Chapter 7: Transport and Communication

Exercises — Exercises

Q1 In how many zones has the Indian Railways system been divided? (a) 9 (b) 12 (c) 17 (d) 14

(c) 17. Because the railway network is very large and puts pressure on a centralised management system, it has been divided into 17 zones.

Q2 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-Prayagraj (c) West Coast Canal, Kottapuram to Kollam (d) Godavari-Kakinada Puducherry

(b) The Ganga, Haldia-Prayagraj. NW 1 is the 1,620 km Prayagraj-Haldia stretch of the Ganga. The Brahmaputra stretch is NW 2, the West Coast Canal is NW 3 and the Godavari-Krishna stretch is NW 4.

Q3 In which of the following years was the first radio programme broadcast? (a) 1911 (b) 1936 (c) 1927 (d) 1923

(d) 1923. Radio broadcasting in India began in 1923 through the Radio Club of Bombay. The year 1911 marks the first airmail flight, and 1936 is when the Indian Broadcasting System was renamed All India Radio.

Q4 Which activity does transportation convey? Name three major modes of transportation. (about 30 words)

Transportation conveys the movement of goods, commodities and people from the place of production or availability to the place of use or consumption. Three major modes are land transport (roads, railways), water transport and air transport.

Q5 Discuss advantages and disadvantages of pipeline transportation. (about 30 words)

Pipelines are the most convenient and efficient way to move liquids and gases over long distances, and even solids once converted into slurry. Their drawback is that they suit only such fluid goods and need fixed, costly networks linking sources to consuming centres.

Q6 What do you mean by 'communication'? (about 30 words)

Communication is the exchange of ideas, views, information and messages from one place to another or one person to another through various means, such as drums, post, telegraph, telephone, radio, television, satellites and the internet.

Q7 Which are the chief means of transportation in India? Discuss the factors affecting their development. (about 150 words)

The chief means of transportation in India are land transport (roads, railways, pipelines, ropeways and cableways), water transport (inland waterways and oceanic routes) and air transport. Roads carry about 85 per cent of passenger and 70 per cent of freight traffic, while railways remain the main means of transport for the masses. Waterways are the cheapest and suit heavy, bulky goods, and air transport is the fastest.

Their development depends on several factors. Economic and technological development led from pathways and unmetalled roads to metalled roads and railways, and special needs produced ropeways, cableways and pipelines. Terrain influences density: rural roads are sparse in hilly, plateau and forested areas, and railways are less dense in hill states, the north-eastern states, central India and Rajasthan. Colonial resource exploitation shaped early railway lines. Competition from road and rail, and diversion of river water for irrigation, reduced inland waterways. Strategic and defence needs led to border roads, and a vast country with diverse terrain and climate made air transport essential.

Q8 Give a detailed account of the development of railways in India and highlight their importance. (about 150 words)

Indian Railways was introduced in 1853, when a 34 km line was built from Bombay to Thane. Under British rule, areas around towns, raw-material producing regions, plantations, hill stations and cantonments were connected, mostly to exploit resources. After Independence, routes were extended to other areas, the notable one being the 760 km Konkan Railway (1998) linking Roha in Maharashtra with Mangalore in Karnataka. The network was 67,956 km (2019-20), divided into 17 zones for administration. By track width it has broad, metre and narrow gauge, and metre and narrow gauges are being converted to broad gauge. Steam engines were replaced by diesel and electric engines, increasing speed and haulage capacity and improving station environments. Metro rail has transformed urban transport and helps control pollution.

Railways are important because they carry both freight and passengers, contribute to economic growth, remain the main transport of the masses, and, as Mahatma Gandhi said, brought people of diverse cultures together for the freedom struggle.

Q9 Describe the role of roads in the economic development of India. (about 150 words)

Roads are the backbone of India's transport system. With a total length of about 62.16 lakh km, India has one of the largest road networks in the world. Roads carry about 85 per cent of passenger and 70 per cent of freight traffic every year and are especially suitable for shorter distances. They bring farm and factory produce to markets and make goods available to consumers.

National Highways, only about 2 per cent of road length, carry about 40 per cent of road traffic, link state capitals, major cities and ports, and support inter-state movement and defence. Projects such as the Golden Quadrilateral, North-South and East-West Corridors and Bharatmala cut the time, distance and cost of movement between major centres and ease congestion. State Highways and District Roads connect capitals, district headquarters and important nodes. Rural roads, about 80 per cent of the total length, link villages to markets. Border Roads strengthen defence and keep remote areas, such as Lahaul-Spiti through the Atal Tunnel, connected, while international highways promote friendly relations with neighbours.