Geography

(India People and Economy) (Chapter - 7) (Exercises)
(Transport and Communication)

(Class – XII)

Question 1:

Choose the right answers of the followings from the given options.

(i) In how many zones has the Indian Railways system been divided?

(a) 9
(b) 12
(c) 16
(d) 14

(ii) On which river and between which two places does the National Water Way No. 1 lie?

(a) The Brahmaputra, Sadiya-Dhubri
(b) The Ganga, Haldia-Allahabad
(c) West Coast Canal, Kottapuram to Kollam

(iii) In which of the following year, the first radio programme was broadcast?

(a) 1911
(b) 1936
(c) 1927
(d) 1923

Answer 1:

(i) (c) 16
(ii) (b) The Ganga, Haldia-Allahabad
(iii) (d) 1923

Question 2:

Answer the following questions in about 30 words.

(i) Which activity does transportation convey? Name three major modes of transportation?
(ii) Discuss advantages and disadvantages of pipeline transportation?
(iii) What do you mean by 'communication'?

Answer 2:

(i) Transport conveys the basic activity of mobility. Mobility is a basic need of humans which helps in trade and other activities. Transport is instrumental in bringing out about increased mobility. With the help of transportation items for daily consumption are brought from the site of production to the market, which makes them available to the consumer.

Three major modes of transportation are Rail, Train and Air.

Advantages:

- Large capacity transportation
- Safer means of transport
- Shorter construction time frame
- Lower energy use
- Environment friendly

Disadvantages:

- Can transport liquids mainly
- Illegal pilferage and wastage due to leak is a problem
- Patrolling and maintenance is a huge task
- Leakage in chemicals and petroleum can cause an accident

(ii)

Pipeline transportation is a newer development in the field of transportation.

- **Advantages:**

1. Liquids and gases can be transported easily at low costs. Even solids can be transported in form of slurry.
2. No need for fuel is required. It is an eco-friendly method. Gradient plays the main role in the transportation of the material.
3. Pipelines can be laid in the high-altitude, rugged areas, even under the sea.
4. Material can be transported between distant areas continuously without the aid of human agents carrying it from one place to another.

- **Disadvantages:**

1. The cost of laying the pipelines is very high. People cannot be transported.
2. Leakage in the pipelines can cause serious disasters especially in the case of transportation of material like petroleum.
3. Pipelines are the very probable target of terrorist attacks; therefore, safety is a major issue.
4. All solid substances cannot be transported.

(iii)

Communication is a process that involves sending and receiving messages through the verbal and non-verbal methods. Communication is a two-way means of communicating information in the form of thoughts, opinions, and ideas between two or more individuals with the purpose of building an understanding.

The types of communication are:

Verbal
Nonverbal
Written
Visual

Question 3:

Answer the following questions in about 150 words.

(i) Which are the chief means of transportation in India? Discuss the factors affecting their development?

(ii) Give a detailed account of the development of railways in India and highlight their importance?

(iii) Describe the role of roads in the economic development of India.

Answer 3:

(i) Road, Rail and Air transport makes up the chief means of transportation in India.

- Road transport provides a faster and less costly means of transporting goods over short distances. Other modes of transport like water, air or rail may incur delays in transit of goods with loading and reloading required in multiple locations.
- Railways are a safe land transport system when compared to other forms of transport. Railway transport is capable of high levels of passenger and cargo utilization.
- Air transportation offers convenient, reliable and fast services of transport.

Factors affecting transport development are:

- Historical factor: This involves the location and patterns of systems, technological development, institutional development and settlement, and land-use patterns.
- Technological factor: The technological characteristics of each major transport mode are considered together with a discussion of the effects of technological advances.
- Physical factor: This includes physiographic controls upon route selection, and geological and climatic influences.
- Economic factor: The structure and nature of transport costs are examined, together with service quality and methods of pricing and charging.

(ii) Rail transport in India is an important mode of conveyance for people and goods in India. Indian Railways (IR) is the primary operator of rail operations throughout the country. India's national rail network is the fourth-largest in the world (after those of the United States, Russia, and China). It is one of the busiest networks in the world, transporting 8.086 billion passengers and 1.208 billion tonnes

of freight annually. IR is the world's eighth largest employer, with more than 1.254 million employees as of March 2020.

As of 1 April 2022, IR has electrified 80% or 52,247 km of the total broad-gauge route. Railway electrification in India began with the first electric train, between Chhatrapati Shivaji Terminus and Kurla on the Harbour Line, on 3 February 1925. Indian Railways announced on 31 March 2017 that the country's entire rail network would be electrified by 2022. Though not a new concept, the electrification in India has now been committed to with an investment of ₹35,000 crores to electrify the entire network and eliminate the cost of fuel for transportation, which will amount to a savings of ₹10,500 crores overall. These savings will allow the government channel funds to invest in the modernisation of the railway infrastructure.

Successive administrations of the Government of India have worked on improving the railways. Projects include the electrification of the entire IR network by 2023, new trains that can operate on existing rail infrastructure at 200 km/h, and new high-speed railways that can operate at speeds in excess of 300 km/h.

Various high speed trains like Vande Bharat, Tejas Express, Gatiman Express etc., have been introduced recently with modern facilities providing seamless and comfortable experience at par with air travel.

(iii) India has an extensive road network and provides amenity to millions of people every day, thus road transport is one of the important ingredients for the social and economic development of the country. India has the third largest road network in the world stretching 3.32 million kilometers in length. The significance of transportation is relative to population and the economy of the country, road transport has emerged as a dominant segment with a share of 4.8 percent in India's GDP. It is necessary, to provide adequate and well-coordinated transport system for economic and social development. As the consequences of economic liberalization demand of transport services drastically increased and in recent years, this demand has shifted to mainly road transport. Easy accessibility, flexibility of operations, door to door service and reliability has earned road transport an increasingly higher share of both passenger and freight traffic than other modes of transport. Hence, roads are the lifeline of Indian trade. They connect the consumers with producers that are they connect urban and rural centers. Rural centers are producers of agricultural goods which are consumed by them and are transported to urban centers because they do not have production of agricultural commodities. That is why roadways are often termed as arteries of India.