# **CHAPTER 7**

# **Transport and Communication**

#### **2MARKS**

#### Question 1.

Define transport.

#### **Answer:**

Transport is a service or facility for carriage of persons or goods from one place to another using animals, humans and different kinds of vehicles, which take place over land, water and air.

#### Question 2.

# What is a transport network?

#### **Answer:**

When several places (nodes) are joined together by a series of routes (links), it forms a pattern which is referred to as transport network.

### **Question 3.**

# When was the first public railway line opened? Which places did it join?

#### **Answer:**

The first public railway line was opened in 1825 between Stockton and Darlington in Northern England.

# **Question 4.**

# What are the new modes of land transportation?

#### **Answer:**

Pipelines, ropeways and cableways are among the newer developments in land transportation.

#### Question 5.

# What are the two categories of roads?

#### **Answer:**

Metalled and unmetalled are two categories of roads.

## Question 6.

# What are highways?

#### **Answer:**

Highways are metalled roads connecting distant places for unobstructed vehicular movement, with separate traffic lanes, bridges, flyovers and dual carriage ways.

### **Question 7.**

# Name the terminals for the Trans Canadian highway.

#### **Answer:**

Vancouver in British Columbia in West to St. John's city, in Newfoundland in East.

#### **Question 8.**

# Name the terminals of Trans-continental Stuart highway.

#### **Answer:**

Darwin in the North to Melbourne in the South via Tennant Creek and Alice Springs in Australia.

### **Question 9.**

### What are border roads?

#### **Answer:**

Border roads are roads laid along international boundaries and play an important role in integrating people of the remote areas with the major cities.

## Question 10.

# Mention the terminal points of South American trans continental railway.

#### **Answer:**

From Buenos Aires, Argentina to Valparaiso, Chile across the Andes Mountains through the Uspallatta Pass.

#### **Question 11.**

# Define trans-continental railways.

#### **Answer:**

Trans-continental railways run across the continent and connects it's two ends.

#### **Question 12.**

# Which sea route is called the Big Trunk Route?

#### **Answer:**

The North Atlantic sea route is called the Big Trunk Route.

#### Question 13.

## When was the Suez canal constructed?

#### **Answer:**

The Suez Canal was constructed in 1869, between Port Said and Port Suez.

#### Question 14.

# Name the seas linked by the Suez canal.

#### **Answer:**

Mediterranean and Red Seas are connected by the Suez canal.

## **Question 15.**

## Panama canal connects which two oceans?

#### **Answer:**

Panama canal connects the Atlantic ocean on the East and Pacific ocean on the west.

# Question 16.

# How is milk supplied from farms to factories in New Zealand?

#### **Answer:**

Milk is supplied from farms to factories in New Zealand through pipelines.

# Question 17.

# What is Big Inch?

#### **Answer:**

Big inch is the pipeline which carries petroleum from the oil wells of Gulf of Mexico to the North Eastern states.

#### **Question 18.**

# When was Aryabhatt, Rohini and Bhaskar-I launched respectively?

#### **Answer:**

Aryabhatta-19, April 1979 Rohini-1980 Bhaskar-I-1979

#### **Ouestion 19.**

# Why does South Africa has rail connectivity?

#### **Answer:**

South Africa has rail connectivity due to the concentration of gold, copper and diamond mining.

#### **Question 20.**

# Name two countries where commuter trains are popular?

#### **Answer:**

Commuter trains are popular in the UK, USA, Japan, India, (any 2)

### Question 21.

# What is the economic significance of the Trans Canadian Railways?

#### **Answer:**

It gained economic significance because it connected the Quebec-Montreal industrial region with the wheat belt of the Prairie region, and the Coniferous forest region in the north, thus making each of them complimentary to the other.

#### **Question 22.**

# Which sea route has reduced the distance between Europe and Asia?

#### **Answer:**

Mediterranean-Indian Ocean sea route through the Suez canal has reduced the distance between Europe and Asia.

## Question 23.

# Which canal has reduced the distance between New York and San Francisco?

#### **Answer:**

Panama canal has reduced the distance between New York and San Francisco.

## **Question 24.**

#### Which animals are used as carriers?

#### **Answer:**

Different animals are used in different places as carriers.

- Horses are used as a draught animal even in the Western countries.
- Dogs and reindeers are used in North America, North Europe and Siberia to draw sledges over snow-covered ground.
- Mules are preferred in the mountainous regions; while camels are used for caravan movement in deserts.
- In India, bullocks are used for pulling carts.

# **Question 25.**

# Which continent has the highest highway density? Give statistics to the fact.

#### **Answer:**

In North America, highway density is high, about 0.65 km per sq km. Every place is within 20 km distance from a highway. Cities located on the Pacific coast (west) are well-connected with those of the Atlantic Coast (east).

#### **Question 26.**

# What is the objective of under construction Pan-American highway?

#### **Answer:**

It will connect the countries of South America, North America and Canada.

## **5MARKS**

#### **Question 1.**

# What factors influence the mode of transportation?

#### **Answer:**

The significance of a mode depends on the type of goods and services to be transported, costs of transport and the mode available. International movement of goods is handled by ocean freighters. Road transport is cheaper and faster over short distances and for door-to door services. Railways are most suited for large volumes of bulky materials over long distance within a country. High-value, light and perishable goods are best moved by airways. In a well-managed transport system, these various modes complement each other.

#### Question 2.

# Suggest steps for better urban transport solution.

#### **Answer:**

For better urban transport system, the following can be adopted:

- Mass rapid transit (MRT)
- Improved public bus service
- Expressways
- Car pool
- Higher parking fees
- Government measures like odd-even car system to regulate traffic flow.

# Question 3.

# Write a short note on Trans Canadian railways?

#### **Answer:**

Trans Canadian railway is 7050km long and runs from Halifax in the

east to Vancouver to the West, through Montreal, Ottawa and Winnipeg. It was initially constructed as a part of an agreement to make British Columbia on the West coast join federation of states.

It gained economic significance because it connected the Quebec-Montreal industrial region with the wheat belt of the Prairie region, and the coniferous forest region in the north, thus making each of them complimentary to the other. A loop line connects it to the important waterways of the world. It is the economic artery of Canada, and wheat and meat are important exports on this route.

# **Question 4.**

# What are the steps for modernization of waterways?

#### **Answer:**

Modem passenger liners (ships) and cargo ships are equipped with radar, wireless and other navigation aids. The development of refrigerated chambers for perishable goods, tankers and specialized ships has also improved cargo transport. The use of containers has made cargo handling at the world's major ports easier. The sea routes are the cheapest means of transportation for bulky material over long distance as it doesn't require route construction and maintenance.

### Question 5.

# What are the factors on which development of inland waterways depend?

#### **Answer:**

Rivers, canals, lakes and coastal areas have been important waterways since time immemorial. Boats and steamers are used as means of transport for cargo and passengers. The development of inland waterways is dependent on the navigability width and depth of the channel, continuity in the water flow, and transport technology in use. Rivers are the only means of transport in dense forests. Very heavy cargo like coal, cement, timber and metallic ores can be transported through inland waterways.

#### **Question 6.**

# What are the problems faced by inland waterways?

#### **Answer:**

Though in the ancient times, rivers were the main highways of inland transportation, but they lost importance because of competition from railways, lack of water due to diversion of water for irrigation and their poor maintenance.

#### Question 7.

# How are rivers modified to enhance their navigability?

#### **Answer:**

Many rivers have been modified to enhance their navigability by dredging, stabilising river banks and building dams and barrages for regulating the flow of water.

## **Question 8.**

## Write a note on Danube waterway.

#### **Answer:**

This important inland waterway serves Eastern Europe. The Danube river rises in the Black Forest and flows eastwards through many countries. It is navigable up to Tauma Severin. The chief export items are wheat, maize, timber and machinery.

#### **Ouestion 9.**

# Write a note on Volga waterway.

#### **Answer:**

Russia has a large number of developed waterways, of which the Volga is one of the most important. It provides a navigable waterway of 11,200 km and drains into the Caspian Sea. The Volga- Moscow Canal connects it with the Moscow region and the Volga-Don Canal with the Black Sea.

## Question 10.

# Write a note on railways in Australia.

#### **Answer:**

Australia has about 40,000 km of railways, of which 25 per cent are found in New South Wales alone. The Australian Trans continental

railway rail¬line runs west-east across the southern part of the continent from Perth on the west coast, to Sydney on the east coast passing through Kalgoorlie, Broken Hill and Port Augusta. Another major north- south line connects Adelaide and Alice Spring and to be joined further to the Darwin-Birdum line.

#### **Question 11.**

Write a note on the union and pacific railway.

#### **Answer:**

This rail-line connects New York on the Atlantic Coast to San Francisco on the Pacific Coast passing through Cleveland, Chicago, Omaha, Evans, Ogden and Sacramento. The most valuable exports on this route are ores, grain, paper, chemicals and machinery.

### Question 12.

What is the Orient express?

#### Answer:

This line runs from Paris to Istanbul passing through Strasbourg, Munich, Vienna, Budapest and Belgrade. The journey time from London to Istanbul by this Express is now reduced to 96 hours as against 10 days by the sea-route. The chief exports on this rail-route are cheese, bacon, oats, wine, fruits, and machinery.

#### **Ouestion 13.**

Describe some of the important highways of the world.

#### **Answer:**

Important highways of the world:

- Trans-Canadian Highway links Vancouver with St. John's city.
- Alaskan Highway links Edmonton to Anchorage.
- North American highways link cities of east coasts with that of west coasts.
- Trans-Continental Stuart Highway connects Darwin and Melbourne.
- Pan American Highway links cities of South America, Central America, and the USA-Canada.
- Golden Quadrilateral in India links metropolitan cities.

- Moscow-Vladiostok Highway serves the east region.
- Highways criss-cross China connecting all major cities.
- Highways join Algiers to Conakry in Africa.

#### **Question 14.**

# How many types of railway tracks are there?

#### **Answer:**

The railway gauges vary in different 'countries and are roughly classified as broad (more than 1.5m), standard (1.44 m), metre gauge (1 m) and smaller gauges. The standard gauge is used in the U.K.

#### **Ouestion 15.**

## Explain the importance of trade, transport and communication.

#### **Answer:**

- They link the areas of production with areas of consumption.
- They reduce distance between places of natural resources, manufacturing and market.
- They facilitate the movement and exchange of goods and services and people.
- Today's world economy heavily depends on efficient trade, transport and communication.
- High living standard and quality of life depend on efficient transport, communication and trade.
- It promotes cooperation and unity among scattered peoples.

# **Question 16.**

# Name the longest highway of India. Which other highways are under construction?

#### **Answer:**

National Highway No. 7 (NH 7), connecting Varanasi with Kanyakumari, is the longest highway in the country. The Golden Quadrilateral (GQ) or Super Expressway is underway to connect the six metropolitan cities — New Delhi, Mumbai, Bangalore, Chennai, Kolkata and Hyderabad.

#### Question 17.

# What are the important railway routes of African continent?

#### **Answer:**

The important routes of the continent are:

- The Beneguela Railway through Angola to Katanga-Zambia Copper Belt
- The Tanzania Railway from the Zambian Copper Belt to Dar-es-Salaam on the coast.
- The Railway through Botswana and Zimbabwe linking the landlocked states to the South African network and
- The Blue Train from Cape Town to Pretoria in the Republic of South Africa.

#### **Question 18.**

## Write a short note on inter-continental airways.

#### Answer:

In the Northern Hemisphere, there is a distinct east-west belt of intercontinental air routes. Dense network exists in Eastern U.S.A., Western Europe and Southeast Asia. The U.S.A. alone accounts for 60 per cent of the airways of the world. New York, London, Paris, Amsterdam, Frankfurt, Rome, Moscow, Karachi, New Delhi, Mumbai, Bangkok, Singapore, Tokyo, San Francisco, Los Angeles and Chicago are the nodal points where air routes converge or diverge to all continents.

# **Question 19.**

# Bring out the significance of highways in Europe.

#### **Answer:**

Europe has a large number of vehicles and a well-developed highway network. But highways face a lot of competition from railways and waterways. In Russia, a dense highway network is developed in the industrialized region west of the Urals with Moscow as the hub. The important Moscow-Vladivostok Highway serves the region to the east. Due to the vast geographical area highways in Russia are not as important as railways.

#### Question 20.

# Why is the North Atlantic sea route significant?

#### Answer:

This links North-eastern U.S.A. and Northwestern Europe, the two industrially developed regions of the world. The foreign trade over this route is greater than that of the rest of the world combined. One fourth of the world's foreign trade moves on this route. It is, therefore, the busiest in the world and otherwise, called the Big Trunk Route. Both the coasts have highly advanced ports and harbour facilities.

### **7MARKS**

#### **Question 1.**

## What are advantages and disadvantages of road transport?

#### **Answer:**

## Advantages:

- Most economical for short distance compared to railways.
- Freight transport by road is gaining importance as it offers door to door service.
- Roads are cheaper, easier and simple to construct and maintain than the railways.
- They can be taken through any terrains and negotiate bends unlike railways..
- Since railways cannot be taken to every corner, so roads play an important role in nation's trade and commerce and for promoting tourism.

# Disadvantages:

- Unmetalled roads are not effective and serviceable throughout the year, even the metalled roads become unmotorable during heavy rains and floods.
- Carrying capacity of roadways per vehicle is much lower than the railways.

- The quality of roads in the developing countries is not good as it requires heavy investment for construction and maintenance.
- City roads suffer from chronic traffic congestion. As a result of this most of the cities face the problem of traffic congestion.

### **Question 2.**

## Write a note on North American highways.

#### **Answer:**

In North America, highway density is high, about 0.65 km per sq km. Eveiy place is within 20 km distance from a highway. Cities located on the Pacific coast (west) are well-connected with those of the Atlantic Coast (east). Likewise, the cities of Canada in the north are linked with those of Mexico in the south. The Trans-Canadian Highway links Vancouver in British Columbia (west coast) to St. John's City in Newfoundland (east coast) and the Alaskan Highway links Edmonton (Canada) to Anchorage (Alaska). The Pan-American Highway, a large portion of which has been constructed, will connect the countries of South America, Central America and U.S.A.-Canada.

#### Question 3.

# Write a note on highways in Asia.

#### **Answer:**

In China, highways criss-cross the country connecting all major cities such as Tsungtso (near Vietnam boundary), Shanghai (central China), Guangzhou (south) and Beijing (north). A new highway links Chengdu with Lhasa in Tibet.

In India, there are many highways linking the major towns and cities. For example, National Highway No. 7 (NH 7), connecting Varanasi with Kanyakumari, is the longest in the country. The Golden Quadrilateral (GQ) or Super Expressway is underway to connect the six metropolitan cities — New Delhi, Mumbai, Bangalore, Chennai, Kolkata and Hyderabad. In Asia, highway network is most developed in India and China.

#### **Question 4.**

# Write a note on railways in North America.

#### **Answer:**

North America has one of the most extensive rail networks accounting for nearly 40 per cent of the world's total. In contrast to many European countries, the railways are used more for long-distance bulky freight like ores, grains, timber and machinery than for passengers. The most dense rail network is found in the highly industrialized and urbanized region of East Central U.S.A. and adjoining Canada. In Canada, railways are in the public sector and distributed all over the sparsely populated areas. The transcontinental railways carry the bulk of wheat and coal tonnage.

#### Question 5.

## Give five important points on railways in Europe.

#### **Answer:**

Europe has one of the most dense rail networks in the world. There are about 4,40,000 km of railways, most of which is double or multiple-tracked. Belgium has the highest density of 1 km of railway for every 6.5 sq kms area. The industrial regions exhibit some of the highest densities in the world. The important rail heads are London, Paris, Brussels, Milan, Berlin and Warsaw.

Passenger transport is more important than freight in many of these countries. Underground railways are important in London and Paris'. Channel Tunnel, operated by Euro Tunnel Group through England, connects London with Paris. Trans-continental railway lines have now lost their importance to quicker and more flexible transport systems of airways and roadways.

In Russia, railways account for about 90 per cent of the country's total transport with a very dense network west of the Urals. Moscow is the most important rail head with major lines radiating to different parts of the country's vast geographical area. Underground railways and commuter trains are also important in Moscow. The Trans-Siberian railways and the Orient express are some of the important railways in the Europe.

### Question 6.

# Give the advantages of water transport.

#### **Answer:**

90-95% of the international trade is carried out through water transport. The energy cost of water transportation is lower. The oceans offer a smooth highway traversable in all directions with no maintenance costs. Winds and oceans currents help in movement of the oceanic vessels thus reducing the fuel cost of transportation.

Compared to land and air, ocean transport is a cheaper means of haulage (carrying of load) of bulky material over long distances from one continent to another. Modern passenger liners (ships) and cargo ships are equipped with radar, wireless and other navigation aids. The development of refrigerated chambers for perishable goods, tankers and specialised ships has also improved cargo transport. The use of containers has made cargo handling at the world's major ports easier.

Water transport is the only means of transportation in dense tropical forest where roads and railways cannot be constructed. It is also the main mode of transportation for people living on islands as it is economic.

One of the great advantages of water transportation is that it does not require route construction. The oceans are linked with each other and are negotiable with ships of various sizes. All that is needed is to provide port facilities at the two ends. It is much cheaper because the friction of water is far less than that of land. The energy cost of water transportation is lower. It is highly suitable for bulky and heavy commodities. It is eco friendly as ocean currents and winds help to a large extent in water transportation.

# **Ouestion 7.**

# Write a note on the Mediterranean- Indian ocean sea route.

#### **Answer:**

This sea route passes through the heart of the Old World and serves more countries and people than any other route. Port Said, Aden, Mumbai, Colombo and Singapore are some of the important ports on this route. The construction of Suez canal has greatly reduced the

distance and time as compared to the earlier route through the Cape of Good Hope. This trade route connects the highly industrialized Western European region with West Africa, South Africa, South-east Asia and the commercial agriculture and livestock economies of Australia and New Zealand. Before the construction of the Suez Canal this was the route connecting Liverpool and Colombo which was 6,400 km longer than the Suez Canal route. The volume of trade and traffic between both East and West Africa is on the increase due to the development of the rich natural resources such as gold, diamond, copper, tin, groundnut, oil palm, coffee and fruits.

## **Question 8.**

# Why cape of good hope sea route has less traffic?

#### **Answer:**

This sea route is another important one across the Atlantic Ocean which connects West European and West African countries with Brazil, Argentina and Uruguay in South America. The traffic is far less on this route because of the limited development and population in South America and Africa. Only southeastern Brazil and Plata estuary and parts of South Africa have large-scale industries. There is also little traffic on the route between Rio de Janeiro and Cape Town because both South America and Africa have similar products and resources.

# Question 9.

# Which canal has shortened the distance between Europe and Asia? Give five points on the canal.

#### **Answer:**

Suez canal has shortened the distance between Europe and Asia. This canal had been constructed in 1869 in Egypt between Port Said in the north and Port Suez in the south linking the Mediterranean Sea and the Red Sea.

• It gives Europe a new gateway to the Indian Ocean and reduces direct sea- route distance between Liverpool and Colombo compared to the Cape of Good Hope route.

- It is a sea-level canal without locks which is about 160 km and 11 to 15m deep.
- About 100 ships travel daily and each ship takes 10-12 hours to cross this canal.
- The tolls are so heavy that some find it cheaper to go by the longer Cape Route whenever the consequent delay is not important.
- A railway follows the canal to Suez, and from Ismailia there is a branch line to Cairo.
- A navigable fresh-water canal from the Nile also joins the Suez Canal in Ismailia to supply fresh-water to Port Said and Suez.

#### **Question 10.**

Which canal has shortened the distance between eastern and western coasts of North America? What is its economic significance?

## Answer:.

Panama canal has shortened the distance between eastern and western coasts of North America. This canal connects the Atlantic Ocean in the east to the Pacific Ocean in the west.

Its economic significance are:

- The canal is about 72 km. long and involves a very deep cutting for a length of 12 km.
- It has a six lock system and ships cross the different levels (26 m up and down) through these locks before entering the Gulf of Panama.
- It shortens the distance between New York and San Francisco by 13,000 km by sea.
- Likewise the distance between Western Europe and the Westcoast of U.S.A.; and North-eastern and Central U.S.A. and East and South-east Asia is shortened.
- The economic significance of this Canal is relatively less than that of the Suez. However, it is vital to the economies of Latin America.

#### **Question 11.**

# Which is the most heavily used inland waterways in the world? Why is it important?

#### **Answer:**

Rhine waterway is the most heavily used inland waterways in the world. The Rhine flows through Germany and the Netherlands. It is navigable for 700 km from Rotterdam, at its mouth in the Netherlands to Basel in Switzerland. Ocean-going vessels can reach up to Cologne. The Ruhr river joins the Rhine from the east. It flows through a rich coalfield and the whole basin has become prosperous manufacturing area. Dusseldorf is the Rhine port for this region. Huge tonnage moves along the stretch south of the Ruhr. This waterway is the world's most heavily used. Each year more than 20,000 ocean-going ships and 2,00,000 inland vessels exchange their cargoes. It connects the industrial areas of Switzerland, Germany, France, Belgium and the Netherlands with the North Atlantic Sea Route.

#### **Question 12.**

## What are advantages and disadvantages of air transport?

#### **Answer:**

# Advantages:

- It is the fastest means of transportation.
- Comfortable for long distance travel.
- Suitable for rapid movement of valuable and perishable cargo.
- It is the only means to reach inaccessible area.
- It is also highly effective during emergency like when routes get blocked due to landslides, avalanches, flood etc.. Strategically airways are very significant.

# Disadvantages:

- Costly, not within reach of poor people.
- It is also expensive to maintain aircraft as well as the airports.
- It's operation dependent on the weather conditions.
- Construction of airports is limited by certain physical constrains.

### Question 13.

# What are pipelines? Give the advantages and disadvantages of pipeline transportation.

#### **Answer:**

Pipelines are used to transport liquids like water, oil, gas for uninterrupted flow.

## Advantages:

- It can be taken through any terrain.
- The initial cost is high but the maintenance cost is low.
- It is eco friendly as it requires no fuel.
- It's operation is not affected by unwanted human intervention.

# Disadvantages:

- Solids cannot be transported.
- Any undetected leakage leads to wastage.

## **Question 14.**

# What is cyberspace? Write a note on it.

#### **Answer:**

Cyberspace is the world of electronic computerized space. It is encompassed by the Internet such as the World Wide Web (www). In simple words, it is the electronic digital world for communicating or accessing information over computer networks without physical movement of the sender and the receiver. It is also referred to as the Internet. Cyberspace exists everywhere. It may be in an office, sailing boat, flying plane and virtually anywhere. As billions use the Internet each year, cyberspace will expand the contemporary economic and social space of humans through e-mail, e-commerce, e-leaming and e-governance. Internet together with fax, television and radio will be accessible to more and more people cutting across place and time. It is these modem communication systems, more than transportation, that has made the concept of global village a reality.

### Question 15.

Which hemisphere is served more by the air transport? Why there is less development of it in the other hemisphere?

#### **Answer:**

Northern hemisphere is served more by the air transport. In the Northern Hemisphere, there is a distinct east-west belt of intercontinental air routes. Dense network exists in Eastern U.S.A., westren Europe and Southeast Asia. U.S.A. alone accounts for 60 per cent of the airways of the world. New York, London, Paris, Amsterdam, Frankfurt, Rome, Moscow, Karachi, New Delhi, Mumbai, Bangkok, Singapore, Tokyo, San Francisco, Los Angeles and Chicago are the nodal points where air routes converge or radiate to all continents. Africa, Asiatic part of Russia and South America lack air services. There are limited air services between 10-35 latitudes in the Southern hemisphere, due to sparser population, limited landmass and economic development.

# Question 16. Write a note on railways in Asia.

#### **Answer:**

In Asia, rail network is the most dense in the thickly populated areas of Japan, China and India. Other countries have relatively few rail routes. West Asia is the least developed in rail facilities because of vast deserts and sparsely populated regions. One of the most important railways of Asia is trans-Siberian Railways, a major rail route of Russia which runs from St. Petersburg in the west to Vladivostok on the Pacific Coast in the east passing through Moscow, Ufa, Novosibirsk, Irkutsk, Chita and Khabarovsk. It is the most important route in Asia and the longest (9,332 km) double-tracked and electrified trans-continental railway in the world.

It has helped in opening up its Asian region to West European markets. It runs across the Ural Mountains Ob and Yenisei rivers. Chita is an important agro-centre and Irkutsk, a fur centre. There are connecting links to the south, namely, to Odessa (Ukraine), Baku on the Caspian Coast, Tashkent (Uzbekistan), Ulan Bator (Mongolia), and Shenyang (Mukden) and Beijing in China. There is a proposal to

build Trans Asiatic railway linking Istanbul with Bangkok via Iran, Pakistan, India, Bangladesh and Myanmar.

### **Question 17.**

# What is the latest development in the field of communication?

#### **Answer:**

Over the years human beings have used different methods long-distance communications of which the telegraph and the telephone were important. Even today, the telephone is the most commonly used mode. In developing countries, the use of cell phones, made possible by satellites, is important for rural connectivity. Today there is a phenomenal pace of development. The first major breakthrough is the use of optic fiber cables (OFC). Faced with mounting competition, telephone companies all over the world soon upgraded their copper cable systems to include optic fiber cables.

These allow large quantities of data to be transmitted rapidly, securely, and are virtually error- free. With the digitisation of information in the 1990's, telecommunication slowly merged with computers to form integrated networks termed as Internet. Internet is the largest electronic network on the planet connecting about 1,000 million. As billions use the Internet each year, cyberspace will expand the contemporary economic and social space of humans through email, e-commerce, e-learning and e-governance. Internet together with fax, television and radio will be accessible to more and more people cutting across place and time. It is these modem communication systems, more than transportation, that has made the concept of global village a reality.

# Question 18.

Air transport has made world a global village. How? Also explain the significance of air transport.

#### **Answer:**

Air transport has brought about a connectivity revolution in the world in many ways. It is the fastest mode of transport. It is because of air transport that there is no place in the world which is more than 35

hours away. Significance of air transport can be understood as follows:

# (a) Economic Significance:

- Air transport is used only for high value goods and passengers.
- Valuable goods can be moved rapidly.
- It is preferred for long distance travel.
- It is the easiest way to reach inaccessible areas such as mountainous snowfields or inhospitable deserts. In the Himalayan region, the routes are often obstructed due to landslides, avalanches or heavy snowfall. At such times, air travel is the only alternative to reach a place.

# (b) Airways also have great strategic importance:

- Airports with wide facilities have to be built.
- The construction of airports and facilities is very costly.

  Therefore airports are built in places where the traffic is large.
- It requires large arrangements such as hanger, fuelling, landing facilities

# **Multiple Choice Questions**

# **Question 1.(i)**

# The Trans-Continental Stuart Highway runs between

- (a) Darwin and Melbourne
- (b) Edmonton and Anchorage
- (c) Vancouver and St. John's City
- (d) Chengdu and Lhasa

#### **Answer:**

(a) Darwin and Melbourne

# Question 1.(ii)

# Which country has the highest density of railway network?

(a) Brazil

- (b) U.S.A
- (c) Cannada
- (d) Russia

#### **Answer:**

(b) U.S.A

## **Question 1.(iii)**

# The Big Trunk Route runs through

- (a) The Mediterranean Indian ocean
- (b) The North Atlantic Ocean
- (c) The South Atlantic Ocean
- (d) The North Pacific Ocean

#### **Answer:**

(b) The North Atlantic Ocean

# **Question 1.(iv)**

# The Big Inch pipeline transports

- (a) Milk
- (b) Liquid petroleum gas (LPG)
- (c) Water
- (d) Petroleum

#### **Answer:**

(d) Petroleum

# **Question 1.(v)**

# Which one pair of the following places is linked by Channel Tunnel?

- (a) London Berlin
- (b) Paris London
- (c) Berlin-. Paris
- (d) Barcelona Berlin

#### **Answer:**

(b) Paris – London