

8 Conquering Distances



Transportation is the movement of people and goods from one location to another. In ancient times, **manpower** and **animal-power** were used mainly for transportation. The domestication of animals introduced a new way to lay the burden of transport on animals, which were superior to people in their speed and also capable of carrying greater load.

Then man invented the wheel. This led to the development of new means of transport. At first, the wheel was a simple piece of wood cut from a log. Gradually, improvements were made in its design and carts were made, which were either pulled by men or by animals.

The next important step was the invention of the steam engine, which was used to run railway trains. With time, the steam engine was replaced by diesel engines.

With advancement in science and technology, we have better and faster means of transport today. We can reach any part of the world within few hours. The transport system in the world can be categorised into three types mainly — land, water and air transport.

Land transport can further be classified into roadways and railways.

Roadways

With the invention of the automobile, there has been improvement of roads in different parts of the world. Earlier the roads were narrow and rough and made of mud or stone. Gradually, these were replaced by broad, smooth and concrete roads on which heavy vehicles could move. Today, the common road vehicles in most of the countries are cars, scooters, buses, trucks, etc., and the roads in urban areas are well developed to allow easy travel.

City roads are mainly divided into two or four lanes. These lanes are meant for fast and slow moving traffic. Exit lanes are also provided for vehicles that want to take a turn. The networks



Flyover in cities

of roads connecting major cities of the country are called highways, freeways or expressways. Some of the world famous highways are:

- * The King's Highway 401 in Canada, which is the widest and the busiest.
- * The Australian Transcontinental Highways.
- * The Pan American Highway.



Highways

In India too we have a good network of roads connecting the major towns, cities and also villages. Some of these roads connect India with its neighbouring countries. Important Indian roadways are:

- * The Grand Trunk (or GT) Road, which connects India with Pakistan. It is the busiest road in India.
- * Khyber pass, which connects India with Afghanistan
- * Indo-Tibet road, that connects India with China through Tibet.
- * Golden Quadrilateral Road System, a new system which shall connect all the four metros (Delhi, Mumbai, Kolkata and Chennai) of India.



Khyber Pass

India has the second largest road network in the world, after the United States. However, there has also been an increase in road traffic, which has led to

1. Increased road accidents
2. Greater air pollution.

Both of these are dangerous and have to be controlled.

Railways

Railways are a highly important means of transport, as they help to transport not only a large number of people but also heavy goods, over long distances. In India, railways were introduced by the British in 1853. The first railway line in India was laid by Lord Dalhousie, a British Governor General, between Mumbai and Thane. Today, we have the largest network of railways in Asia.

The Indian railways has improved a lot since 1853. At present, we have many fast moving trains connecting important cities of the nation. Some superfast trains of India are the **Shatabdi Express** and the **Rajdhani Express**. Some luxurious trains like the '**Palace on Wheels**' and the **Royal Orient** have also been introduced. India's first metro rail started years back in Kolkata. An air-conditioned metro rail system is operational now in our capital city, Delhi, and also in many other cities of India. Let us now read about some of the important railway lines of the world.



Palace on Wheels is a luxury train.

- * **Seikan Tunnel** in Japan is the longest under-sea rail tunnel in the world. It is over 53 km in length.



* **Channel Tunnel** is a 50.5 km long undersea rail tunnel beneath the English Channel, between the United Kingdom and France. However, it has a longer under-sea portion than Seikan Tunnel.

* **The Trans-Siberian Railways** is the longest railway line in the world. It is in Asia.

* **The TGV** or the Train a Grande Vitesse; the French for high speed train, is France's high-speed rail service. It is the fastest train in the world, with a speed of over 500 km/hr.



TGV

Waterways

Waterways has been a popular means of transport since the time of early man. The early man made a simple raft using logs of wood to travel through water. Today, we can travel in big, comfortable ships that run on steam or diesel.



Water transport helps to carry heavy and bulky goods over long distances, like the railways. It is the **cheapest means of transport**. The only requirement of waterways is good ports with proper facilities for loading and unloading of goods.



Waterways — Old and new

Water transport can be divided into two types: Inland Waterways and Ocean Transport.

Inland Waterways

Some big rivers and lakes which are navigable are used as waterways. Large rivers like the Mississippi, the Nile and the Amazon are used by huge ships. In India, the Brahmaputra and the Ganga are used as inland waterways.

Ocean Transport or the Sea Route

Seas or oceans are used for the transportation of heavy goods like foodgrains, mineral ores or petroleum. This is known as ocean transport. Some important sea routes are:

The Suez Canal Route

This canal connects the Mediterranean Sea with the Gulf of Suez and the Red Sea. Opened in 1869, it allows water transportation between Europe and Asia, without navigating around Africa. It is about 160 km long.

The Panama Canal Route

The Panama Canal connects the Atlantic Ocean with the Pacific Ocean. It became operational in 1914 and has reduced the travelling time to eight hours between the two oceans.



The Suez Canal connects Mediterranean Sea with the Red Sea.



The Panama Canal connects the Atlantic with the Pacific Ocean.

North Atlantic Route

It is the **busiest sea route** in the world. It connects the Atlantic Ocean with the Pacific Ocean through Canada.

Water Transportation in India

In India, apart from the Ganga and the Brahmaputra rivers, the lagoons of Kerala are also used for transportation. India also has a long coastline, with 12 major ports and 181 minor ports. These ports are the gateways to India's international trade by sea. The major ports are Mumbai, Kandla, Kochi, Marmagao, Chennai, Kolkata, Vishakhapatnam and Paradwip. Among these, Mumbai is the biggest and the busiest port of all.

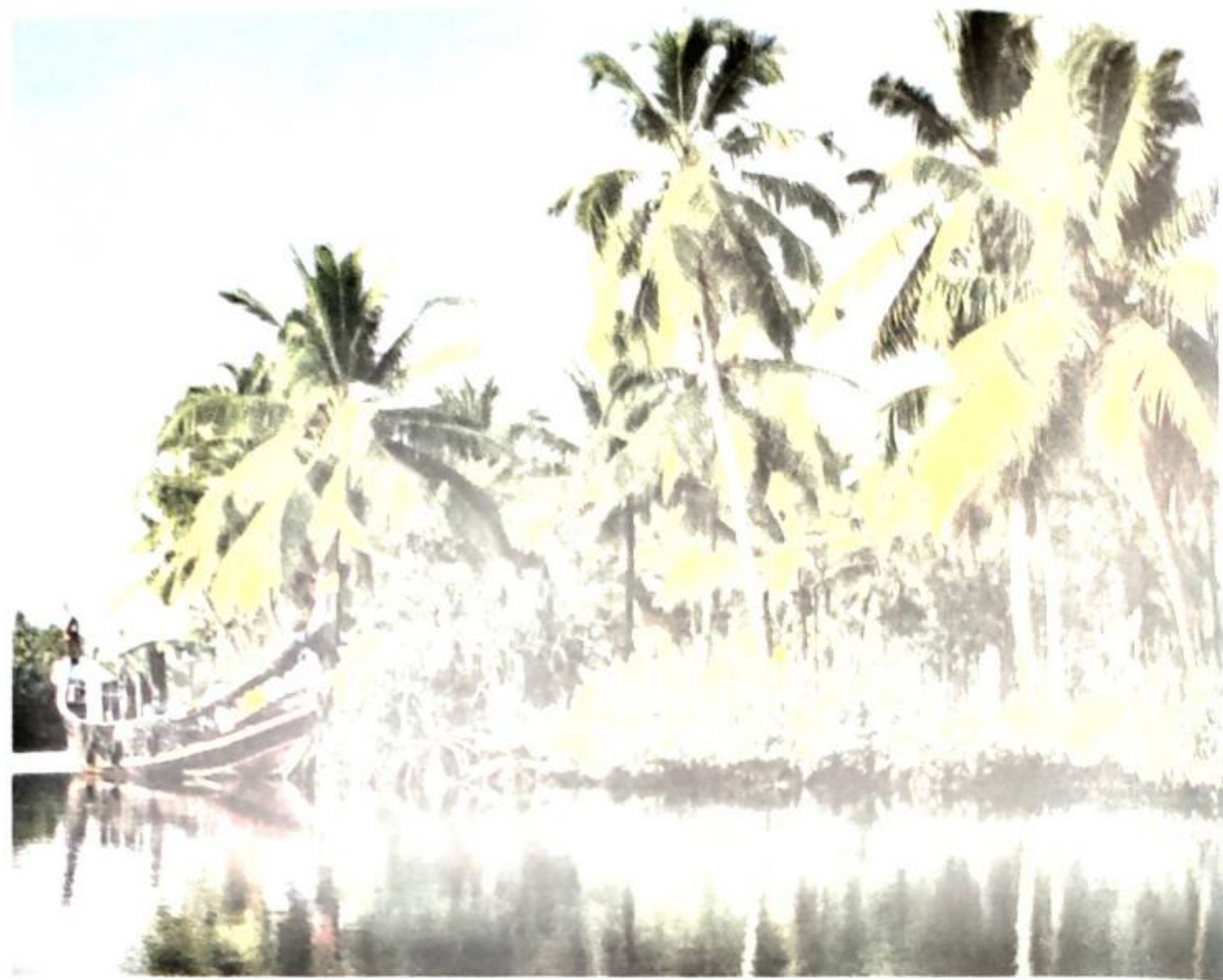
Airways

Airways, which is the latest as well as the fastest means of transport, is becoming very popular today. It helps to save time and is also the most comfortable means of travelling to far off places. However, it is also quite expensive. Travelling by air became possible with the invention of the world's first airplane by the Wright Brothers, Wilbur and Orville, in the year 1903. These two Americans had developed a simple flying machine, which underwent many changes with time. As technology progressed, there was a drastic change in the shape and speed of aeroplanes.

Today, almost all the countries are linked by airways and most of them have big international airports. Both people and goods can be easily transported by air all over the world.

Some important airlines are:

- * Pan American Airlines (USA)
- * British Airways (Britain)
- * Air Canada (Canada)
- * Lufthansa (Germany)
- * Aeroflot (Russia)
- * Alitalia (Italy)
- * Japan Airlines (Japan)
- * Emirates (UAE)



Lagoons of Kerala



Orville and Wilbur Wright



World Map — Major air routes

Airways in India

In India, airways began with two major airlines run by the government — Air India and Indian Airlines. Air India is an International Airlines, carrying passengers and goods all over the world. Indian Airlines, based in Delhi, is a National Airline and carries passengers and goods on domestic routes. Several other airlines have started functioning in India in the past few years. Jet Airways, Kingfisher Airlines, Air Deccan and Sahara Airways are some private airlines operating within the country.



Jet Airways

Word Meanings



- Tunnel** : an underground passage
Inland : related to the interior part of the country
Operational : ready for use
Navigable : able to be used by boats or ships
Lagoons : areas of salt water separated from the sea by a sand bank

It's a Fact



- ❖ The Grand Trunk Road covers a distance of 2,600 km and is one of the longest and oldest roads of Southern Asia.
- ❖ London's Heathrow Airport is the world's busiest airport.
- ❖ The road at the highest altitude in the world is in Ladakh, in India.
- ❖ Australian Highway 1 is the longest national highway in the world at over 20,000 km and runs almost the entire way around the continent.

Let's Recall



- ❖ Transportation is the movement of people and goods from one location to another.
- ❖ The network of roads connecting major cities of the country is called a highway.
- ❖ India has the second largest network of roads in the world, after the United States.
- ❖ Railways were introduced in India by the British in 1853.
- ❖ The TGV is the fastest train in the world.
- ❖ Water transport is the cheapest means of transport.
- ❖ The Brahmaputra and the Ganga are the only navigable rivers in India.
- ❖ The North Atlantic Route is the busiest sea route in the world.
- ❖ Airways is the fastest and most expensive means of transportation.
- ❖ Air India and Indian Airlines are the two major airlines of the Indian government.

Exercises



A. Tick (✓) the right answer.

1. The fastest train in the world is

(a) TGV

(b) MGV

(c) CRV

2. The G.T. road connects

(a) India and Pakistan

(b) India and Afghanistan

(c) India and Myanmar

3. The Suez Canal was opened in
 (a) 1969 (b) 1879 (c) 1869
4. The aeroplane was invented by
 (a) Wright Brothers (b) Thomas Edison (c) Charles Darwin

B. Fill in the blanks. Choose the right word from the box.

Afghanistan British North Atlantic Trans-Siberian second

1. Railways were introduced in India by the _____.
2. _____ Route is the busiest sea route in the world.
3. Khyber pass connects India with _____.
4. India has the _____ largest road network in the world.
5. The _____ railways is the longest railway line in the world.

C. Correct the figures in the following statements and write them again:

1. The Panama Canal was opened in 1816.
_____.
2. India has 2 major ports and 18 minor ones.
_____.
3. The world's first airplane was invented in 1930.
_____.
4. Seikan Tunnel is over 63 km in length.
_____.
5. Railways were introduced in India in 1855.
_____.

D. Write the names of two:

- | | |
|--|---------------|
| 1. Undersea rail tunnels in the world | _____ , _____ |
| 2. Superfast trains of India | _____ , _____ |
| 3. Navigable rivers of India | _____ , _____ |
| 4. World famous highways | _____ , _____ |
| 5. Major airlines of the Indian government | _____ , _____ |
| 6. Private airlines | _____ , _____ |

E. Answer the following questions.

1. What is the Golden Quadrilateral Road System?
2. Define: (a) Transportation, (b) Highways
3. What is the importance of railways?
4. Name the two types of waterways. Briefly explain giving examples.
5. Write a short note on 'Water Transportation in India'.

Class V

Date:- 10 July 2020

Social Studies

Day:- Friday

Chapter-8 Conquering Distances

Word Meanings -

Tunnel - an underground passage

Inland - related to the interior part of the country.

Operational - ready for use.

Navigable - able to be used by boats or ships.

Lagoons - areas of salt water separated from the sea by a sand bank.

Exercises

A) Tick (✓) the right answer.

1. The fastest train in the world is

(a) TGV , (b) MAV , (c) CRV

2. The G.T. road connects

(a) India and Pakistan , (b) India and Afghanistan ,

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3. The Suez Canal was opened in

(a) 1969 , (b) 1879 , (c) 1869 .

4. The aeroplane was invented by

- (a) Wright Brothers , (b) Thomas Edison ,
(c) Charles Darwin .

B Fill in the blanks. Choose the right word from the box.

Afghanistan British North Atlantic
Trans - Siberian Second

1. Railways were introduced in India by the British.
2. North Atlantic Route is the busiest sea route in the world.
3. Khyber Pass connects India with Afghanistan.
4. India has the second largest road network in the world.
- ~~5. The railway is the longest~~
5. The Trans-Siberian railway is the longest railway line in the world.

c) Correct the figures in the following statements and write them again :

1. The Panama Canal was opened in 1816.

→ The Panama Canal was opened in 1914.

2. India has 2 major ports and 18 minor ones.

→ India has 12 major ports and 181 minor ones.

3. The world's ~~largest~~ first airplane was ~~not~~ invented in 1930.

→ The world's first airplane was invented in 1903.

4. Seikan Tunnel is over 63 km in length.

→ Seikan Tunnel is over 53 km in length.

5. Railways were introduced in India in 1855.

→ Railways were introduced in India in 1853.

D) Write the names of two:

- 1) Undersea rail tunnels in the world Seikan Tunnel, Channel Tunnel
- 2) Superfast trains of India Shatabdi Express, Rajdhani Express
- 3) Navigable rivers of India the Brahmaputra, the Ganga
- 4) World famous highways The King's Highway 401, The Pan American Highway
in Canada
- 5) Major airlines of the Indian government Air India,
Indian Airlines
- 6) Private airlines Jet Airways, Air Deccan

Dear Students,

The chapter Conquering Distances will be continued next Friday. Exercise E will be solved [Answer the following questions]

STAY HOME, STAY SAFE.