

02



LIFE LINE OF NATIONAL ECONOMY

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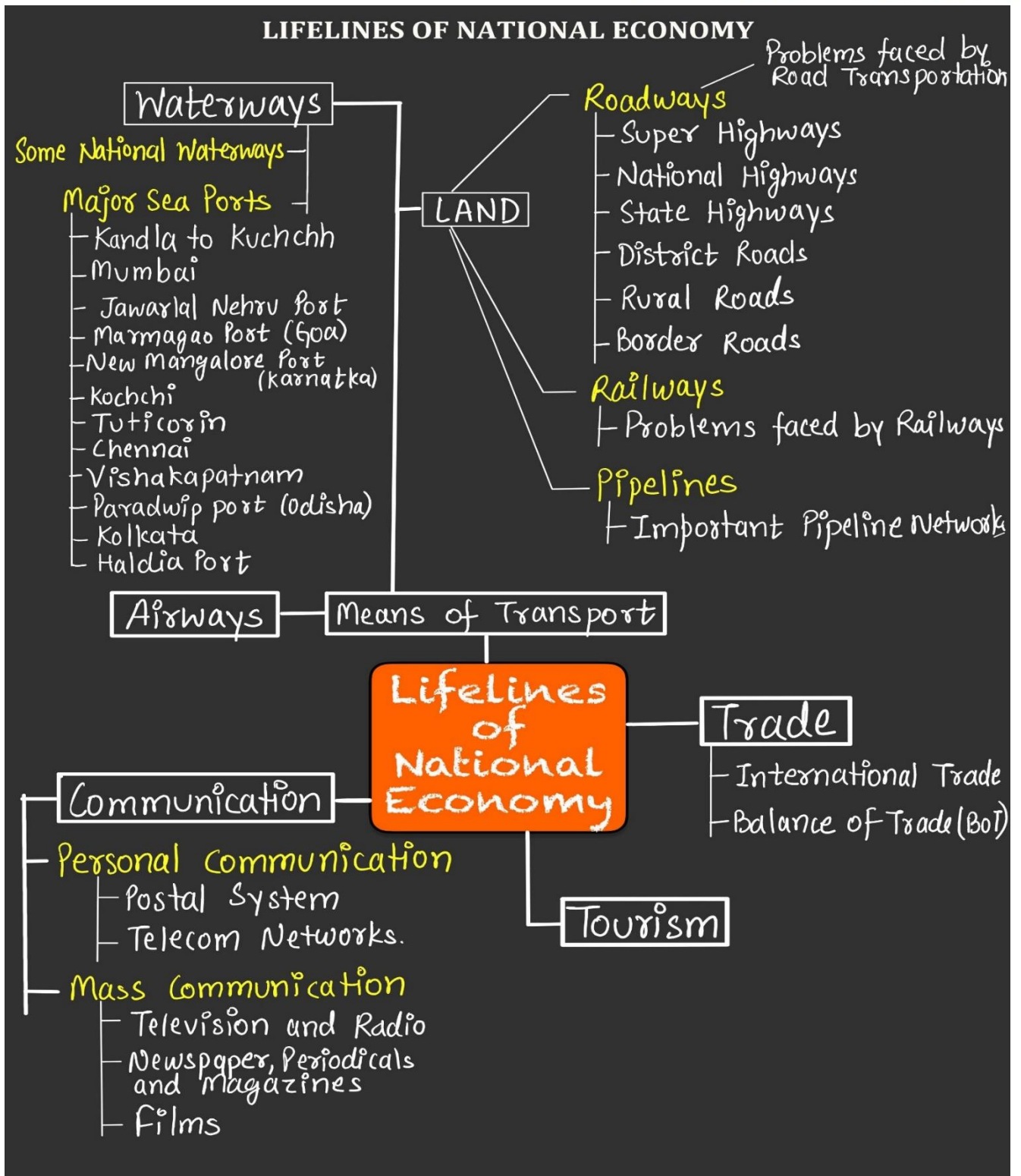
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02

LIFE LINE OF NATIONAL ECONOMY

GEOGRAPHY
 REVISION MODULE



Problems faced by Road Transportation

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TRANSPORT - The movement of goods and services from supply locations to demand location is termed as transportation.

Roadways

India has one of the largest road networks in the world, aggregating to about 56 lakh km.

Road transport is growing in importance as compared to railways because -

- Cost of constructing of roads is much lower than that of railway lines.
- Roads can traverse comparatively more dissected and undulating topography.
- Roads can negotiate higher gradients of slope and can traverse mountains like Himalayas
- Road transport is economical in transportation of few person and relatively smaller amount of goods over short distances.
- It provides door-to-door services, thus the cost of loading and unloading is much lower.
- It is also used as feeder to other modes of transport as they provide link between railway stations, air and sea ports.

Classification of Roads on the basis of Capacity :

1. **Super Highways** - It includes major road development projects like Golden Quadrilateral linking Delhi-Mumbai-Chennai-Kolkata and Delhi by six-lane super highway. It also includes, North-South Corridor linking Srinagar and Kanyakumari and East-west Corridor linking Silchar and Porbandar. These projects are being implemented by National Highway Authority of India (NHAI).
2. **National Highway** - They link extreme parts of country. They are laid & maintained by Central Public Works Department (CPWD).
Different NHs -
NH-1 : Delhi to America (Sher Shah Suri Marg)
NH-2 : Delhi to Kolkata
NH-7 : Varanasi to Kanyakumari (longest, 2369 km)
NH-8 : Delhi to Mumbai
3. **State Highway** - Roads linking a state capital with different district headquarters. They are constructed and maintained by State Public Works Department (PWD).
4. **District Roads** - These roads connect the district headquarter with other places of the district. They are maintained by the Zilla Parishad.
5. **Rural Roads** - Link rural areas and villages with towns. These roads received special impetus under the Pradhan Mantri Gramin Sadak Yojna. Under

this scheme, special provisions are made to connect every villages in the country to a major town by an all season motorable road.

6. Border Roads - Border Roads Organisation (BRO), a Government of India undertaking constructs and maintains the roads in the bordering areas of the country. It was established in 1960 and has improved the accessibility in areas of difficult terrain and have helped in the economic development of these area.

Problem faced by Road Transportation:

- o Many roads being unmelted, due to which transportation is difficult during rainy season.
- o Inadequate reach of National Highways in many places.
- o High traffic congestion on roads in cities.

Railways [cbse 2019, 2015]

- o Railways are the principal mode of transportant for freight (goods) and passengers in India, carry bulky weight and excellent for long distances.
- o The Indian Railways have a network of 7,133 stations spread over a route length of 64,460 km.
- o for the administrative convenience, India railways are divided into 16 zones.
- o There are 3 types of gauges (railway track) broad gauge, metre gauge and narrow gauge.
- o There are many challenges for Indian Railways as-
 - It is difficult to lay railway lines in sandy plains of western India, hilly and mountainous regions of peninsular India and Himalayas.
 - It requires construction of bridges over rivers in North and eastern India
 - There are problems of sinking of railway tracks and landslides blocking the track.
 - The initial costs of laying the tracks are too high.

Problems Faced by Railways:-

- o Many passengers travel without ticket.
- o Thefts and damaging of railway property.
- o People pull chains unnecessarily which cause heavy damage to railways.
- o Delaying of trains.
- o Landslides and sinking of tracks in some stretches.

Pipelines

- Pipelines transport network is a new arrival on the transportation map of India.
- Earlier, it was used to transport water to cities and industries.
- Now, these are used to transport crude oil, petroleum products and natural gas from natural gas fields to refineries, fertilizer factories and big thermal power plants.
- Initial cost of laying pipeline is high but subsequent running costs are minimal.
- It reduces trans-shipment losses or delays

Important Pipeline Networks-

- From oil fields in upper Assam to Kanpur.
- From Salaya to Jalandhar
- Gas pipeline from Hazira to Jagdishpur.

Waterways

- Waterways are the cheapest means of transport.
- It is suitable for carrying heavy and bulky goods.
- It is fuel-efficient and environment friendly mode of transport.
- India has inland navigation waterways of 14,500 km in length.
- 95% of country trade volume (68% in terms of value) is moved by sea.

Some National Waterways:

- NW-1 - The Ganga river between Allahbad and Haldia (1620 km)
- NW-2 - The Brahmaputra river between Sadiya and Dhubri (891 km)
- NW-3 - The West-Coast Canal of Kerala (205 km)
- NW-4 - Specified stretches of Godavari and Krishna rivers along with Kakinada Puducherry stretch of canals (1078 km)
- NW-5 - Specified stretches of rivers Brahmani along with Metil river, delta channels of Mahanadi and Brahmani rivers and East Coast Canal (588 km).

Major Sea Ports:

- Kandla in Kutch: It was the first port developed soon after Independence to ease the volume of trade on the Mumbai port. It is a tidal port.
- Mumbai: It is the biggest port with a spacious natural and well-sheltered harbour.
- Jawaharlal Nehru Port: It was planned with a view to decongest the Mumbai port and serve as a hub port for this region.
- Marmagao Port (Goa): It is premier iron ore exporting port of the country. It accounts for about 50% of India's iron ore export.

- New mangalore Port (Karnataka): It caters to the export of a lagoon with a natural harbour.
- Kochchi: It is the extreme South-Western port, located at the entrance of a lagoon with a natural harbour.
- Tuticorin: It is the extreme South-Eastern port, it has a natural harbour and rich hinterland.
- Chennai: It is one of the oldest artificial ports of India. It ranks second after Mumbai in terms of the volume of trade and cargo.
- Vishakapatnam: It is the deepest landlocked and well-protected port.
- Paradwip port (Odisha): It specialises in the iron ore export
- Kolkata: It is an inland riverine port. The port serves a very large and hinterland of Ganga-Brahmaputra basin. Being a tidal port, it requires constant dredging of Hoogley.
- Haldia Port: It was developed as a subsidiary port to relieve growing pressure on the Kolkata Port.

Airways

- Airways is the fastest, most comfortable and prestigious mode of transport.
- It can cover difficult terrains like high mountains, dreary deserts, dense forests and long oceanic stretches with great ease.
- Pawanhans Helicopter Ltd. provides helicopter service to Oil and Natural Gas Corporation (ONGC) in its off-shore operations.
- The air transport was nationalised in 1953.
- Air travel is not within the reach of common people, it is only in the north-eastern states that special provisions have been made to extend the service to the common people.

Communication

↳ act of exchanging information.

Personal Communication:

- Postal System: The Indian postal network is the largest in the world. Cards and envelopes are considered first-class mail (airlifted) whereas the second-class mail includes book packets, registered newspaper and periodicals (surface mails). Recently, six channels have been introduced to facilitate quick delivery in cities and large towns. Rajdhani channel, Metro Channel, Green Channel, Business Channel, Bulk mail channel and Personal Channel.
- Telecom Networks: India has one of the largest telecom network in Asia. Excluding urban area more than two-thirds of the villages in India have been covered with

Subscribers Trunk Dialling (STD).

Mass Communication :

Mass communication provides entertainment and creates awareness among people about various national programme and policies.

- Television and Radio: All India Radio (Akashvani) and Doordarshan, the national TV channel, broadcast a variety of programmes in national, regional and local languages.
- Newspapers, Periodicals & Magazines: India publishes a large number of newspapers and periodicals, newspapers are published in about 100 languages.
- Films: India is the largest producer of feature films in the world. The Central Board of Film Certification is the authority to certify both Indian and foreign films.

Trade

Exchange of goods between people, states and countries is known as trade.

International Trade: The trade between two countries is known as International Trade.

Exports and Imports are the components of trade. When goods are sent to another country for sale, it is called export, whereas when goods come from another country to be sold in India, is called import.

Advancement of international trade of a country is an index of its economic prosperity. As the resources are spaced bound so no country can survive without international trade.

India has emerged as software giant at International level.

Balance of Trade (BoT): The balance of trade of a country is the difference between its export and its import.

When the value of exports exceeds the value of imports, it is known as favourable balance of trade. When the value of imports exceeds the value of exports, it is known as unfavourable balance of trade.

Export Commodities of India: Agriculture and allied product, ores and minerals, petroleum products, gems and jewellery.

Import Commodities of India: Petroleum and petroleum products, pearls and precious stones, chemicals, coke, coal, briquettes and machinery.

Tourism

- More than 15 million people are directly engaged in the tourism industry. It also promotes national integrity, provides support to local handicrafts and cultural pursuits.
- It also helps in the development of international understanding about our culture and heritage.
- Foreign tourists visit India for heritage tourism, eco-tourism, adventure tourism, business tourism, cultural tourism and medical tourism.

cbse
2019

22. Explain the importance of Railways as a means of transport → Pg-②

cbse
2017

14. Examine with example the role of means of transport and communication in making our life prosperous and comfortable.

Ans. - Important role means of transport & communication plays :-

- Today, the world has been converted into a large village with the help of efficient & fast moving transport.
- Transport has been able to achieve this with the help of equally developed communication & trade are complementary to each other.
- Therefore, transport communication and trade are complimentary to each other.
- Railways, airways, waterways, newspapers, radio, television, cinema and internet have been contributing to its economic progress in many ways.

cbse
2015

12. Explain the importance of railways as the principal mode of transportation for freight and passengers in India. — Pg-②

2019

22. Explain the importance of Railways as a means of transport.

ANSWERS:

22. The importance of railways as the principal mode of transportation for freight and passengers in India are as follows:

- i). Railways make it possible to conduct multifarious activities like business, sightseeing, pilgrimage along with transportation of goods.
- ii). It is suitable for long distance travel.
- iii). Plays an important role in national integration.
- iv). Railways bind the economic life of the country
- v). It accelerates the development of the industry and agriculture.

2018

11. "Dense and efficient network of transport is a prerequisite for local and national development." Analyse the statement.

ANSWERS:

11. Efficient network of transport is prerequisite for local and national development:

- i). The movement of the goods and services from their supply locations to demand locations necessitates the need for transportation.
- ii). Development of country depends upon the production of goods and services as well as movement to their destinations.
- iii). Transport helps in both production and distribution of goods.
- iv). Supports all sectors of the economy.

2017

14. Examine with example the role of means of transport and communication in making our life prosperous and comfortable.

ANSWERS:

14. Important role means of transport and communication plays:

- i). Today, the world has been converted into a large village with the help of efficient and fast moving transport.
- ii). Transport has been able to achieve this with the help of equally developed communication system.
- iii). Therefore, transport communication and trade are complementary to each other.
- iv). Railways, airways, waterways, newspapers, radio, television, cinema and internet have been contributing to its economic progress in many ways.

2015

12. Explain the importance of railways as the principal mode of transportation for freight and passengers in India.

ANSWER: 12. The railways are the main artery of inland transport in India. It is the lifeline of the country as mentioned below :

- (i) The Indian Railways have a network of 7,031 stations, 7,817 locomotives, 5,321 passenger service vehicles, 4,904 other coach vehicles and 2,28,170 wagons as on 31st March, 2004.
- (ii) Railways are useful in conducting business, sightseeing, pilgrimage along with transportation of goods over longer distances.
- (iii) It is the largest public undertaking in the country. Thus, the railways is playing an important role in our economy.

Very Short Type Questions

Q1. Write the name of major three types of railway?

Ans: Broad guage(1.676Mts), Metre guage(1 mts), Narrow guage(0.75mts)

Q2. Write the name of two types of mass media?

Ans: Print Media:- Newspaper, Magzine and books.

Electronic Media:- TV, Redio, Internet etc.

Q3. What are the problem product in India?

Ans: Petroleum product mostly imported as crude oil from gulf country.85% of petroleum products imported in India

Q4. Six Lane Highways are called

Ans: Golden quadrilateral super highways

Q5. Golden quadrilateral super highways are maintained by

Ans: National Highway Authority of India.

Q6. Villages are connected to a major town through this scheme of roads

Ans: PMGSY

Q7. Border Roads are constructed by

Ans: BRO

Q8. Provides door-to-door connectivity

Ans: Roadways

Q9. Bulk carrier across nations

Ans: Waterways

Q10. Bulk carrier within India

Ans: Railways

Q11. Principal mode of transportation for freight and passengers in India

Ans: Railways

Q12. Width of two tracks of Broad Gauge is

Ans: 1.676 m

Q13. Natural harbour in India

Ans: Mumbai

Q14. Biggest natural port in India

Ans: Mumbai

Q15. Largest producer of feature film in the world

Ans: India

Q16. AIR stands for

Ans: All India Radio

Q17. Terminal stations of East-West corridor

Ans: Silcher and Porbandar

Q18. Which mode of transportation reduces trans-shipment losses and delays?

Ans: Pipeline

SHORT TYPE QUESTION ANSWERS

Q1. What is international trade? What do you mean by Balance of trade? What is the importance of trade? Ans. Trade between two countries is called international trade. It includes exchange of

commodities, services, information and knowledge. Relation or difference between nation's exports and imports is called balance of trade.

It has two types:

(i) Surplus trade: when the value of exported goods and services is more than the value of imported goods and services. It is called favorable trade balance.

(ii) Trade Deficit: when the value of exported goods and services is less than the value of imported goods and services. It is called unfavorable trade balance.

The importance of trade is:

1. No country can survive without international trade because resources are space bound.
2. Advancement of international trade of a country leads to its economic prosperity because such a trade provides so many jobs to workers as well as business to traders.
3. It is through international trade that we earn much of our foreign exchange which is required for importing many essential goods.
4. Foreign trade helps in transfer of technology.

Q2. Mention the different means of transport in India.

Ans. Means of transport in India are:- (i) Roadways, (ii) Waterways, (iii) Airways, (iv) Pipelines, (v) Railways.

Q3. What are the means of mass communication? Explain features of any two media.

Ans. These are those means of communication through which one can communicate with several people at the same time.

For example- Radio, newspaper and T.V.(Television):-

(i) It is one of the largest and essential networks in the world.

(ii) It provides entertainment and keeps the viewers well informed about the world.

Radio:-

(i) It is the cheapest and the most effective means of communication.

(ii) Besides entertainment, it also provides information and promotes social education.

Q4. What are the different types of roads in India?

Ans. **There are six types of roads**

1. Golden Quadrilateral Super Highways or Expressway National Highways
2. National Highways
3. State Highways
4. District Roads
5. Other Roads or Rural Roads or Village Roads
6. Border Roads

Q5. What do you mean by pipeline transport?

Ans. Transportation of liquid, gases or slurries through pipes made of durable metal or a plastic tube is called pipeline transport. It is the most convenient mode of transport for crude oil, petroleum products and natural gas even solids like iron ore in slurry form to refineries, fertilizer factories, industries and big thermal power plants.

For example:

- From oil field in 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.
- Gas pipeline from Hazira in Gujarat connects Jagdishpur in Uttar Pradesh, via Vijaipur in Madhya Pradesh. It has branches to Kota in Rajasthan, Shahajahanpur, Babrala and other places in Uttar Pradesh (HVJ).

LONG ANSWERS TYPE QUESTION

1. Why is 'transport and communication' called the lifelines of an economy?

Or Why is transport a necessity? (Why is it considered a pre requisite for economic development?)

Ans:-

- i. Transport helps in the movement of people goods and materials. It helps in the production and distribution of goods and services.
- ii. It is the basic arteries of an economy. It provides link between producers and consumers of goods.
- iii. The pace of development of a country depends on the production of goods and services as well as their movement over space.

Q2. What are the advantages of roads over railways?

Or (How does road transport score over railways?) What are the problems faced by the road transportation in India?

Ans:-

- (a) Roads are important for transport of goods and passengers for short and medium distances.
- (b) Road transport is relatively cheap and easy both in construction and maintenance.
- (c) It can be constructed even in mountainous terrain whereas railways are not possible in these areas. Railways require levelled ground.
- (d) Roads connect areas of production with market, factories with farms and provide door-to-door service.
- (e) Road transport is used as a feeder to other modes of transport such as they provide a link between railway stations, air port and seaports.
- (f) For easy transportation of perishable goods, roads provide better service than the railways.

The problems faced by road transportation are the following:

- (a) The road network in India is inadequate keeping in view of the number of passengers and volume of traffic.
- (b) About half of the roads in India are un-surfaced which becomes muddy during the rainy season.
- (c) The National Highways are inadequate and highly congested in the cities and their bridges and culverts are narrow.
- (d) The road side amenities like telephone ,books ,emergency health services and police protection on the national highways are very poor and need improvement.

Q3. Name the different types of roads in India.

Ans:-

(a) Super Highways: (Express ways) The Golden Quadrilateral connecting Delhi, Mumbai, Chennai, Kolkatta and Delhi is a six lane super highway. North South Corridor connecting Srinagar and Kanyakumari and East West Corridor connecting Silcher in Assam and Porbandhar in Gujarat are also super highways. These are maintained by the National Highway Authority of India.

(b) National Highways: These connect one state with another and are of national importance. These are constructed and maintained by the Central Public Works Department. There are about 52,000 Km of National Highways in India. e.g. N.H. 17, N.H..47 etc.

(c) State Highways: These roads are constructed and maintained by state Governments. It connects state capital with district head quarters and with other important cities of the states. There are about 1.3 lakh Km of state highways in India.

(d) The District Roads: These roads connect district headquarters with cities and other places of the district. These roads are constructed and maintained by the District administration.

(e) Other Roads: Village roads connect villages with neighboring towns and cities. These roads receive special impetus under the Pradhan Mantri Grameen Sadak Yojana.

(f) Border Roads: The border roads link the frontiers of the country. The border roads are constructed and maintained by the Border Roads Organization (BRO).

Q4. State the characteristics of the North –South Corridor.

Ans:-

- a) It connects Srinagar in Jammu Kashmir and Kanyakumari in Tamil Nadu.
- b) It is the longest express way in India.
- c) It is a four to six lane road.

- d) It is meant for fast movement of traffic.
- e) Much roundabouts or junctions are not seen
- f) Roads are not cut at right angles and no fear of vehicles crossing- accidents are less.

Q5. How do physiographic and economic factors influence the distribution pattern of Indian railway network? Explain with suitable examples.

Ans:-

➤ **Physiographic factors:**

(a) Railways require level land for its construction. It is not possible to construct a railway line in the mountains terrains. Flood plains of Bihar and Assam and rugged topography of the Himalayan region are not good for railway service.

(b) Sparsely populated areas like sandy deserts of Rajasthan are not good for railway network. It requires high density of population for its growth.

(c) Northern plains of India have dense network of railway, because their vast level land, high density of population and rich agricultural resources.

➤ **Economic factors:**

a) Rich agriculture ensures the development of railways for easy and cheap transportation of agricultural goods.

b) Greater industrial activity is required in areas where development of railways is expected. Movements of goods and passengers support the railways.

Q6. What are pipelines used for? Describe two important network of pipeline transportation in India.

Ans:-

(a) In the past pipelines are used for transporting water to cities and industries.

(b) Now pipelines are used also for transportation of crude oil, petroleum products and natural gas from oil and natural gas fields to refineries, fertilizer factories and to big thermal power plants. Solids also can be transported through a pipeline when converted into slurry.

(c) Though initial cost of laying pipeline is high, the running and maintenance cost is very low. It saves trans-shipment losses and delays.

(a) **Assam to Kanpur:** There is a pipeline transportation from oil fields in upper Assam to Kanpur in Uttar Pradesh via Guwahati, Barauni and Allahabad for the transportation of petroleum. It has branches from Barauni to Haldia via Rajbandh to Maurigram and Guwahati to Siliguri.

(b) **HBJ pipeline (HVJ):** It is a gas pipeline from Hazira in Gujarat to Jagdishpur in Uttar Pradesh via Bijaipur(Vijaypur) in Madhya Pradesh. It has branches to Kota in Rajasthan, Shahjahanpur, Babrala and other places in Uttar Pradesh. It is also connected with Mumbai High and South Bassein in Maharashtra.

Q7. Why are inland waterways significant? Mention any four National Water ways.

Ans:-

(a) Waterways are the cheapest means of transport, most suitable for carrying heavy and bulky goods.

(b) It is a fuel efficient and environment friendly mode of transport.

(c) India has inland navigable waterways of 14,500 km in length. Out of these 3700 km are navigable by mechanized boats.

(d) The Government has declared the following waterways as National Waterways.

(1) The Ganga river between Allahabad and Haldia covering 1620 Km. (NW.1)

(2) The Brahmaputra river between Sadia and Dhubri covering 891 km. (NW.2)

(3) The West Coast canal between Kollam and Kottayam in Kerala with 168 km. The Champakara canal with 14 km and the Udyogmandal canal with 22 km in Kerala. (Total 205 Km in Kerala) All NW No.3

(4) Specified stretches of Godavari and Krishna rivers along with Kakinada and Puducherry stretches of canals with 1078 km is NW. No.4.

(5) Specified stretches of river Brahmani along with Matai river, delta channels of Mahandi and Brahmani rivers and East coast canal, all with 588 km is NW No.5.

(6) There are some other inland waterways like Mandavi, Zuari and Cumberjua, Sunderbans, Barak, backwaters of Kerala and tidal stretches of some other rivers.

Q8. Why is air travel preferred in north eastern states?

Ans:-

- i. Air transport is the fastest, most comfortable and prestigious mode of transport.
- ii. It can travel very high terrains, vast deserts dense forests, and large oceanic stretches with great ease where other modes of transportation are difficult.
- iii. The north eastern part of India is marked with the presence of big rivers, frequent floods dissected relief, rugged topography, dense forests and international frontiers. Other modes of transportation is impossible especially at times of emergencies.