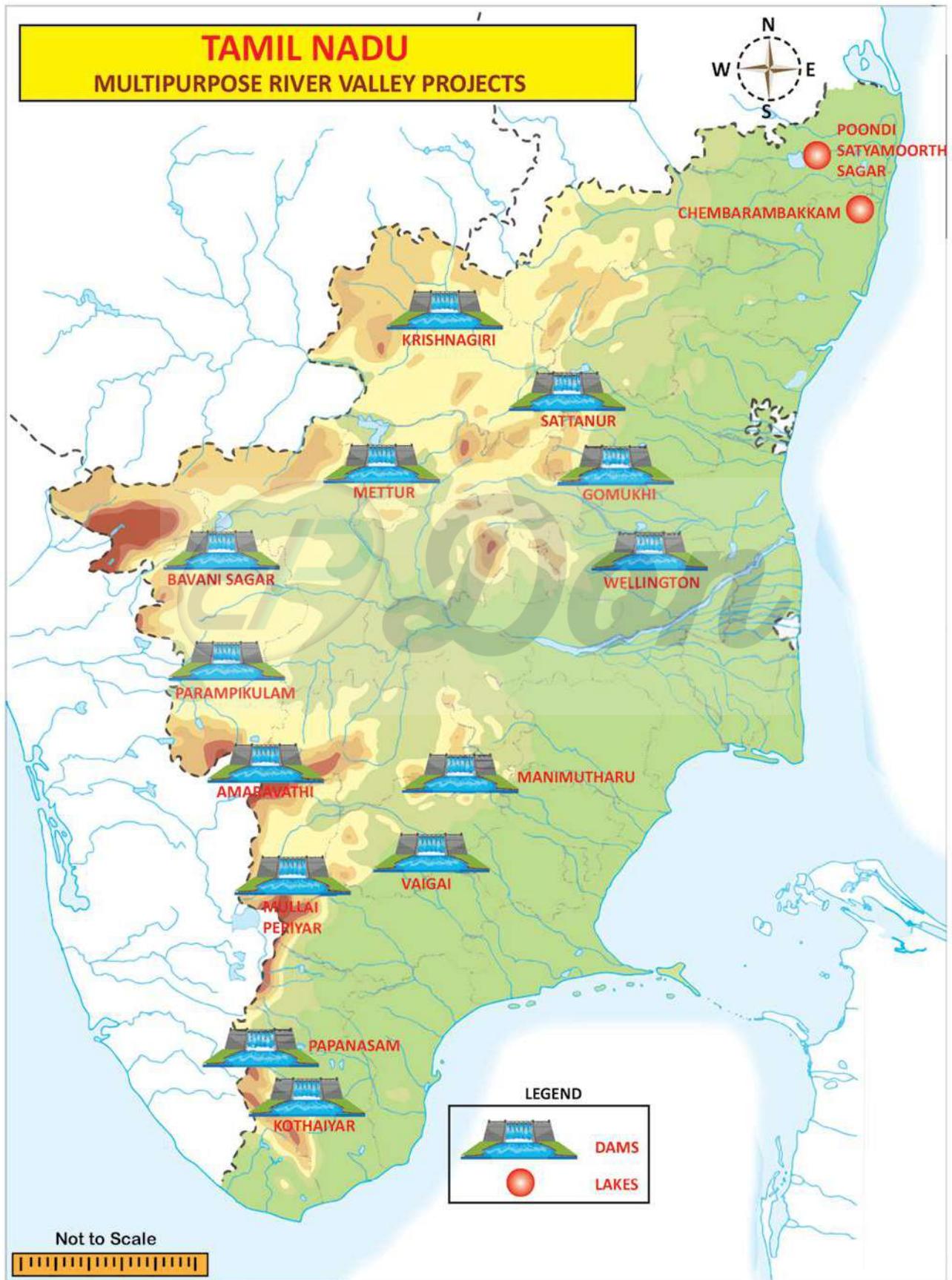
MAP WORK

1. Tamil Nadu - Major Crops





2. Tamil Nadu - Multipurpose River Valley Projects

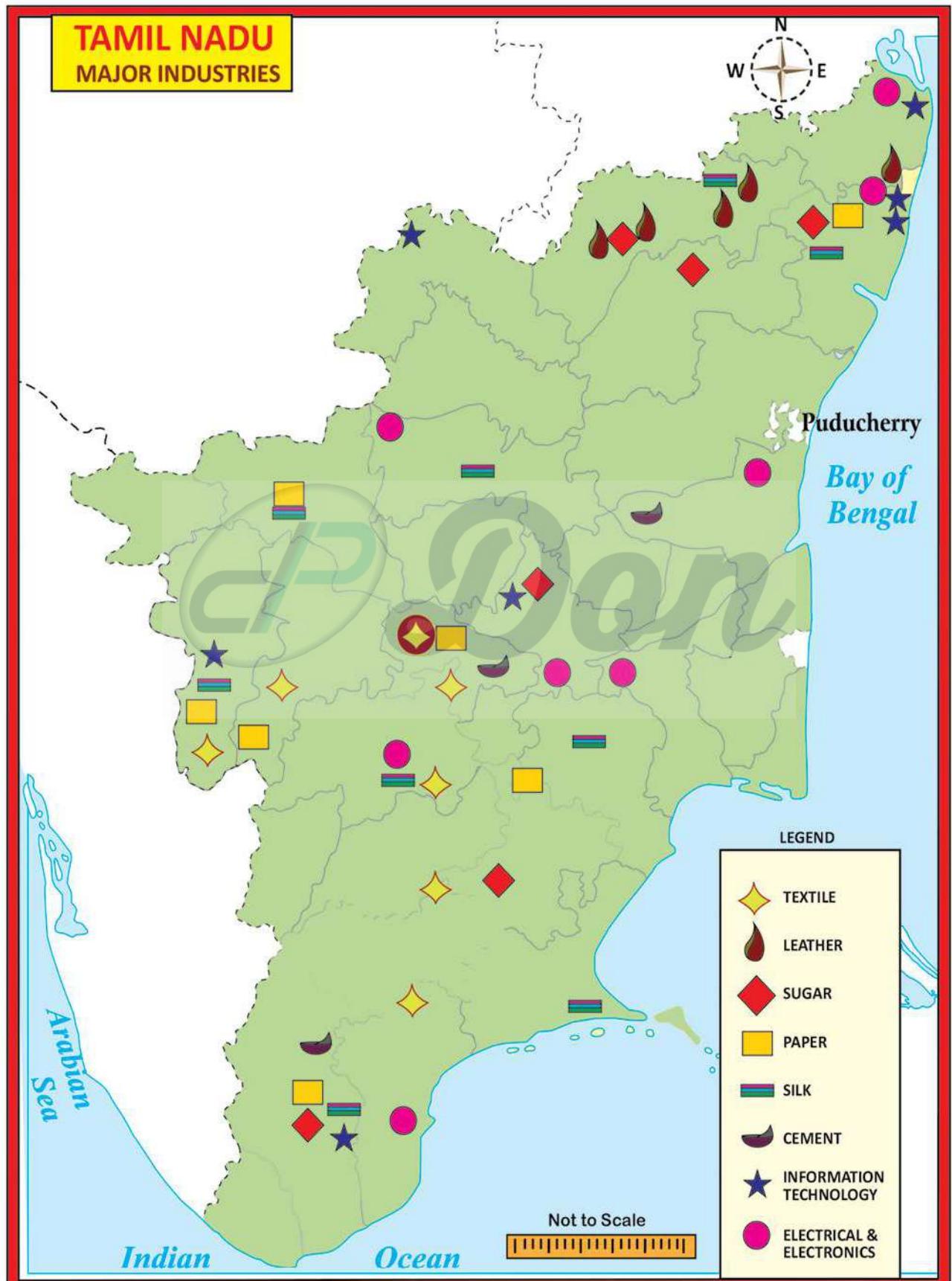




HUMAN GEOGRAPHY OF TAMIL NADU

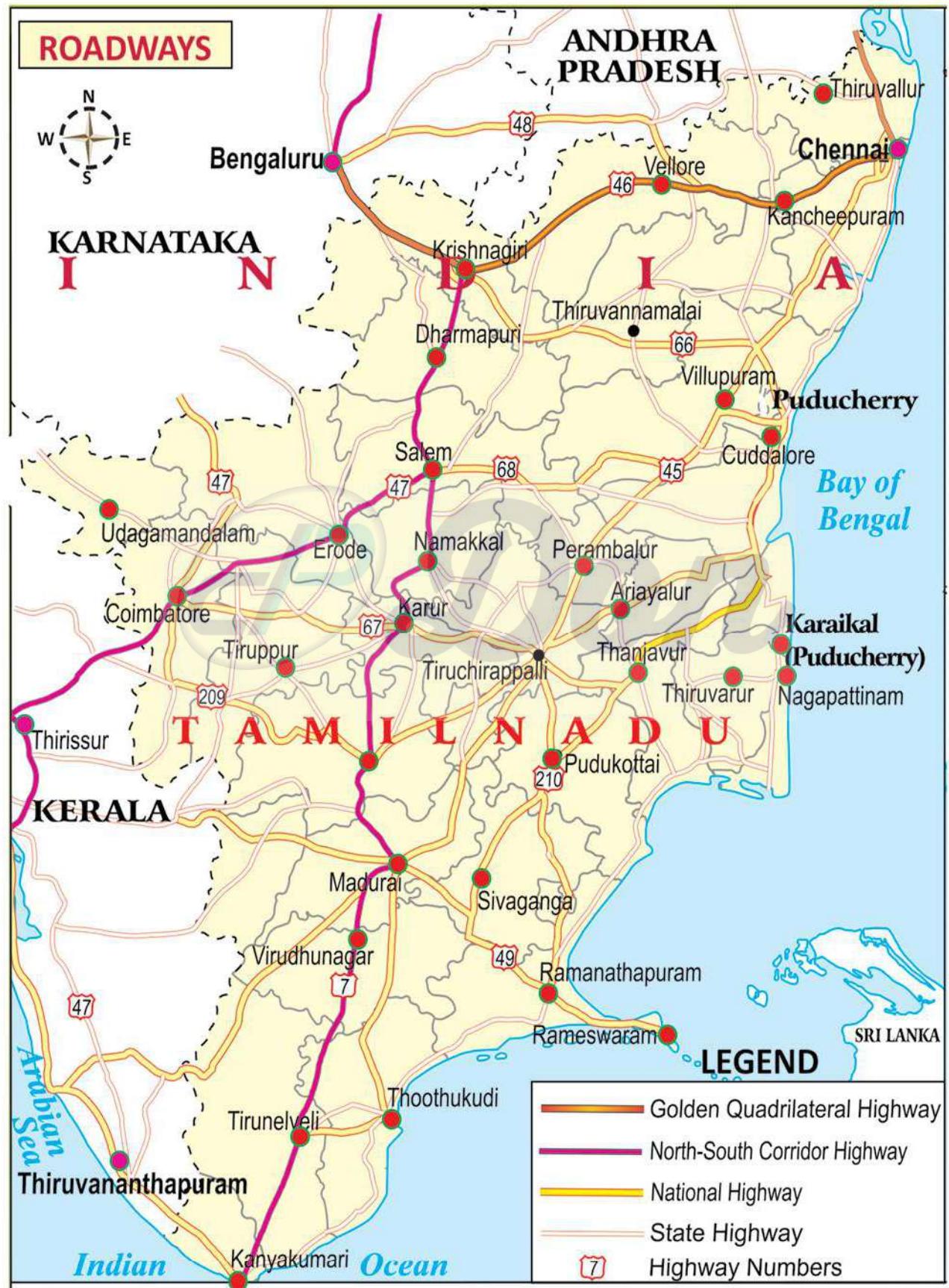
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3. Tamil Nadu - Major Industries





4. Tamil Nadu - Roadways

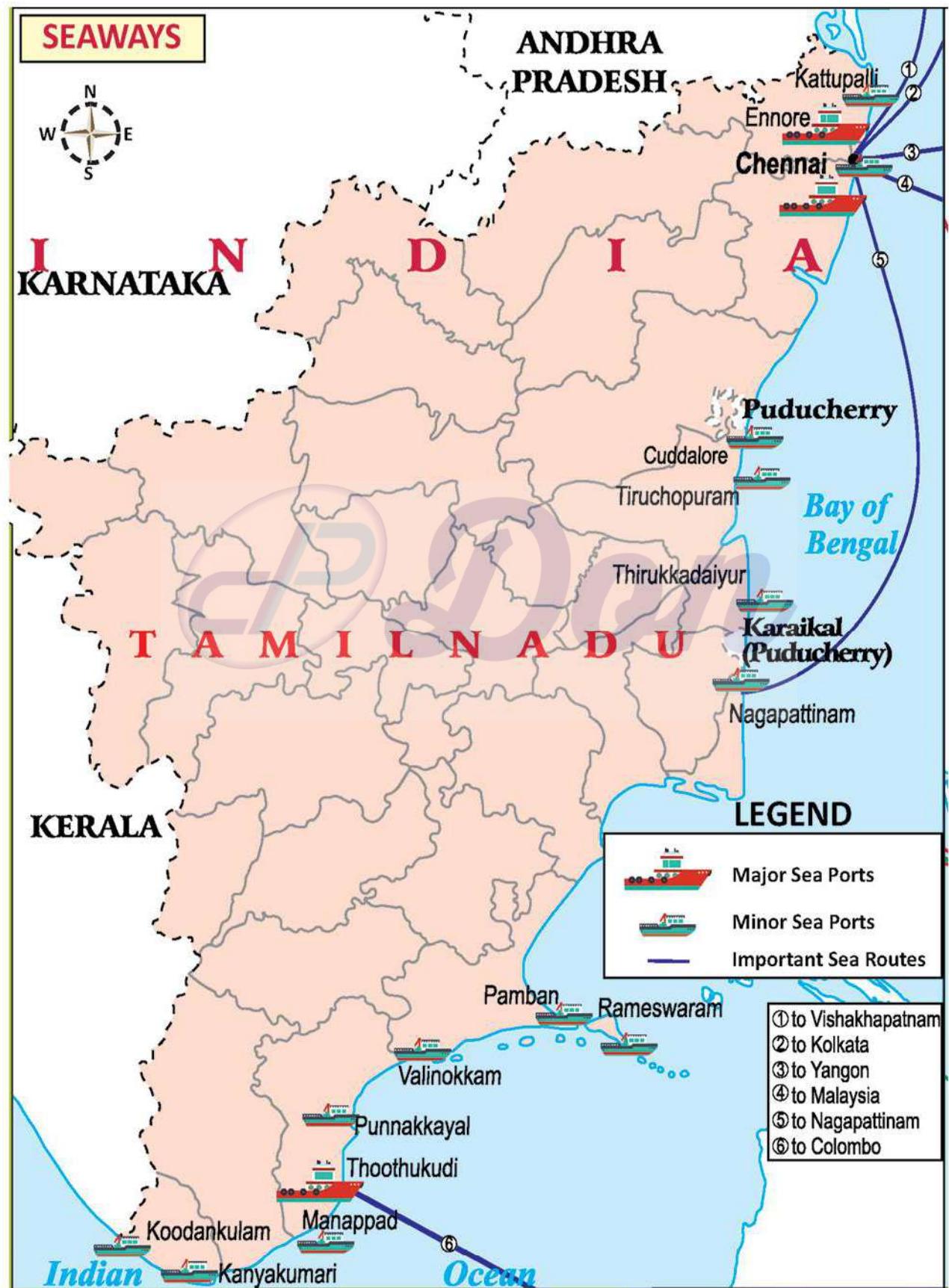


5. Tamil Nadu - Railways

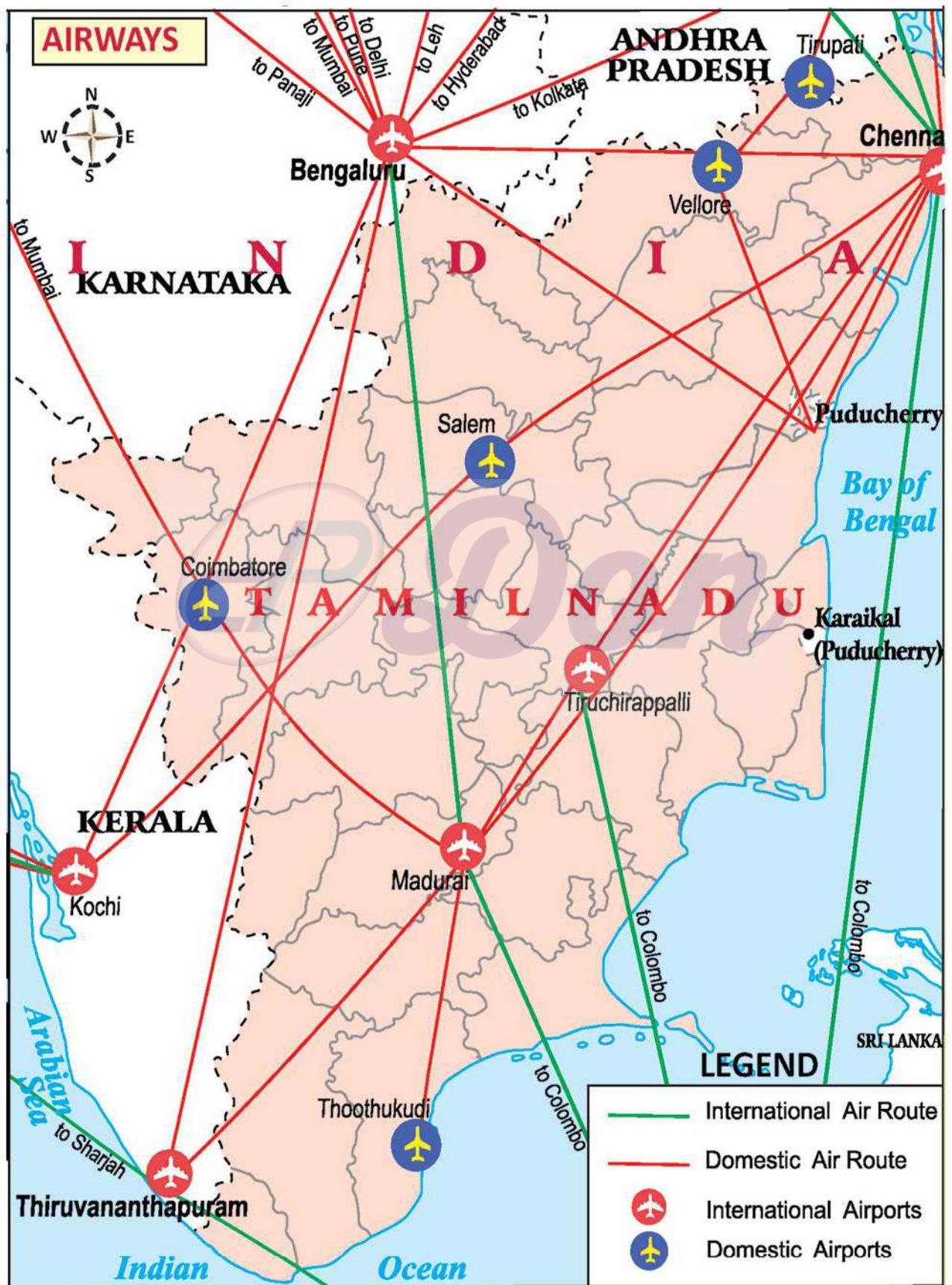




6. Tamil Nadu - Seaways



7. Tamil Nadu - Airways





10

Unit Test**UNIT - VII – Human Geography of Tamil Nadu**

Time : 1.00 hr.

Marks : 30

I. Choose the correct answer: $3 \times 1 = 3$

1. Second staple food of the people of Tamilnadu is ____
a) Pulses b) Millets c) Oilseeds d) Rice
2. Literacy rate of Tamilnadu as per 2011 census is ____
a) 80.32 % b) 62.33 % c) 73.45 % d) 80.33 %
3. A major hydro - electric power project of Tamilnadu is ____
a) Mettur b) Papanasam c) Sathanur d) Thungabahdرا

II. Fill in the blanks: $3 \times 1 = 3$

1. Agriculture of Tamilnadu constitutes ____ % of its economy.
2. Sathanur dam is constructed across the river ____
3. The difference between the value of exports and imports is called ____

III. Answer the following questions (Any five): $5 \times 2 = 10$

1. What are the cropping seasons of Tamilnadu?
2. Why is Coimbatore is called Manchester of Tamilnadu?
3. Define : Human Geography.
4. What are the types of farming?
5. Write the uses of oilseeds.
6. What is GI?
7. What is the aim of the SEZ?
8. Write the major exports of Tamilnadu.

IV. Distinguish between (Any two): $2 \times 2 = 4$

1. Marine fishing and inland fishing.
2. Food crops and Non - food crops.
3. Surface water and Ground water.
4. Import and Export.

V. Answer in a paragraph (Any two): $2 \times 5 = 10$

1. Write short notes on plantation crops.
2. Write about the mineral resources of Tamilnadu.
3. Write the basic road safety rules.
4. Explain the geographical determinants of agriculture.

