

Lifelines of National Economy

Syllabus

Transport, communication and trade

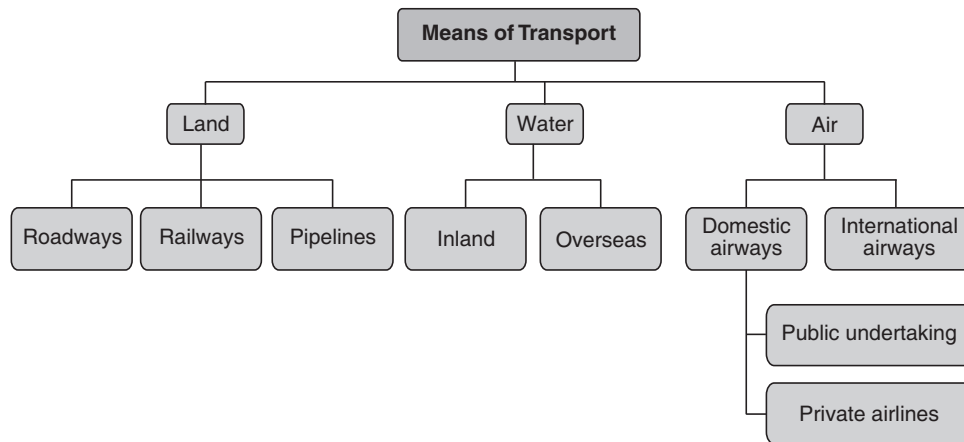
Facts that Matter

1. The development of a country depends upon the production of goods and services as well as their movement to their destination. Transport plays an important role in the economy. Because of transport, raw materials reach to the factory or industry and finished products reach to the consumer. Transport has helped in both production and distribution of goods.
2. Apart from transport, mode of communications, like telephone and internet makes flawless flow of information possible. Today, the world has been converted into a large village with the help of efficient and fast moving transport and developed communication system.
3. **Transport** can be classified into land, water and air transport.
4. **Roadways**
India has one of the largest road networks in the world. Roadways have preceded railways. The growing importance of road transport in comparison with rail transport is because the construction cost of roads is much lower. It provides door to door services and thus the cost of loading and unloading is much lower. It is used as feeder to other modes of transport.
5. In India, roads are classified in six classes according to their capacity—(i) Golden Quadrilateral Super Highways, (ii) National Highways (iii) State Highways, (iv) District Roads, (v) Other Roads and (vi) Border Roads.
6. Roads can also be classified on the basis of the type of material used for their construction such as metalled and unmetalled roads. Metalled roads are all weather roads whereas unmetalled roads go out of use in the rainy season.
7. **Road density** means the length of road per 100 sq. km of area. Distribution of road is not uniform in the country. Density of all roads varies from only 10 km in Jammu & Kashmir to 375 km in Kerala with the national average of 75 km.
8. **Railways**
The Indian railways have a network of 7,031 stations spread over a route length of 63,221 km with a fleet of 7817 locomotives, 5321 passenger service vehicles, 4904 other coach vehicles and 228,170 wagons as on 31 March, 2004. The Indian railways is the largest public sector undertaking of India. The first train steamed off from Mumbai to Thane in 1853, covering a distance of 34 km. It is organised into 16 railway zones.

9. Railways are the prime mode of transportation for goods and passengers in India. Railways also make it possible to conduct varied activities like business, sightseeing and pilgrimage along with transportation of goods over longer distances.
10. The distribution pattern of the railway network in the country has been largely influenced by physiographic, economic and administrative factors.
11. The northern plains provide most favourable conditions having high population density, vast level land, and rich agricultural resources.
12. Today, the railways have become more important in our national economy than all other means of transport put together. However, rail transport suffers from certain problems as well. For example, many passengers travel without tickets.
13. **Pipeline** transport network is a new arrival on the transportation map of India. Earlier it was used to transport water but these days it is used to transport crude oil, petroleum products and natural gas from oil and natural gas fields to refineries, fertiliser factories and big thermal power plants. Even solids can be transported through pipelines when converted into slurry.
14. Initial cost of laying pipelines is high but subsequent running costs are minimal. It rules out trans-shipment losses or delays.
15. **Waterways** are the cheapest means of transport. They are most suitable for carrying heavy and bulky goods. It is a fuel-efficient and environment friendly mode of transport.
16. India has inland navigation waterways of 14,500 km in length. Out of these only 3,700 km are navigable by mechanised boats. The workable waterways include the Godavari, Krishna, Barak, Sunderbans, Buckingham canal, Brahmani, East-West canal and Damodar Valley Corporation Canal. The following waterways have been declared as the **National Waterways** by the Government:
 - The Ganga river between Allahabad and Haldia (1620 km)—N.W. No. 1.
 - The Brahmaputra river between Sadiya and Dhubri (891 km)—N.W. No. 2.
 - The West-Coast Canal in Kerala (Kottapuram-Komman, Udyogamandal and Champakkara canals-205 km)—N.W. No. 3.
17. With a long coastline of 7,516.6 km., India is dotted with 12 major ports and 181 medium and minor ports. These ports handle 95% of India's foreign trade.
18. The name of some major ports are—Kandla, Mumbai, Vishakhapatnam, Paradip, Kolkata, etc. Mumbai is the biggest port with a spacious, natural and well-sheltered harbour.
19. The air travel is the fastest mode of transport. It can cover difficult terrains and long oceanic stretches with great ease. The air transport was nationalised in 1953. Airways are of two types—**Domestic** and **International**.
20. **Air India** provides international air services. **Pawanhans Helicopters Ltd** provides helicopter services to Oil and Natural Gas Corporation in its offshore operations, to the inaccessible areas and difficult terrains of north-eastern states and interior parts of J & K, Himachal Pradesh and Uttarakhand.
21. Communication refers to exchange of ideas, messages, emotions, either written or oral, from one place to another. There are two ways of communication—personal communication and mass communication. Mass communication includes television, radio, press, films, etc.

22. The Indian postal network handles parcels as well as personal written communications. **The first-class mail** includes cards and envelopes. They are carried by land and air transport. **The second-class mail** includes book packets, registered newspapers and periodicals. They are carried by surface mail, covering land and water transport.
23. Six mail channels have been introduced by Indian postal network for quick delivery of mails in large towns and cities.
24. India has one of the largest telephone networks in Asia. Special provisions have been made by the government by extending twenty-four hours STD facility to every village in the country to strengthen the flow of information.
25. **Mass Communication** is a communication in which masses are communicated at the same time by one source. Mass communication provides entertainment and creates awareness among people about various national programmes and policies. It includes radio, television, newspapers, magazines, books and films.
26. **All India Radio** (Akashwani) broadcasts a variety of programmes in national, regional and local languages for various categories of people, spread over different parts of the country.
27. **Doordarshan** is the national television channel of India. It is one of the largest terrestrial networks in the world. It broadcasts a variety of programmes from entertainment, education to sports, etc. for people of different age groups.
28. India publishes a large number of **newspapers** and **periodicals** annually. Newspapers are published in about 100 languages and dialects. Largest numbers of newspapers published in the country are in Hindi, followed by English and Urdu.
29. India is the largest producer of **feature films** in the world. It produces short films, video feature films and video short films. The Central Board of Film Certification is the authority to certify both Indian and foreign films.
30. The exchange of goods among people, states and countries is referred to as **trade**. **The market** is a place where such exchanges take place. Trade between two or more countries is termed as **international trade** but trade which occurs in a region within the same country is called **local trade**. It may take place through sea, air or land routes. Export and import are the components of trade. The difference between export and import is known as **balance of trade**.
31. India has trade relations with all the major trading blocks and all geographical regions of the world. Among the commodities of export are the agricultural and allied products, ores and minerals, gems and jewellery, chemical and allied products, engineering goods and petroleum products. Major imports are petroleum and its products, pearls and precious stones, inorganic chemicals, coal, coke and briquettes and machinery.
32. Tourism in India has grown substantially over the last three decades. Foreign tourists visit India for heritage tourism, economic tourism, adventure tourism, cultural tourism, medical tourism and business tourism. Rajasthan, Goa, Jammu and Kashmir and temple towns of South India are important destinations of tourists in India.
33. Our country earns foreign exchange through tourism. More than 15 million people are directly engaged in the tourism industry.

Flow-Learning



Words that Matter

1. **Density of roads:** The length of road per sq km of area is known as density of roads.
2. **State Highways:** Roads linking a state capital with different district headquarters are known as State Highways.
3. **District roads:** Roads which connect the district headquarters with other places of the district are called district roads.
4. **Golden Quadrilateral Super Highways:** These are six lane highways connecting major cities and ports of the country for speedy movement of goods and passengers.
5. **Rural roads:** Roads which link rural areas and villages with towns are classified as rural roads.
6. **Border roads:** Strategically important roads in the bordering areas of the country are called border roads.

NCERT TEXTBOOK QUESTIONS SOLVED

Q1. Multiple choice questions.

- (i) Which two of the following extreme locations are connected by the east-west corridor?
 - (a) Mumbai and Nagpur
 - (b) Silcher and Porbandar
 - (c) Mumbai and Kolkata
 - (d) Nagpur and Siligudi
- (ii) Which mode of transportation reduces trans-shipment losses and delays?
 - (a) Railways
 - (b) Roadways
 - (c) Pipeline
 - (d) Waterways
- (iii) Which one of the following states is not connected with the H.V.J. pipeline?
 - (a) Madhya Pradesh
 - (b) Maharashtra
 - (c) Gujarat
 - (d) Uttar Pradesh

- (iv) Which one of the following ports is the deepest land-locked and well protected port along the east coast?
 - (a) Chennai
 - (b) Paradip
 - (c) Tuticorin
 - (d) Vishakhapatnam
- (v) Which one of the following is the most important modes of transportation in India?
 - (a) Pipeline
 - (b) Railways
 - (c) Roadways
 - (d) Airways
- (vi) Which one of the following terms is used to describe trade between two or more countries?
 - (a) Internal trade
 - (b) International trade
 - (c) External trade
 - (d) Local trade

Ans. (i)—(b), (ii)—(c), (iii)—(b), (iv)—(d), (v)—(c), (vi)—(b).

Q2. Answer the following questions in about 30 words.

- (i) State any three merits of roadways.
- (ii) Where and why is rail transport the most convenient means of transportation?
- (iii) What is the significance of the border roads?
- (iv) What is meant by trade? What is the difference between international and local trade?

Ans. (i) Three merits of roadways are:

- (a) Construction cost of roads is much lower.
- (b) It provides door to door services thus the cost of loading and unloading is much lower.
- (c) It is used as feeder to other modes of transport. To reach any destination be it railway station, sea port or airport, one needs to travel through roads.
- (ii) Rail transport is the most convenient means of transportation in the northern plains. It is because the northern plains have vast level land, high population density and rich agricultural resources. These have provided the most favourable condition for the growth of rail transport.
- (iii) The significance of border roads:
 - (a) Border roads have improved accessibility in areas of difficult terrain.
 - (b) They have helped in the economic development of these areas.
- (iv) The exchange of goods among people, states and countries is referred to as trade. Trade between two or more countries is termed as international trade but trade which occurs in a region within the same country is called local trade.

Q3. Answer the following questions in about 120 words.

- (i) Why are the means of transportation and communication called the lifelines of a nation and its economy?
- (ii) Write a note on the changing nature of the international trade in the last fifteen years.

Ans. (i) The development of a country depends upon the production of goods and services as well as their movement to their destination. Transport plays an important role in the economy. Because of transport raw materials reach to the factory or industry and finished products reach to the consumer. Transport has helped in both production and distribution of goods. Hence, efficient means of transport are prerequisites for fast development.

India is well-linked with the rest of the world despite its vast size, diversity and linguistic and socio-cultural plurality. Railways, airways, water ways, newspapers, radio, television, cinema and internet, etc. have been contributing to its socio-economic progress in many ways. The trades from local to international levels have added to the vitality of its economy. It has also enriched our life and added substantially to growing amenities and facilities for the comforts of life. Hence, it is right to say that means of transportation and communication are the lifelines of a nation and its economy.

(ii) International trade is defined as the exchange of goods and services between two or more countries. International trade has undergone a sea change in the last fifteen years. Exchange of commodities and goods have been superseded by the exchange of information and knowledge. India has emerged as a software giant at the international level and it is earning huge foreign exchange through the export of information technology. Advancement of international trade of a country is an index to its economic prosperity. It is, therefore, considered the economic barometre for a country. Income earned from international trade constitutes a major part in the net national income. Large international trade leads to revival of domestic economy.

Major Exports

- the agricultural and allied products—2.53%
- ores and minerals—9.12%
- gems and jewellery—26.75
- chemical and allied products—24.45%
- engineering goods—35.63%
- petroleum products—86.12%

Major Imports

- petroleum and petroleum products—41.87%
- pearls and precious stones—29.26%
- inorganic chemicals—29.39%
- coal, coke and briquettes—94.17%
- machinery—12.56%
- Bulk imports include fertilisers—67%, cereals—25.23%, edible oils—7.94% and news print—5.51. India has trade relations with all the major trading blocks and all geographical regions of the world.

Quiz Drive

1. Northern terminal of the North-south corridor.
2. The name of National Highway No. 1.
3. The headquarter of the southern railway zone.
4. The rail gauge with a track width of 1.676 m.
5. The southern terminal of the National Highway No. 7.
6. A Riverine Port.
7. Busiest railway junction in Northern India.

Ans. 1. SRINAGAR 2. SHER SHAH SURI MARG
3. CHENNAI 4. BROAD GAUGE
5. KANYAKUMARI 6. KOLKATA
7. MUGHALSARAI

Activity

Start your search vertically, horizontally or diagonally and reach various destinations across the countries!

S	H	E	R	S	H	A	H	S	U	R	I	M	A	R	G
A	R	T	P	R	N	X	E	L	A	T	A	D	L	A	Y
J	M	M	X	I	P	O	R	A	Y	M	P	G	H	T	X
Y	C	H	E	N	N	N	A	I	I	K	M	C	A	I	M
O	D	C	D	A	L	M	C	S	O	T	P	O	R	C	P
A	P	T	R	G	S	K	J	M	J	L	E	A	N	E	R
R	A	E	T	A	J	P	O	R	M	W	M	A	S	X	O
I	L	S	B	R	O	A	D	G	A	U	G	E	L	O	T
A	S	N	L	C	M	E	C	U	K	Z	M	A	A	J	E
L	M	U	G	H	A	L	S	A	R	A	I	B	S	N	A
G	O	E	T	V	R	A	Y	F	T	O	R	E	A	J	M
K	Q	A	L	K	A	N	A	E	U	I	T	W	B	E	A
Q	K	O	L	K	A	T	A	E	U	I	T	W	B	E	A
N	I	T	N	K	D	E	M	O	U	R	P	N	P	J	D

Ans. 1. SHERSHAH SURI MARG 2. CHENNAI
3. BROADGAUGE 4. MUGHALSARAI
5. KOLKATA 6. SRINAGAR
7. KANYAKUMARI

MORE QUESTIONS SOLVED

I. MULTIPLE CHOICE QUESTIONS

Choose the correct Option:

1. The National Highway No. 1 is also known as
 (a) Mahatma Gandhi Marg (b) Sher Shah Suri Marg
 (c) Golden Quadrilateral (d) Jawaharlal Nehru Road

2. Trade carried in cities, towns and villages is called
(a) External trade (b) Local trade
(c) Internal trade (d) International trade
3. The Indian national highways are maintained by the department of
(a) National Highway Authority of India
(b) State Public Works Department
(c) Zila Parishad
(d) Central Public Works Department
4. Which one of the following organisations constructs Border roads in India?
(a) PWD (b) CPWD
(c) BRO (d) NHAI
5. World has become a global village due to which of the following?
(a) Transport and communication (b) International trade
(c) Engineering Industry (d) Electronic industry
6. Which is the cheapest mode of transport in India?
(a) Waterways (b) Roadways
(c) Railways (d) Airways
7. Border Roads Organisation was established in
(a) 1950 (b) 1955
(c) 1958 (d) 1960
8. The longest highway of India is
(a) National Highway-8 (b) National Highway-7
(c) National Highway-1 (d) National Highway-15
9. The full form of NHAI is
(a) National Highway Academy of India
(b) Northern Highway Authority of India
(c) New Highway Authority of India
(d) National Highway Authority of India
10. Delhi and Mumbai are connected by
(a) National Highway-15 (b) National Highway-1
(c) National Highway-7 (d) National Highway-8
11. The National Highway that covers most of Rajasthan is
(a) National Highway-15 (b) National Highway-8
(c) National Highway-1 (d) National Highway-2
12. The air transport was nationalised in the year
(a) 1947 (b) 1950
(c) 1953 (d) 1957
13. Which port is the major iron ore exporting port of the country?
(a) Mumbai port (b) Marmagao port
(c) Paradip port (d) Kandla port
14. The biggest port is
(a) Mumbai port (b) Marmagao port
(c) New Mangalore port (d) Kandla port

15. The extreme south-western port is
 (a) Tuticorin port (b) Kochchi port
 (c) New Mangalore port (d) None of the above
16. Which one is not an important destination of Foreign tourists in India?
 (a) Madhya Pradesh (b) Goa
 (c) Rajasthan (d) Jammu and Kashmir
- Ans.** 1—(b) 2—(b) 3—(d) 4—(c) 5—(a) 6—(a)
 7—(d) 8—(b) 9—(d) 10—(d) 11—(a) 12—(c)
 13—(b) 14—(a) 15—(b) 16—(a)

II. VERY SHORT ANSWER TYPE QUESTIONS

Q1. What is the major objective of the super Highways?

Ans. The major objective of the Super Highways is to reduce the time and distance between the mega cities of India.

Q2. What do you know about National Highways?

Ans. National Highways are the primary road systems and are laid and maintained by the Central Public Works Department (CPWD).

Q3. Name the cities that are connected by National Highway No.1.

Ans. Delhi and Amritsar.

Q4. What are known as State Highways?

Ans. Roads linking a state capital with different district headquarters are known as State High Ways.

Q5. Name the authority that maintains State Highways.

Ans. State Public Works Department.

Q6. Why was Border Roads Organisation established in 1960?

Ans. It was established for the development of the roads of strategic importance in the northern and north-eastern border areas.

Q7. Why are metalled roads called all weather roads.

Ans. Metalled roads are made of cement, concrete or even belumen of coal. They do not go out of use in the rainy season. Therefore, they are called all weather roads.

Q8. Which port was the first port developed soon after the independence of India?

Ans. Kandla in Kuchchh was the first port developed soon after the independence of India.

Q9. Which type of port is Kandla?

Ans. Kandla is a tidal port.

Q10. Where is New Mangalore port located?

Ans. This port is located in Karnataka.

Q11. Which is the deepest landlocked and well protected port?

Ans. Visakhapatnam is the deepest landlocked and well protected port.

Q12. Why was Haldia port developed?

Ans. Haldia port was developed as a subsidiary port, in order to relieve growing pressure on the Kolkata port.

Q13. What are considered first-class mail by the Indian postal network?

Ans. Cards and envelopes are considered first-class mail.

Q14. What comes under the category of second-class mail.

Ans. Book packets, registered newspapers and periodicals come under the category of second-class mail.

Q15. Which authority certifies both Indian and foreign films?

Ans. The Central Board of Film certification is the authority to certify both Indian and foreign films.

Q16. Name the places which are important destinations of foreign tourists in India.

Ans. Rajasthan, Goa, Jammu and Kashmir and temple towns of south India.

Q17. Which is a major commodity imported by India?

Ans. Petroleum and petroleum products.

Q18. Name the mode of transportation that reduces trains-shipment losses and delays in the supply of petroleum and gases?

Ans. Pipelines

Q19. Which port is located in Orissa?

Ans. Paradip port is located in Orissa.

Q20. Which state of India has highest density of roads?

Ans. Kerala has highest density of roads.

Q21. What is the length of inland waterways in India? How much waterway is navigable by mechanical boats?

Ans. India has inland navigation water ways of 14,500 km in length. Out of these only 3,700 km are navigable by mechanised boats.

Q22. How many major ports does India have? Name any four points. What is the percentage of foreign trade handled by the major ports?

Ans. India has 12 major ports.

Name of four ports.

- | | |
|---------------------------|-------------------|
| (i) Kandla in Kuchchh | (ii) Mumbai port |
| (iii) Marmagao port (Goa) | (iv) Kochchi port |

95% of India's foreign trade of is handled by the twelve major ports.

III. SHORT ANSWER TYPE QUESTIONS

Q1. Why is the importance of road transport in comparison to rail transport growing in India?

Or

Why is road transport more useful than rail transport in India? Explain four reasons. (CBSE 2009)

Ans. The growing importance of road transport in comparison to rail transport is because of the following reasons:

- (i) Construction cost of roads is much lower than that of railways lines.
- (ii) Roads can pass through comparatively more dissected and undulating topography.
- (iii) Road transport is economical in transportation of few persons and relatively smaller amount of goods over short distances.

- (iv) It provides door to door services thus the cost of loading and unloading is much lower.
- (v) It is used as feeder to other modes of transport. To reach any destination be it railway station, sea port or airport, one needs to travel through roads.

Q2. Name three major super highway projects. What is the main objective of these Super Highways? (HOTS)

Ans. Three Super Highways are:

- (i) **Golden Quadrilateral Super Highways:** It links Delhi-Kolkata-Chennai-Mumbai and Delhi by six-lane Super Highways.
- (ii) **The North-South corridors** linking Srinagar (Jammu and Kashmir) and Kanniyakumari (Tamil Nadu).
- (iii) **East-West Corridor** linking Silcher (Assam) and Porbander (Gujarat). The major objective of these Super Highways is to reduce the time and distance between the mega cities of India.

Q3. Distinguish between national highways and state highways.

Ans.	National highways	State highways
	1. National highways link all major cities of extreme parts of the country. These are the primary road systems.	1. Roads linking a state capital with different district headquarters are known as State Highways.
	2. They are maintained by the Central Public Works Department (CPWD).	2. These roads are constructed and maintained by the State Public Works Department (PWD) in State and Union Territories.
	3. National highways are of natural importance.	3. State highways serve the need of states.

Q4. What are border roads? What is its importance?

Ans. Strategically important roads in the bordering areas of the country are called border roads. Border Roads Organisation (BRO) which is a Government of India undertaking constructs and maintains border roads. This organisation was established in 1960 for the development of the roads of strategic importance in the northern and northeastern border areas.

Border roads are important because they have improved accessibility in areas of difficult terrain. They have helped in the economic development of border areas.

Q5. State some problems of road transport in our country.

Ans. Major problems of roadways are:

- (i) Distribution of road is not uniform in the country.
- (ii) Keeping in view the volume of traffic and passengers, the road network is inadequate.
- (iii) About half of the roads are unmetalled and this restricts their usage during the rainy season.
- (iv) The National Highways are inadequate too.

- (v) Moreover, the roadways are highly congested in cities
- (vi) Most of the bridges and culverts are old and narrow.
- (vii) Poor maintenance is also a big problem.

Q6. Mention the importance of water transport. Name three National Waterways of our country.

Or

Explain a few advantages of waterways of India.

Or

Name the National Waterways of India.

[CBSE 2005, 2009(F)]

- Ans.** (i) Waterways are the cheapest means of transport.
 (ii) They are most suitable for carrying heavy and bulky goods.
 (iii) It is a fuel-efficient and environment friendly mode of transport.

The following waterways have been declared as the **National Waterways by the Government:**

- (i) The Ganga river between Allahabad and Haldia (1620 km)—N.W. No. 1
- (ii) The Brahmaputra river between Sadiya and Dhubri (891 km)—N.W. No. 2
- (iii) The West-Coast Canal in Kerala (Kottapurma-Komman, Udyogamandal and Champakkara canals-205 km)—N.W. No. 3

Q7. Why is air transport preferred in north-eastern states of India?

(CBSE 2009)

- Ans.** (i) The air travel is the fastest, most comfortable and prestigious mode of transport.
 (ii) It can cover very difficult terrains like high mountains, dreary deserts, and dense forests and also long oceanic stretches with great ease.
 (iii) Airways have made access easier in the north-eastern part of the country which has big rivers, dissected relief, dense forests and frequent floods and international frontiers.
 (iv) It is very useful especially during natural calamities.

Q8. Name six mail channels introduced by Indian postal network.

Ans. Six mail channels for quick delivery of mails in large towns and cities are:

- (i) Rajdhani Channel
- (ii) Metro Channel
- (iii) Green Channel
- (iv) Business Channel
- (v) Bulk Mail Channel
- (vi) Periodical Channel

Q9. Define international trade. Why is it considered as economic barometer of a country?

(CBSE 2011)

- Ans.** When trade takes place between two countries it is known as international trade.
- (i) It is very important for the development of a country. Advancement of international trade of a country is an index to its economic prosperity.
 - (ii) As the resources are space bound, no country can survive without international trade.
 - (iii) It enables a country to earn foreign exchange which is needed to import essential goods. It is, therefore, considered the economic barometer for a country.

Q10. Define balance of trade. Distinguish between favourable balance of trade and unfavourable balance of trade. (HOTS)

Ans. The difference between export and import is known as balance of trade.

Favourable balance of trade	Unfavourable balance of trade
1. If the value of exports is more than the value of imports, it is called favourable balance of trade.	1. If the value of imports is greater than the value of exports it is known as unfavourable balance of trade.
2. Favourable balance of trade is regarded good for the economic development.	2. Unfavourable balance of trade is seen harmful for the domestic economy.

Q11. Mention the importance of tourism as a trade.

Or

What is the importance of tourism?

[CBSE 2010(F), 2011]

Ans. Our country earns foreign exchange through tourism. More than 15 million people are directly engaged in the tourism industry. Tourism has proved itself as one of the most important aspects of trade. Tourism in India has grown substantially. It promotes National Integration and provides support to local handicrafts and cultural pursuits.

It also helps in the development of international understanding about our culture and heritage. It has contributed 21,828 crore of foreign exchange in the year 2004. Over 2.6 million foreign tourists visit India every year.

Q12. Why have the great plains more railways than the Himalayan mountains?

(HOTS)

Ans. The distribution pattern of the railway network in the country has been largely influenced by physiographic, economic and administrative factors. The northern plains provide most favourable conditions having high population density, vast level land, and rich agricultural resources whereas the Himalayan mountainous regions are unfavourable for the construction of railway lines due to high relief, sparse population and lack of economic opportunities. That's why the great plains have more railways than the Himalayan mountains.

Q13. What do you mean by the density of the roads? Name the state with

(i) Highest density of roads

(ii) Lowest density of roads

[CBSE 2010(F)]

Ans. The length of road per 100 Sq. km of area is known as density of roads.

(i) The state with highest density of roads – Kerala

(ii) The state with lowest density of roads – Jammu & Kashmir.

Q14. Explain the improvement made by the Indian Railways in its functioning.

[AI CBSE 2012]

Ans. The improvements made by the Indian Railways in its functioning:

(i) Narrow gauges have been converted into broad gauges.

(ii) Track electrification

(iii) Automatic signals on the trunk routes.

Q15. (i) Name two areas in India which are unfavourable for the construction of railway lines?

(ii) Why are certain area unfavourable for the construction of railway lines? Give two reasons. (HOTS)

- Ans.** (i) (a) The Himalayan mountainous regions
(b) The sandy plains of Rajasthan
(ii) (a) The Himalayan mountainous regions are unfavourable for the construction of railway lines due to high relief sparse population and lack of economic opportunities.
(b) It was also difficult to lay railway lines on the sandy plains of western Rajasthan, swamps of Gujarat and forested tracks of Madhya Pradesh, Chhattisgarh, Orissa and Jharkhand.

Q16. Which is the principal mode of transportation for freight and passengers? Mention any three problems of that means of transport.

[CBSE 2010(F), 2011]

Ans. The principal mode of transportation for freight and passengers is railways.

Note: Also see Q1. (Long Answer Type Questions)

Q17. “Advancement of international trade of a country is an index of its economics prosperity”. Justify the statement. (HOTS)

Ans. See Q9. (Short Answer Type Questions)

Q18. Give one feature of each of the following:

- | | |
|---------------------------------|----------------------------|
| (i) Mumbai port | (ii) Marmagao port |
| (iii) New Mangalore port | (iv) Tuticorin port |

- Ans.** (i) Mumbai port is the biggest one with a spacious natural and well sheltered harbour.
(ii) Marmago port is the premier iron ore exporting port of the country.
(iii) New Mangalore port, located in Karnataka caters to the export of iron ore concentrates from Kudremukh mines.
(iv) Tuticorin in Tamil Nadu has a natural harbour and rich hinterland.

Q19. Explain the reasons for dense railway network in the North Indian plains.

[AI CBSE 2012]

- Ans.** (i) The northern plains have vast level land. It is easy to lay railway lines there.
(ii) These plains have high population density as a result of which we find dense railway network these to cater the interest of the people.
(iii) Rich agricultural resources provide a favourable condition for the growth of railway network in the northern plains.
(iv) The metropolitan cities of the northern plains have also played a great role in the growth of railways.

IV. LONG ANSWER TYPE QUESTIONS

Q1. Analyse the physiographic and economic factors that have influenced the distribution pattern of the railway network in our country. (CBSE 2015)

Ans. The distribution pattern of the railway network in the country has been largely influenced by physiographic and economic factors:

- (i) The northern plains with their vast level land, high population density and rich agricultural resources provided the most favourable condition for the growth of railway network.

- (ii) In the hilly terrains of the peninsular region, railway tracts are laid through low hills, gaps or tunnels.
- (iii) The Himalayan mountainous regions too are unfavourable for the construction of railway lines due to high relief, sparse population and lack of economic opportunities.
- (iv) It was equally difficult to lay railway lines on the sandy plain of Western Rajasthan, swamps of Gujarat, forested tracks of Madhya Pradesh, Chhattisgarh, Odisha and Jharkhand.
- (v) In recent times, the development of the Konkan railway along the west coast has facilitated the movement of passengers and goods in this most important economic region of India.

Q2. Write a short note on Indian Railways discussing its importance, distribution pattern and problems faced by the Indian Railways.

Or

How do physical and economic factors influence the distribution pattern of the Indian Railway network? Explain with examples. (AI CBSE 2009)

Ans. The Indian Railways have a network of 7,031 stations spread over a route length of 63,221 km with a fleet of 7817 locomotives, 5321 passenger service vehicles, 4904 other coach vehicles and 228,170 wagons as on 31 March 2004. The Indian railways is the largest public sector undertaking of India. The first train steamed off from Mumbai to Thane in 1853, covering a distance of 34 km. It is organised into 16 railway zones.

Railways are the prime mode of transportation for goods and passengers in India. Railways also make it possible to conduct varied activities like business, sightseeing and pilgrimage along with transportation of goods over longer distances. They are suitable for long distance travel and play an important role in national integration. Railways in India bind the economic life of the country as well as accelerate the development of the industry and agriculture. The Indian Railways is the largest public sector undertaking in the country. In recent times, the development of the Konkan railway along the west coast has simplified the movement of passengers and goods in this most important economic region of India.

Factors which influence the distribution pattern of Railway network in India:

The distribution pattern of the railway network in the country has been largely influenced by physiographic, economic and administrative factors.

- (i) The northern plains provide most favourable condition having high population density, vast level land, and rich agricultural resources.
- (ii) Rivers create problem in laying down of railway tracts because they require construction of bridges across the wide beds of the rivers.
- (iii) In the hilly terrains of the peninsular region, railway tracts are laid through low hills, gaps or tunnels.
- (iv) The Himalayan mountainous regions too are unfavourable for the construction of railway lines due to high relief, sparse population and lack of economic opportunities.
- (v) It was equally difficult to lay railway lines on the sandy plain of western Rajasthan, swamps of Gujarat, forested tracks of Madhya Pradesh, Chhattisgarh, Odisha and Jharkhand.

Today, the railways have become more important in our national economy than all other means of transport put together. However, rail transport suffers from certain problems as well.

Problems faced by the Indian Railways

- (i) Many passengers travel without tickets.
- (ii) Thefts and damaging of railway property has not yet stopped completely.
- (iii) People stop the trains, pull the chain unnecessarily and this causes heavy damage to the railway.

Q3. What is mass communication? Throw light on different types of mass communication and its importance. (HOTS)

Or

Explain the importance of 'Radio' and 'Television' as an effective means of mass communication in India. (CBSE 2005, 2009)

Ans. Mass communication is a communication in which masses are communicated at the same time by one source. Mass communication provides entertainment and creates awareness among people about various national programmes and policies. It includes radio, television, newspapers, magazines, books and films.

All India Radio (AIR) (Akashwani) broadcasts a variety of programmes in national, regional and local languages for various categories of people, spread over different parts of the country.

Doordarshan: The national television channel of India is one of the largest terrestrial networks in the world. It broadcasts a variety of programmes from entertainment, education to sports, etc. for people of different age groups.

Both radio and television are very effective means of communication in India because they are spread in every corner of the country. People of all classes enjoy them.

India publishes a large number of newspapers and periodicals annually. They are of different types depending upon their periodicity. Newspapers are published in about 100 languages and dialects.

Q4. Describe the importance of pipelines in India. Name three important networks of pipeline transportation in the country.

Ans. Pipeline transport network is a new arrival on the transportation map of India. Earlier it was used to transport water but these days it is used for the following:

- (i) Transport of crude oil, petroleum products and natural gas from oil and natural gas fields to refineries, fertiliser factories and big thermal power plants is done with the help of pipelines.
- (ii) Even solids can be transported through pipelines when converted into slurry.
- (iii) The far inland locations of refineries and gas-based fertiliser plants could be thought of only because of pipelines.
- (iv) Initial cost of laying pipelines is high but subsequent running costs are minimal.
- (v) It rules out trans-shipment (during transportation) losses or delays.

Three important networks of pipeline transportation in the country

- (i) From oil field in the upper Assam to Kanpur (UP), via Guwahati, Barauni and Allahabad. It has branches from Barauni to Haldia, via Rajbhand, Rajbhand to Maurigram and Guwahati to Siliguri.

- (ii) From Salaya in Gujarat to Jalandhar in Punjab, via Viramgam, Mathura, Delhi and Sonipat. It has branches to connect Koyali (near Vadodara, Gujarat) Chakshu and other places.
- (iii) Gas pipeline from Hazira in Gujarat connects Jagdishpur in UP, via Vijaipur in MP. It has branches to Kota in Rajasthan, Shahajahanpur, Babrala and other places in UP.

Q5. Write any four characteristics of Kandla seaport. (CBSE 2010)

- Ans.**
- (i) Kandla in Kuchchh was the first port developed soon after independence of India.
 - (ii) It was developed to ease the volume of trade on the Mumbai port, in the wake of loss of Karachi port to Pakistan after the partition.
 - (iii) Kandla is a tidal port.
 - (iv) It caters to the convenient handling of exports and imports of highly productive granary and industrial belt stretching across the states of Jammu and Kashmir, Himachal Pradesh, Punjab, Haryana, Rajasthan and Gujarat.

Q6. Write a short note on various kinds of roads in India.

Ans. Various kinds of roads in India are:

1. **Golden Quadrilateral Super Highways:** The government has launched a major road development project linking Delhi-Kolkata-Chennai-Mumbai and Delhi and six-lane super Highways.
The North-South corridors linking Srinagar (Jammu and Kashmir) and Kanniyakumari (Tamil Nadu) and East-West Corridor linking Silcher (Assam) and Porbander (Gujarat) are part of this project.
2. **National Highways:** National highways link extreme parts of the country. These are primary road systems and are laid and maintained by the Central Public Works Department (CPWD). The historical Sher Shah Suri Marg is called National Highway No.1, between Delhi and Amritsar. The National Highway 7 between Varanasi and Kanniyakumari is the longest highway of India. The national highway 2 is between Delhi and Kolkata. The national highway 3 is between Agra and Mumbai. The national highway 8 is between Delhi and Mumbai. The national highway 15 passes through Rajasthan.
3. **State Highways:** Roads linking a state capital with different district headquarters are known as State Highways. State highways are constructed and maintained by the State Public Works Department (PWD)
4. **District Roads:** Roads which connect the district headquarters with other places of the district are called district roads. These roads are maintained by the Zila Parishad.
5. **Rural Roads:** Roads which link rural areas and villages with towns are classified as rural roads. Under the Pradhan Mantri Grameen Sadak Yojana scheme special provisions are made so that every village in the country is linked to a major town in the country by an all season motorable road.
6. **Border Roads:** Strategically important roads in the bordering areas of the country are called border roads. Border Roads Organisation (BRO), a government of India undertaking constructs and maintains border roads. This organisation was established in 1960 for the development of the roads of strategic importance in the northern and northeastern border areas.

Q7. What is the meaning of road density? Describe any three major problems faced by road transportation in India. [CBSE 2010(F)]

Ans. The length of road per sq km of area is known as road density.

Road transportation in India faces a number of problems. Three of them are given below:

- (i) Keeping in view the volume of traffic and passengers, the road network is inadequate.
- (ii) About half of the roads are unmetalled and this limits their usage during the rainy season.
- (iii) The roadways are highly congested in cities and most of the bridges and culverts are old and narrow.
- (iv) The National Highways are inadequate too.

Q8. Why do roadways have an edge over railways? Explain. (CBSE 2011, 2012)

Ans. See Q1. (Short Answer Type Questions)

Q9. “Dense and efficient network of transport and communication is a pre-requisite for national and international trade.” Support the statement with four arguments. (AI CBSE 2012)

Ans. See NCERT Textbook Q3. (i)

Q10. Describe any five major problems faced by road transport in India.

(AI CBSE 2013)

Ans. See Q5. (Short Answer Type Questions)

Q11. What is importance of railway transport?

(CBSE 2010(F))

Ans. (i) Railways are the prime mode of transportation for freight and passengers in India.

(ii) Railways also make it possible to conduct multifarious activities like business, sightseeing, pilgrimage along with transportation of good over longer distances.

(iii) Apart from an important means of transport the Indian Railways have been a great integrating force for more than 150 years.

(iv) Railways in India bind the economic life of the country as well as accelerate the development of the industry and agriculture.

Q12. How do the physiographic and economic factors influence the distribution pattern of the India railway network? Explain with suitable examples.

(CBSE 2004, AI CBSE 2009)

Ans. See Q1. (Long Answer Type Questions)

Q13. State three points regarding the importance of pipelines in transportation.

(CBSE 2005, 2010(C))

Ans. See Q3. (Long Answer Type Questions)

Q14. Why is air transport an important means of transport in the north-eastern part of our country? Explain any four reasons. (CBSE 2011, AI CBSE 2013)

Ans. See Q7. (Short Answer Type Questions)

Q15. Describe any five major problems faced by road transport in India.

(CBSE 2013)

Ans. See Q5. (Short Answer Type Questions)

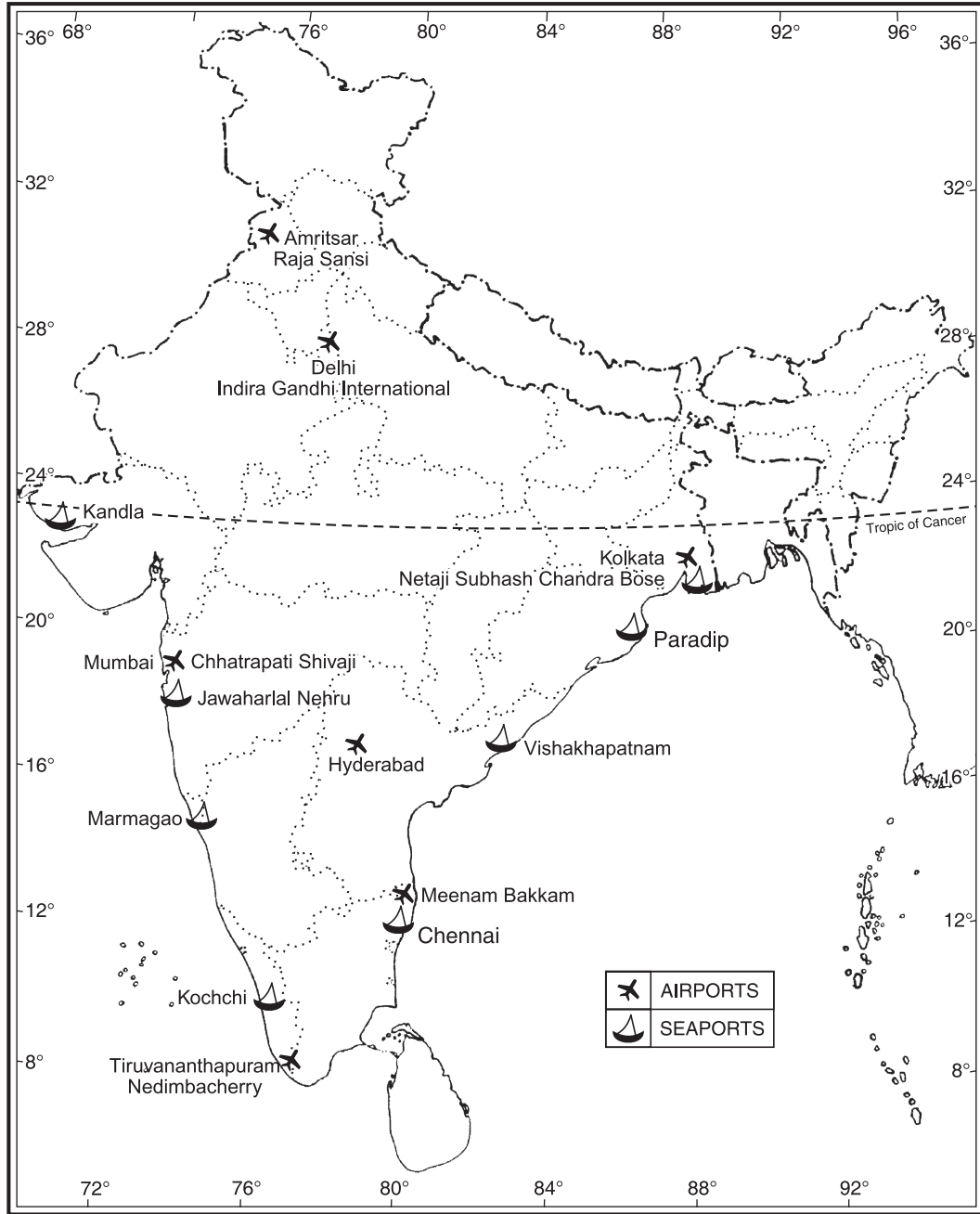
V. MAP SKILLS

Q1. On an outline political map of India, mark the following:

Major Ports—Kandla (CBSE 2010), Mumbai, Jawaharlal Nehru, Marmagao, Kochchi [CBSE (F) 2010], Chennai, Vishakhapatnam, Paradip, Kolkata.

International Airports—Amritsar (Raja Sansi); Delhi (Indira Gandhi International); Mumbai (Chhatrapati Shivaji); Tiruvananthapuram (Nedimbachery); Chennai (Meenam Bakkam); Kolkata (Netaji Subhash Chandra Bose) and Hyderabad.

Ans.



VI. VALUE BASED QUESTIONS

Q1. Means of transport and communication are called the lifelines of a nation and its economy. What are the main reasons behind it?

Or

How are means of transport and communications complementary to each other? Explain with three examples.

- Ans.** (i) The development of a country depends upon the production of goods and services as well as their movement to their destination. Transport plays an important role in the economy. Because of transport, raw materials reach to the factory or industry and finished products reach to the consumers. Transport has helped in both production and distribution of goods. Hence, efficient means of transport are prerequisites for fast development.
- (ii) For a long time, trade and transport were restricted to a limited space. With the development in science and technology, the area of influence of trade and transport expanded far and wide. Today, the world has been converted to a large village with the help of efficient and fast moving transport. Transport has been able to achieve this with the help of equally developed communications system. Therefore, transport, communications and trade are complementary to each other.
- (iii) India is well-linked with the rest of the world despite its vast size, diversity, linguistic and socio-cultural plurality. Railways, airways, waterways, newspapers, radio, television, cinema and internet, etc. have been contributing to its socio-economic progress in many ways. The trades from local to international levels have added to the vitality of its economy. It has also enriched our life and added substantially to growing amenities and facilities for the comforts of life. Hence, it is right to say that means of transportation and communication are the lifelines of a nation and its economy.

Q2. What values are associated with tourism?

Ans. The values associated with tourism are:

- (i) It promotes national integration.
- (ii) It provides support to local handicrafts and cultural pursuits.
- (iii) It develops international understanding among countries.
- (iv) It increases foreign exchange.

TEST YOUR SKILLS

1. Critically examine how roadways are more important than railways.
2. What is the importance of super-highways in our national economy?
3. Describe the factors affecting the distribution of railway network.
4. What are the merits and demerits of pipelines?
5. Explain the three important networks of pipelines in India.
6. Suggest some measures to promote tourism in India.