31

THE STORY OF TRADE, TRANSPORT & COMMUNICATION

31.1 Introduction

The early man had only a few needs to meet and was able to satisfy them almost entirely on his own. However, with increasing demands, this was no more possible. He was required to exchange his surplus goods or commodities with those in which he was defficient. This cumbersome system of barter gradually gave way to trade when money was invented and become popular. Similarly, use of gold has been in vogue since long in facilitating world trade.

The trade to grow in value and volume as the means of transport and communication began to grow and multiply. Roadways, railways, waterways and airways have all made their contribution in promoting trade. So have the revolutionary changes in the filed of personal and mass communication. The means of transport and communication and trade go hand in hand in making our big world virtually smaller. This in turn has been possible only because of ever in creasing use of science and technology in on everday life.

31.2 Objectives

After studing this lesson you will be able to :

- explain the barter system - its need and limitations;
- recognise how use of money and paper currency promoted trade at various levels;
- establish inter-relationships between means of transport, communication and trade;
- mark the aggressive role of advertisements in creating new demands where none exists;
- appreciate the role of science and technology in revolutionising means of transport and communication;
- conclude that no territorial specialization on a large scale could have been possible in the absence of trade;

- integrate contents of economics, history and everyday science in a geographical framework;
- prepare series of questions in a sequential order with a view to teach the content of this chapter to primary school children;
- prepare suitable teaching - learning aids and a sample leson plan to teach the content of this chapter to primary school children;
- prepare different types of questions with suitable marking scheme.

31.3 Some Hints For Teaching

(a) Teaching - Learning Aids

1. Flow chart showing different items of breakfast reaching the breakfast table at a particular place e.g. Delhi from different parts of India producing them.
2. Pictorial chart showing different means of transport.
3. Pictorial chart showing different means of communication.
4. Road map of India (highlighting National Highways)
5. Railway map of India (highlighting trunk routes)
6. Map showing air routes of India.
7. Map showing the Air routes of the world.
8. Map showing the ocean routes of the world.
9. Chart showing major export and import items of India; and
10. Map showing major gateways of foreign trade of India along with their items of export and import.

(b) Suggested Methods of Teaching and Learning

Story-telling method will be the most effective method. Its examples are :

1. Story of tea cup from tea gardens to the breakfast table;
2. Story of the wheel - evolution of different modes of transport;
3. Story of communication - evolution of communication from beating of drum days to the days of sattelites.

(c) Major points to be Highlighted

1. Interdependence of different regions of India for providing our daily needs - concept of surplus and deficit of commodities;
2. Evolution of trade from the days of barter to the present days based on use of currency;
3. We satisfy our rapidly growing needs through trade between different regions and different countries;
4. Efficient and cost-effective transport network is a must for the promotion of

trade. Flourishing trade in turn encourages the strengthening of the network of transport and communications;

5. The three-fold division of the means of transport consists of Land, Water and Air transport;

6. Each of the three categories of transport has its own merits and demerits;

7. A changing trend in our foreign (international) trade i.e. from the dominance of export of industrial raw materials to finishing goods;

8. Another recent trend in our imports is the inclusion of some items like diamonds, gold and cashewnuts for re-export after processing in our country because these are not much required for consumption in India and we have the expertise of processing these items;

9. Our imports are still higher than the exports resulting into an unfavourable balance of trade largely due to the import of petroleum;

10. Our trading partners today are spread all over the world.

(d) Group Activity

(i) Each pupil will be encouraged to choose one article of household use and trace back to its manufactuing place from the following list :

(a) salt (b) sugar (c) match box (d) crocker (e) plastic jug (f) stainless steel utensils (g) shoe.

(ii) The teacher makes the pupils name their respective mode of transport used by them to reach the school and helps them to classify the different modes and arrange them according to the increasing speed.

(iii) Try to trace the route followed by them. They may prepare the sketch maps of their routes.

31.4 Importance of Trade in Daily Life

Let us study the geography of simple everyday breakfast. Wheat used in making bread may have been grown in Surtgarh farm of Rajasthan; it might have been milled in Punjab or Haryana and the bread might have been made in a bakery in or around Delhi. The butter applied to the toast may have come either from Gujarat, Punjab or even Andhra Pradesh. The salt and pepper used to make it tasty in all probability could have come from Gujarat or Rajasthan, in the case of the former and Kerala the latter. Even a cup of tea could not be prepared unless the tea leaves would have reached you all the way from east Assam or west Bengal. In case it is coffee, it would have been produced in Karnataka. The sugar used could have been manufactured in Uttar Pradesh or Maharastra. If you had a banana it might have been produced in Khandesh of Maharastra. In case you had an apple it must have reached you from the Kashmir or Kullu valleys of the north. Thus even an ordinary breakfast comes to your breakfast table usually from four corners of the country. These commodities must have travelled not in a single stroke but through various modes of transport, changing several hands before it is ready for consumption on your breakfast table literally from four corners of the country. These commodities

must have travelled not in a single stroke but through various modes of transport, changing several hands before it is ready for consumption on your breakfast table. Imagine on how many people you have to depend to have a simple breakfast!

31.5 Trade - Its Origin and Evolution

For this you have to go to the olden days when bartering of commodities was the order of the day. Bartering, indeed was a very hard way to trade. For instance a person who had a surplus calf but not enough wheat to feed his family had to search for a person who had surplus wheat and at the same time was badly in need of a calf and nothing else. Such a buyer and a seller with a common need then had to agree on the amount of wheat to be paid in lieu of the calf. The barter would take place only when both parties thought that they were gainers and not losers. Such barter deals could take place only locally as carrying commodities like wheat and a calf over a distance had its own problems.

In course of time there developed an idea that surplus commodities could be disposed of by accepting money; and that such money can be used for buying things one needed most. This new arrangement,of selling and buying goods for money or cash divided the barter operation into two separate transaction of buying selling, resulting in considerable case. It was also more convenient to decide rates or prices of commodities in terms of money. This mode of exchange gave greater satisfaction to both the buyers and sellers of commodities. Over a period there developed a new class of traders who specialized in buying and selling certain commodities. The job had its risks and hence it called for enterprise. This in turn allowed reasonable profit to the traders.

Money consisted of coins of different denominations and accordingly madeup of different metals like copper, silver and gold. After a long time, governments were successful in printing and issuing currency notes of paper with national value and promising the bearer to pay the all amount on demand. People thought the government was stable and powerful to keep. This further facilitated trade. consequeritly there was a spurt in the value and volume of trade.

Gold has been in use for centuries in facilitating and promoting international trade. All governments keep gold in reserve against the notes they issue through their authorized banks.

The trade grow rapidly as the needs of people began to multiply, particularly after the industrial revolution. The rapid growth in trade in turn gave birth to a new phenomenon of issuing advertisements through means of mass communication namely newspapers, periodicals and journals and much more aggressively through radio and television. Big manufacturers not only meet the demands of the people or their customers but also go a step further in creating entirely new demands where exist none.

* Trade has indeed made life richer, adding to its comforts
* Barter lay the seeds of modern widespread trade although it was the hardest way to trade.
* Invention of money and much later, paper currency gave tremendous boost to trade at all levels.
* Advertisements promote competition and also create new demands where exists none.

INTEXT QUESTIONS 31.1

Fill in the blanks from the alternatives given in brackets :

(i) The home of tea is————(Assam, Kerala, Andaman).

(ii) The home of spices is————(J & K; Kerala, Orissa).

(iii) The largest producer of salt is———— (Gujarat, Andhra Pradesh, Lakshadweep).

(iv) The largest producer of coffee is———— (Himachal Pradesh, Goa and Karnataka).

(v) Direct exchange of commodities is known as———— (Trade, marketing, bar).

(vi) Invention of————gave great fillip to trade (Wheel, money, domestication of animals).

(vii) International trade has all along been sustained by———— (gold, currency notes, money).

31.6 The Growing Needs- The Mother of Trade

Food clothing and shelter are the only three basic needs of man. It may be interesting to see how even these three simple and barest needs have undergone a sea change.

Food : Imagine how early man must have gathered food-berries, nuts, fruits, honey, eggs and fish etc. Think how he must have wrapped his body in leaves and skins of animals he hunted. Visualise how human being utilised tree trunks and tops or natural rock caves as his only shelter. Since then the human being have covered a lot of ground.

We have already seen how diversified our food has been when we had a glance at the breakfast table, you may have an inkling into our growing interest is varied and delicious food to suit every taste. More importantly, we want a nutritious and a balanced diet for one and all to cater to various body functions- supply of energy, increasing body resistance to diseases, make up for the wear and tear of the body and provide for the growth of the young bodies.

Clothes : Similar is the story of our clothes- the second most basic need of human beings. It stands next only to food. It is the clothes that visibly distinguish a human being from all other animal species. Soon after its birth the human body is wrapped in clothes to protect it from change in temperature, hot or cold winds and humid or wet climatic conditions. Perhaps the human infant is the least protected from the elements of weather as it lacks feathers of a bird and fur or thick skin of mammals unlike several animals.

Today we wear clothes and need variety of clothings, the list of which may prove endless. More important for us are the fibres and their special qualities. We have learnt over centuries how to thrash, separate and weave fibres- be it cotton, wool, silk, or jute- irrespective of their plant or animal origins. Today we have added

synthetic or manmade fibres obtained form cellulose, wood pulp, glass, coal and petro-chemicals. They include rayon,terelene, nylon, and other polysters .

It is believed that India has been the home of cotton plant. India was perhaps the ancient most exporter of cotton fabrics as its evidence is traced back to Indus Valley Civilization, at least 4000 years old. Indian subcontinent specialised in *mulmul or muslin*- an extremely fine variety of cloth. Likewise kani shawls made of pashmina are also known for their extremely fine quality. Its silk fabrics as well as zari works are equally well known . It is again the Indian subcontinent that has a near monopoly in production of jute and export of jute fabrics - gunny bags and jute carpets Kerala state specialises in coir industry exporting mats and carpets.

Woollens-sweaters, shawls and blankets -and hosiery goods are manufactured in jammu & kashmir and the state of Punjab. Important centres of woolen textiles are Srinagar, Ludhiana, Dhariwal and Amritsar, Mumbai, Ganganagar and Kanpur are the other centres. Quality cotton fabrics are woven in Mumbai and Ahemdabad mills. Silk sarees are made at Varanasi, Mysore, Kanjeevaram and Murshidabad and also in Assam. Calcutta is the world's largest production and export centre of jute goods. India is also the largest supplier of hides, skins, leather and leather goods as it has the largest number of cattle in the world.

Today, we wear and use clothes not only to protect us from the elements of weather but also to make us more presentable. Our clothes reflect our personality, personal tastes and an aesthetic sense, in choosing clothes, sheds, designs and fashions. This in turn accounts for highly diversified nature of our textile industry in mill, handloom and powerloom sectors. Our textile industry stands next only to agriculture in providing jobs. Literally hundreds of jobs are offered by the industry for one to choose from. They range from, farming, plucking cotton balls, pressing and ginning, carding, spinning, designing, weaving, dying, washing, tailoring, carpet making, trading to exporting textile products all over the world.

Shelter : Huts were perhaps the only improvised shelters of early man. They required nothing but branches and twigs, leaves and grasses, bamboos and cane, mud, bricks and stone, all of which were locally available with no costs involved. The modest house of today needs bricks, building stone, tiles, cement and lime, timber, iron bars, iron sheets, aluminum sheets or frames, iron pipes, glasses, brass, plastic sheets, sunmica and furnishings of various sorts. However, discovery of cement has revolutionised building industry. The housing industry in turn has given rise to several small scale industries in every part of the country. It employes construction labour and services of artisans of every sort. There is a keen competition in various small scale industries to supply their products to this most wide spread industries in the country. Trade has given us a wide range of articles to choose from be it food, clothing or housing. Nonetheless, our choice is still largely influenced by physical terrain and climatic conditions, as seen in earlier lesson.

* Food, clothing and shelter have been the basic needs of man.
* Although these needs are universal, they are met by people very differently in different parts of the world.
* With passage of time we now fulfill these demands according to our tastes, values and means at own disposal.
* This in turn has given rise to thousands of new jobs and a big boost to trade.

INTEXT QUESTIONS 31.2

Fill in the banks with the appropriate words given at the end :

i) Our daily diet must supply ———— and increase body ———— to diseases.

ii) Our diet should also help to make up ———— and ———— of the body.

iii) It should also provide for body ————of the youth.

iv) Cotton, jute and coir are ————derived from ————

v) Fibres of animal origin are ————and ————.

vi) Rayon, terelene nylon etc are————or————fibres.

vii) Srinagar, Ludhiana, Dhariwal and Amritsar are the centres of ———— ————industry.

viii) Varanasi and Kanjeevarma are famous for ————sarees.

ix) ———— has revolutionised building industry.

(building, cement, energy, fibres, made, man, plants, resistance, silk, silk, synthetic, tear, wear, wool, woollen textile)

31.7 Inter-relationships between Trade, Transport and communications

We have already seen how trade depends on the means of transport while discussing the geography of the breakfast menu. For the trade to flourish at each and every level, the means of transport must be adequate, fast, efficient, secure and at the same time in expensive. There is a fairly wide network of various means of transport in our country. However, they are not as adequate and efficient as we would now like them to be in the forefront of international trade. We are not able to utilise our potential to increase our share in the international or world trade.

We are, therefore, now seeking participation of private enterprise both from India and abroad, to make transport network more efficient and cost effective. Our exports are suffering for want of efficient network of transport, be it roads,

railways, seaports or airports. The modern transport encompasses all the three media, water and air. Let us discuss them briefly both from historical and geographical perspectives.

(A) Land Transport

There was a time when man had to carry all his worldly belongings on his own back and shoulders. This stage of being the beast of his own burden continued for centuries till he succeeded in taming local animals. These new local partners of man changed from region to region. They could be bullocks, donkeys, horses, camels, goats, reindeer, alpakas, llamas, yaks, water buffaloes and even elephants depending up on the region. Soon man managed to transfer his luggage on the backs of his new partners, making them beasts of his burden. He made sledges and filled them with his belongings to be dragged by his animal partners. Yet another very important break through came in man's march towards progress when he invented wheel. In course of time he learnt to fit the sledges with wheels so that animals could carry much more luggage and that too at a much faster speed with relative ease. This was so because the wheels caused much less friction while moving along the ground.

Invention of steam engine and internal combustion engines were the next break through in man's relentless campaign in conquering distances. Hardly 200 years ago a steam engine was invented and perfected in Western Europe. The need for the engine arose for an entirely different reason. In those days coal mines in England got flooded, periodically, with rain water, bringing the entire mining operation to a stand still. The mines had to be dewatered mechanically taking days in the absence of any other way. Since there was a great demand for coal it had to be moved as quickly as possible from the mines. For this purpose the owners of the mines had built open wagons and put them on fixed rails. These chains of wagons were drawn by horses easily as they moved upon smooth rails causing very little friction. Thus a railway train was already working of course without an engine.

It was Watt's steam engine which was specially prepared to dewater coal mines (with the help of water pumps powered by steam engine) that filled the gap. Watt's crude steam engine replace horse and began to draw itself railway train of wagons. No wonder if the first railway engine was discribed as "an iron horse".

Not far behind was the car engine. Scientists called it internal combustion engine where thrust is generated through the combustion of air and oil gas. Shortly there appeared on the scene the cars, buses, jeeps, trucks and what not! The world had undergone a qualitative change when thousands of cities all over the world including India were interconnected with railway lines and all weather metalled or tar roads. These modern means of fast transport helped to spread industrial revolution in almost every part of the world. They helped in collecting raw materials and distributing finished products very speedily. Now the container system has further added to the efficiency of railway transport by delivering goods safely, speedily and at the doorstep of the customer.

One of the fallouts of transport revolution was to strengthen a geographical hypothesis that crops in particular should be grown under favourable geographical conditions to maximise their output and yield per unit land, capital and labour.

In other words territorial specialisation of agricultural crops and of industries to some extent became a reality. People began to specialise in those crops that were most suited to the local soil, climatic conditions and traditional skills. This may explain why tea gardens were set up in Assam and around Darjeeling in West Bengal. Brazil established its Coffee Fazandas in Eastern Highlands. Malaysia brought its coastal plains under rubber estates. The deltaic soils of West Bengal and Bangladesh have a monopoly of jute production, Japan manufactures cars and high tech electronics with an eye on American and West European markets. India mines iron ore in Baila Dila in Bastar (M.P.) for feeding iron and steel mills located on the Japanese coasts. All these and many more examples show that transport and trade go hand in hand.

A brief comparison between sail and road transport may not be out of place here. Both are means of land transport, equally modern and fast. However, roads can easily negotiate even fairly steep slopes and can span mountainous regions as well. Vehicles on road call for a small investment and allmost under personal ownership. The cost of laying roads also is less compared to railways. Road vehicles can reach the clients at their door steps. Railways on the other hand cannot negotiate high slopes and do not reach the clients at their door steps. However they are good for covering long distances for goods both heavy and bulky Rail traffic more comfertable for long distance passengers. Thus need to cooperate and not compete with each other.

* Man was the first beast of burden.
* After taming animals he made them beasts of his own burden.
* Invention of wheel was a big break through in the story of transport.
* The subsequent break through came when James Watt's steam engine and internal combustion engine were invented.
* Modern means of transport succeeded in spreading industrial revolution to different parts of the world.
* The modern means of transport helped in promoting territorial specialisation of crops and to some extent heavy Industry.
* Road and rail transport with their plus points need to cooperate with each other.

INTEXT QUESTIONS 31.3

Fill in the blanks with appropriate words given at the end :

i) To be in the forefront of world trade we need our transport network to be———and———.

ii) New transport policy of India Provides for participation of ———— both from India and ————.

iii) Three media used by modern transport are————, ———— and ————

iv) ————can move fast as they cause less ———— while moving on the ground.

v) The first railway engine was called an ———— and ———— (air, abroad, air, dense, efficient, enterprise, friction, Horse, Iron/ Land, Private, water, wheels)

(B) Water Transport

Early man must have been impressed and inspired by animals that could swim and cross the rivers in floods. In flash floods he might have caught hold of a log and moved along with it without tiring himself. Impressed by a floating log he must have tied pieces of wood with leather and formed a raft. Such a raft was more secure and convenient than a single big round log. Thus with a raft he could float over deep water without the fear of drowning. He must have thought of selecting a big log and scooping out a part of it to form a hollow. Thus first dug out might have come in existence. Such a dug out was hollow and light. So it could float even on shallow waters. Siting in side the hollow must have made him more secure. Thus a dug out was an improvement over a log and a raft. Then with Oares he must have started giving direction and speed to a dugout. Thus a canoe and boat must have come in use. Later on he must have started using masts to take advantage of favourable winds to make his ship or versel move fast without rowing it. Thus, the sail ships must have helped to undertake longer sea voyages and carrying goods to trade with other people. All these realties of the past are found even today in one part of the world or the other and help in reconstructing past in some what logical manner.

When the steam engine was invented, the seamen did not lag behind in trying out such machines to tow big ships or vessels with enhanced speed and remarkable ease. There are pictures of old ships which were tied with both the steam engine as well as masts. It only shows that to begin with they were not fully confident of steam engines and their capability to move on high seas for long durations and away from home.

Ships carrying mainly the passengers are called liners. Much of their traffic has not been captured by air traffic as it saves lot of time and money. The ships mostly carrying goods are called tramps. Vessels build entirely to transport mineral oil are called tankers. They are the largest in size or tonnage, about 85000 to 100,000 tonnes. Refrigerated ships carry perishable goods such as animal carcasses, dairy products, fruits and vegetables etc. e.g. Australia exports animal meat in the form of animal carcasses to Japan where there is great demand for the same. Bulk of the international trade is carried throught shipping across the seas and oceans. Therefore, seas and oceans are rightly called the bridges between continents.

Many harbours of the major parts have to be continually dredged, widened and

deepened, so that the new ships of bigger size can be anchored there easily. Like wise the ports are equipped with mechanical facilities of loading and unloading and storage to save time and crowding of the ports. The tidal port of Calcutta situated on the Hooghly - a distributary of Ganga has to be dredged continually. The subsidiary port of Haldia has been developed further down stream. It thus helps in decrowding of the port during high tides and tidal bores. Mumbai on the other hand has a very spacious natural harbour and yet its port remains overcrowded. To avoid its further congestion a new port across the harbour has been developed, south of Mumbai, at Nhava Sheva and is named as Jawaharlal Nehru Port. This is the only port in India which is fully mechanized.

Water transport is no more confined to high seas alone. Most industrialised countries use their large rivers for inland navigation. Where necessary and feasible, they have built navigation canals so that the transport of industrial raw materials and finished goods is handled through water transport. This is because water transport is much cheaper than land transport although it is not fast enough. Water transport is cheaper because the waterways do not require to be built; nor do they call for constant maintenance as the land roads and railway lines do. The river Rhine in Western Europe provides the busiest inland navigation rooute serving simultraneously four highly industrialised countries of Europe -Switzerland, Germany, France and Netherlands.

Popularity and inexpensiveness of water transport can be judged from the fact that navigable canals across long and difficult stretches of land were built to connect oceans lying across them. The Suez, Panama and Kiel canals are best examples. The Suez Canal connects Red Sea-a part of Indian Ocean with the Mediterranean Sea which is a part of the Atlantic Ocean. Its construction has helped Mumbai port tremendously as it has reduced the travelling distance between London and Mumbai by as much as 7000km. The Kiel canal connects the Baltic Sea with the North Sea benefitting Germany the most. The Panama Canal connects the Atlantic Ocean with the Pacific and benefits the United States of America the most. The distance between New Orleans and San Francisco has been cut down by well over 10,000 km. The ships passing through this novel canal have to climb up and down the mountain through the man-made water locks. It is thus an antigravity canal. It becomes cheap to use this canal even after paying high duties as it saves time and distance considerably.

* Coastal waters and big rivers have been used by man since long as convenient medium of transport.
* The advent of steam engine gave birth to steam ships whose latest/specialised versions are a liners, a tramp, and oil tankers and a refrigerated ships.
* As water ways are not required to be built or maintained, they are the cheapest means of transport for carrying heavy and bulky goods over distances long and short.
* Construction of international navigation canals like the Suez and Panama has succeeded in reducing travelling distances, saving times, money and energy.

INTEXT QUESTIONS 31.4

Write T against statements that are True and F against the False ones:

i) Instead of separating continents the oceans today act as convenient bridges between them.

ii) The Suez is an antigravity canal

iii) The Suez canal has cut down travelling distance between Mumbai and London by as many as 7000 km.

iv) Not the animals but the man has been the first ever beast of burden.

v) Oil tankers of today are the world's largest ships.

vi) Jawahar Lal Nehru Port, though fully mechanised, it is only a subsidiary port of Mumbai.

vii) Calcutta is a tidal riverine port with Haldia as its subsidiary.

(C) Air Transport

Man being a land animal conquering distances on land naturally mattered him the most. Turining oceans into bridges connecting continents was yet another feather in his cap. This provided the greatest boost to promote international trade in the most inexpensive manner. Now he dreamt of soaring and flying high into the air. So he experimented with baloon to begin with and ultimately succeeded in developing aeroplanes, the credit for which goes to the Wright Brothers of America. Now with a jet aeroplane one can go round the world in less than 48 hours! Besides their speed, the aeroplanes provide the most comfortable journey man could ever think of. They have really brought peoples of the world very close to one another. The further possibilities of air and space travel are yet to be explored as they hold great promise for future.

Air travel saves time and hence it has become very popular for those who can afford. For common man it is still out of reach. Air travel is more convenient in crossing thick jungles, deserts and big rivers in spate etc. In India air travel is becoming popular in northeastern part of the country because of inadequacy of road, rail and water transport. This is due to the very difficult nature of terrain and pressure of jungles, flooded rivers etc. Furthemore circumventing the territory and boundaries of Bangladesh have made land route very circuitous and long to be covered in relatively short time.

India is fortunate to have situated on a busy air route connecting Europe with Australia, East and South East Asia. It has major four international air ports in Mumbai, Delhi, Calcutta and Chennai. A large number of cities find place on the air map of India. India has two important public under takings. Air India and Indian Airlines besides several private airlines.

(D) Communication

Man being a social animal communication is highly important in his personal,

family and social life. With spread of man to different parts of the world communication became important as well as difficult. To begin with man had to carry messages him self. With taming of animals he could now ride on horse or camel back to carry urgent messages to far of places. Even pigeons were pressed into service by tying written notes to their legs. These trained pigeons would carry messages only to certain fixed places.

With postal departments in place they began to provide several services such as despatching postcards, envelops, express post, money orders etc. The latest addition to the postal services has been the air mail and speed post or courier mail. Then were introduced telegraph services as invented by Thomas Alva Edison an American citizen, who had several very important invents to his credits. Brief and urgent messages were transmitted. Such messages were called telegrams.

For this purpose, permanent telegraph wires and poles had to be put up. Towns and cities were interconnected for this purpose. Electicity was used as a medium to transmit messages from one place to another. A simple code of dots and dash was developed for this purpose.

Then come yet another and more revolutionary invention of telephone when live voices could be carried instantly through telephone wires. It provided for two way communication between two persons connected by telephone wires. This invention is credited to Alexander Graham Bels yet another American. The world was criss-crossed by now not only by roads and railway lines but telegraph and telephone wires too.. The telephone wires were laid even under the sea so that people across the ocean could also speak to each other without any difficulty. Telegraph and Telephone wires under sea are called cables. So far postal services, cables and wires or telegrams and telephone services served the needs of individuals and formed the part of the means of personal communications. When an Italian scientist Marcony invented wireless communication through radio waves an entirely new chapter in mass communication was added. This was electronic medium unlike the earlier ones.

The wireless or radio was later on followed by the inventions of film, cinema and television all of which are means of mass communication. Books, newspapers and periodicals are also means of mass communication. They are called print media as they use the printed words as their medium. The print media, although less spectacular, have an invincible place of their own in the area of mass communication.

Today E mail (Electronic Mail), radio, photographs, Fax, teleprinters etc have been very popular means of communication. They are not only economic but also the instant means of communication. A very important role is being played these days by man-made communication satellites as they boost the capacity of electronics media. People in all walks of life like commerce, industry, trade, academics and administrations besides media man have been using them to their great advantage. The instant communication takes place at the tremendous speed of light nearly 300,000 km per second. For conveying message to the instrument kept on Mars it takes just minutes! Remember that the sun's rays to reach the earth require about eight minutes.

(E) Relations Between Transport and Communication

The means of transport and communication have very close relationship. They always move hand in hand. In fact one cannot exist and improve without the other. When man had not tamed animals he himself carried messeges. When animals were domesticated he began to carry urgent messages to far off places riding on horses or camels. Perhaps the introduction of bicycle was a great relief to postmen both in urban and rural areas. With the advent of railways and passenger buses the postal services began to move very fast through them. The mail moving along land and water transport is called surface mail. This word came in use when important mail began to be carried by air. It was called airmail. Means of communication in turn also helped transport services. For instance, fast railway trains could move safely only when they received a message or communication that railway track they are supposed to follow was safe and clear and was available to them to commence their journey. The same is true of air mail or air services unless they get a clearance in advance about the weather conditions at the next destination and on the way they would never embark on their journey.

(F) Relation Between Trade and Communication

The relationship between trade and transport is too obvious to be discussed. However, the role played by means of communication is some what invisible though far more subtle. A trader places an order for the goods he requires only when he knows their rates or prices and only after he ensures their rates quoted to him are the lowest possible for that particular deal. Written communications took long time to reach and by then the rates or prices of commodities could also further rise or fall. But the telegrams and telephone made things much easier and quicker. The mass media also further helped in finding out the latest rates in almost every part of the world instantly. Thus means of communication have given unprecedented boost to trade at every level from local to global. This explains why the trader as businessman of today wants to have cellular and even mobile phone, twenty four hours a day at his commands.

31.8 Foreign Trade of India

For centuries India has been trading with other countries. In lieu of the goods it exported abroad, India received gold or making it a very rich country of the world. Since older times it exported spices to European countries not for their use in cooking but for preservation of meat. It also exported cotton, cotton cloth and silks. In foreign countries India was known as a land of cotton and muslin, a fine variety of cloth.

India being an agricultural land its exports in the recent past consisted of cotton, spices, tea, tobacco, groundnut and nutshell, leather and jute goods. Except jute goods all others were just agricultural raw materials.

Since Independence the nature of our exports has undergone tremenendous change. Instead of mere cotton we now export yarn, cotton cloth and now reādymade garments on an increasingly large scale. We also export silk and silks sarees. Jute goods, tea and spices continue to be our major items of export. Instead of importing sugar from other countries, we make enough sugar in the country part of which we are now in a position to export. India now exports qualtity rice. On the

food front we have to import pulses and vegetable oil as we are still short of our needs, despite the fact that we are the largest producers of these two items. India also exports fruits, vegetables and flowers.

India has added a new dimension to its international trade firstly by exporting mineral ores like iron ore, manganese, bauxite and mica. Now we have started producing iron and steel, aluminium etc in our country a part of which we are now exporting. More importantly, we now export light engineering goods such as fans, bi-cycles, sewing machines, water pumps, scooters, tools and machines. We now produce many articles requiring high technology to meet our needs such as tractors, motor cars, automobiles, railway and defence equipment. Howeyer, we have to import modern machinery from abroad. India is now a big producers of fertilisers but it still has to import a part of it.

Some items we import on a large scale not for our consumption but processing them further before they are re-exported at a handsome premium. Such items include cashewnuts, gold and diamonds. Gold is turned into fine ornaments and diamond after cutting and polishing are exported for their use in several industries. We are also now very big exporter of electronic goods consisting of hard and soft wares. India thus exports many manufactured goods. However, its imports are still higher then the exports - as a result the foreign trade of India ends up with unfavourable balance of trade. This is largely due to a single items of import, the petroleum and petroleum products like diesel and kerosene. With rapidly increasing automobile industry in the country, the demand for petrol and petroleum products is found to increase menacingly. At one time nearly half of our requirements were being met through domestic production. Now not even one third comes from indigenous source. We have to find out more reserves and tap them in a big way to narrow the gap between production and consumption and also to save own foreign exchange.

India's foreign trade was largely directed to Great Britain and commonwealth countries. Now in addition to these, our major trade partners are the U.S.A, Russia, Germany, France, Japan, Middle East and African Countries. We are also trying to increase our trade with South Asian or SAARC countries, South East Asian countries and those of Latin America.

* For visiting distant places air transport is most conventional as it saves time and money.
* In India there is enough scope to popularise air travel particularly in the Northeast.
* Postal services, telegraph and telephone have made communication very easy and relatively inexpensive for people everywhere.
* The invention of radio, television, film and cinema have brought a revolution in mass communication mass entertainment, also mass education and mass advertisements.
* Means of transport and communication go hand in hand complementing each other.
* India is on the verge of becoming a major player in world trade once it further modernises its transport and communication infrastructure.

INTEXT QUESTIONS 31.5

1. Make correct Pairs from the two columns :

i)	Aeroplane	(a) Alexander Graham Bell.
ii)	Radio	(b) James Watt.
iii)	Steam Engine	(c) Marcony
iv)	Telegraph	(d) Thomas Alva Edison
v)	Telephone	(e) Wright Brothers.

2. Rearrange the following in a chronological order

(i) An airmail; (ii) An inland letter; (iii) A letter through a horseman ; (iv) A message through a pigeon; (v) A direct ring on a telephone to other countries and (vi) A telegram.

3. Classify the following into two groups : (a) Means of personal communication and (b) means of mass communication

(i) Book ; (ii) Cinema ; (iii) Cable ; (iv) E-Mail: (v) Fax (vi) Greeting Card ; (vii) Journal (viii) Newspaper; (ix) Radio ; (x) Telegram ; (xi) Telephone and (xii) Television.

4. Write T against statement that are true and F against the false ones :

i) The job of the means of transport and communication is to compete with each other.

ii) The relationship between communication and trade is rather invisible but most suble.

iii) India has a favourable balance of trade.

iv) The nature and destination of India's foreign trade has undergone considerable change-a change for the better.

v) India's unfavourable balance of trade has nothing to do with import of pertroleum and petroleum products.

WHAT YOU HAVE LEARNT

You have learnt the importance of trade in our everyday life with very concrete examples. You can now explain the barter system its need and limitations and how trade evolved from the crude barter system. You have seen the role of money and currency in national trade and that of gold in international trade. You now know how means of transport and communication are inter-related and in turn are totally indispensable for promotion of trade. You have also seen the aggressive role of advertisements in creating demands where existed none. It must have been of interest to you to find out how science and technology have revolutionised means of transport and communication. Equally interesting must have been the trade of territorial specilisation particularly of crops such as tea, coffee, rubber and jute. This lesson must have also shown how contents of history, economics and everyday science can be woven in a broad geographical framework.

TERMINAL QUESTIONS

1. Explain the importance of trade in the everyday life of a common man with suitable examples.
2. What is barter system? How was it different from the marketing of today?
3. How have money, paper currency and gold promoted trade at national and international levels?
4. Why are the growing needs of man called the mother of trade? Explain in reference to clothing as one of the basic needs.
5. Describe landmarks in the development of land transport from earliest times.
6. Elaborate the statement that crops in particular be grown on a commercial scale under favourable geographical conditions to maximise their output and yield per units of land, capital and labour.
7. Compare the road and rail transport and state why they should cooperate with each other.
8. Trace the evolution of water transport and explain why they are the most inexpensive and indispensable to promote international trade.
9. Establish relationship between the rapid growth in the spheres of transport and communication and their complementarity.
10. What is the relationship between trade and communication?
11. State how the nature and direction of India's foreign trade has been changing, particularly since independence.
12. Which is the largest stumbling block in the position of India's balance of trade? How can it be removed?
13. Prepare on land transport a series of questions in a sequential order for teaching to primary school children. You may use the accompanying sample (Appendix -4 pages 80 to 81)
14. Prepare five objective type questions on each of the following categories of questions. Also write answers of each question immediately below it :
    (a) Multiple choice
    (b) Fill in the blanks
    (c) Selecting True and False statements
    (d) Matching type

Note : These questions should be other than those given in different chapters included in the books from 1 to 5 and this module.

15. Prepare five questions on each of the following categories and also prepare a brief marking scheme of each question immediately below it.

(a) Very short answer question of 1 mark
(b) Very short answer question of 2 marks
(c) Short answer questions of 4 marks
(d) Short answer question of 4 marks
(e) Long answer question of 5 marks
(f) Map filling question of 5 marks

Note : These questions should be other than those given in the students assignments of each book and the sample question paper.

CHECK YOUR ANSWERS

INTEXT QUESTIONS

31.1 (i) Assam; (ii) Kerala; (iii) Gujarat : (iv) Karnataka : (v) Barter ; (vi) money : (vii) gold.

31.2 (i) energy, resistance; (ii) wear, tear; (iii) building; (iv) fibres, plants ; (v) silk, wool; (vi) synthetic, man-made; (vii) woolen, textiles; (viii) silk; (ix) cement.

31.3 (i) dense; efficient; (ii) private, enterprise; abroad. (iii) land; water;air ; (iv) wheels; friction; (v) Iron; Horse.

31.4 (i) T ; (ii) F ; (iii) T ; (iv) T; (v) T ; (vi) F ; (vii) T.

31.5

1. (i)-d ; (ii) -c : (iii) -b; (iv) -d ; (v)-(a);

2. (iii)-(iv)-(ii)-(vi)-(i)-(v).

3. (A) Means of personal communication

(iii); (iv); (v); (vi), (x) and (xi)

Means of mass communication

(i); (ii); (vii); (viii); (ix); (xii).

4. (i) F; (ii)-T; (iii) F; (iv)T; (v) F.

TERMINAL QUESTIONS

1. See 31.4 Para 1
2. See 31.5 Para 1;2
3. See 31.5 Para 3;4
4. See 31.6
5. See 31.7 (A) Para 1;2;3
6. See 31.7 (A) Para 4.
7. See 31.7 (A) Last Para.
8. See 31.7 (B) Para 1;2;5;6
9 See 31.7 D and E.
10 See 31.7 F
11. See 31.8 Para 3;4;5.
12 See 31.8 last but one para.
13. See Appendix -4 page to for guidence
14. See Intext questions of Books 1 to 5 and of the module for guidance
15. See students Assignments of Books 1 to 5 and of the module for guidance.