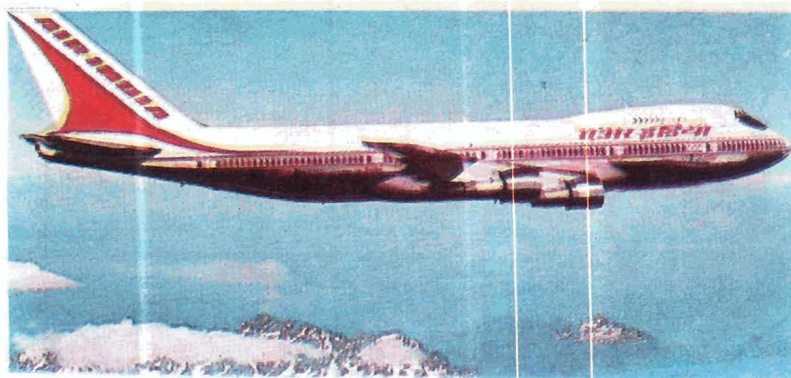

UNIT 8 MODES OF TRANSPORT

Structure

- 8.0 Objectives
- 8.1 Introduction
- 8.2 Development of Means of Transport
- 8.3 Road Transport
- 8.4 Rail Transport
- 8.5 Water Transport
- 8.6 Air Transport
- 8.7 Role of Transport in Tourism
- 8.8 Towards a National Transport Policy
- 8.9 Let Us Sum Up
- 8.10 Keywords
- 8.11 Answers to Check Your Progress Exercises
- Annexure



8.0 OBJECTIVES

A tourist can travel by a variety of means. Hence, it is necessary for both — the tourist as well as the tourism professional to familiarise themselves with the various modes of transport. After reading this Unit, you will be able to:

- learn the stages of development of various modes of transport,
- identify the different modes of transport,
- appreciate the importance of transport in the promotion of tourism, and
- understand the need of a national transport policy.

8.1 INTRODUCTION

Transport contributes significantly to our socio-economic needs. Transport industry has acquired a fundamental place in the global network system by facilitating mobility of persons and goods from one place to another through various modes of transportation. The development of tourism depends on the transport industry. A tourist always thinks of **safe**, **comfortable** and **convenient** mode of transport. And of course, **costs** and **time** are also important considerations while deciding on the mode of travel. Here lies the challenge before the transport industry to attract the tourist by offering suitable means of travel as per their requirements.

This Unit starts with a brief discussion on the development of various means of transport in their historical setting. It goes on to explain the major modes of transport available in India and their relevance. The role of transport in tourism and the need for national transport policy have also been discussed.

8.2 DEVELOPMENT OF MEANS OF TRANSPORT

From the advent of human civilisation, the means of transport have been changing according to changed conditions and the development of technology. The propulsive means used were mainly animals on land and sails at sea. The discovery and application of steam and electricity in the 19th century and the internal combustion engine in the 20th century revolutionised travel and transport and introduced the present era of mass transport. The next spectacular breakthrough came in the late 1950 with the propulsion of aircrafts with jet engines opening to the whole world the immense benefits of air travel. In Unit 3 you have read about the impact of such breakthrough in transport technology on tourism. Travel became faster and more and more people could travel.

Well, let us have a brief look at the development of transport system in India. This can be broadly divided as:

- Pre-Colonial Period,
- Colonial Period, and
- Post Independence Era.

i) **Pre-Colonial Period:** The Indian transport industry dates back to ancient days wherein trade routes linked several rural and urban centres to ports and markets in the country. Historians have tried to establish a link between caves, rock art and travel. Many caves were on the ancient trade routes in India. The town plans of Harappa and Mohanjodaro indicate well-planned roads in townships for transport purposes. This trend continued until the end of the Mughal period. For example, the famous Grand Trunk road was laid during the reign of Sher Shah Suri.

ii) **Colonial Period:** Road transport and sea ports continued to be developed during the British rule in India. A network of roads was built up by the colonial regime. This was done to link the ports with the hinterland to carry raw materials from India to Europe and import finished products from the European continent for Indian markets. Railway emerged in 1854 to further supplement this network besides quick movement of troops and police to cater to the administrative requirements. The first scheduled air service started in 1932 and continued to be symbolic for many years.

iii) **Post Independence Era:** The priorities changed after independence. Rehabilitation of the railways and reconstruction of highways damaged or neglected during the second world war and rebuilding the transport network to cater to the developmental needs of the economy and society became matters of prime concern. Attention was also paid to the development of sea, air and other modes of transport. From merely fulfilling the administrative needs of the government, today in India, the thrust is for the development of transport to meet the growing demands of society and overall development of the country.

Despite the implementation of the 5 year plans and the achievement therein, the transport system still finds itself in a state of inadequacy. For example, the transport sector is heavily dependent on foreign technology, capital and loans which have resulted in the slow rate of its development. The IATO has been consistently urging upon the government on behalf of its members to liberalise the import of air-conditioned tourist coaches. The growth of various modes of transport has been, during this period, largely unrelated to each other and thus failed to develop as a well integrated multi-model system. The investments in this sector have been on the decline in the various plan periods. The total expenditure on transport industry in the first three plans was 23% which came down to 14% in the fourth plan and 12% thereafter.

8.3 ROAD TRANSPORT

As on date four major modes of transport are prevalent in India. They are:

- Road Transport
- Rail Transport
- Water Transport
- Air Transport

Let us first begin with road transport.

Road transport is one of the most promising and potent means suitable for short and medium distances. It provides the basic infrastructure for bringing the majority of the people who are living in far-off villages into the mainstream of national life by connecting them with different places. It offers a number of advantages such as flexibility, reliability, speed and door-to-door service, besides supplementing and increasing the efficiency of the other modes of transport. It has a vital role in the opening up of interior and remote areas and is relatively cheaper and less capital intensive.

Indian roads are classified into the following five categories:

- National Highways

- State Highways
- District Roads
- Village Roads
- Unclassified Village Roads.

The national highways are the principal arterial routes connecting the union capital with the state capitals, major ports and various highways. They constitute 2% of the total road network of 19 lakh kilometres (1988) in the country and cater to 40% of the total road traffic in India.

State highways connect state capitals with district headquarters, important cities and towns within a state, the national highways and the highways of adjacent states.

District roads take the traffic from the main roads to the interior of each district and to rural areas. They are further sub-classified into major district roads which are metalled and have a high standard and specification and other district roads which are relatively of lower specification and design.

Classified village roads connect villages or groups of villages with each other and to the nearest district road and other main highways, railway stations and river ghats. These roads provide the basic infrastructure in rural areas.

Unclassified village roads are mostly earthen roads. Having a far lower standard in most cases, they are merely tracks in rural areas.

Two-thirds of the villages in the country (approximately 4 lakhs villages) are without all-weather roads while one-third are without any road link at all despite the road length in India increasing from 4 lakh kilometres (1951) to 19 lakh kilometres (1988). As per IATO Manual "most of the roads are quite good, however, link roads leading to National Parks and Wildlife Sanctuaries may not always be good". In Appendix-I we have mentioned some destinations, distance and time taken to travel.

Mechanised vehicle traffic in India has increased from 3.06 lakhs (1951) to 166.93 lakhs (1989). Among the mechanised vehicles, the share of buses has declined from 11% to 1.84% (1989), the actual number of buses on roads being 2,94,000. 60% of the road transport is in the private sector while 40% is in the public sector. The passenger traffic carried by the public sector is, however, 51% as against 49% by the private sector and is mainly through the state transport undertakings. The inter-state bus system is well developed and the quality of buses varies. For example many State Transport Corporations run frequent ordinary buses, some semi-deluxe and deluxe buses and a few air-conditioned coaches. Advance bookings are available in the last three categories. All information is available at the bus-stands. At inter-state bus terminals, like the one in Delhi, practically all state transport corporations provide information and advance booking counters. Except for air-conditioned and deluxe coaches baggage is generally carried on the roofs. Hence, one should advise the tourists to ensure the safety of luggage and water proofing. Not many foreign tourist prefer ordinary bus travel. However, for domestic tourists it is a popular mode of travel. Throughout the year we find certain Bus Operators conducting tours — particularly for pilgrims — to certain areas covering many places at a time. Taxis, chauffeur driven cars, car rental systems, matador type vans are some other services in road transport.

In the light of this general information on road transport, your first task is to collect information about the tourist places which can be covered by road transport. The existing facilities available to carry tourists by road transport are to be identified next. For example, Mr. and Mrs. Grover have reached Puri from Delhi. They want to see the famous Sun temple at Konarak and other historical sites around Puri. Road transport is the most ideal mode for them to visit these places. Available modes of transport are local buses, luxury coaches of different types or taxis. Your job here is also to collect data about different needs of tourists and accordingly advise/book them. In fact your advise is based according to different categories and the diverse tourist requirements. For instance, Mr. and Mrs. Grover are well off and fond of privacy in travel. They also do not have much time in hand. So, for them the ideal choice would be a taxi. It is expected that you keep yourself updated on various sorts of information and also of innovative ideas to propose to the tourists.

Modes of Transport



Himachal Tourism		
1 NIGHT SERVICE DELHI / MANALI		FARE
2 LUXURY COACH (SHIMLA TO DELHI)		
3 LUXURY COACH (SHIMLA TO MANALI)	DAILY	
4 LUXURY COACH (SHIMLA TO DHARMSHALA)		
5 SIGHT SEEING TOURS (SHIMLA & AROUND)	DAILY	
6 LUXURY COACH (SHIMLA TO HATKOTI)		

For Booking CONTACT INSIDE



8.4 RAIL TRANSPORT

Railways are the principal carriers specially suited for long distance level. In a vast country like India they serve as the main artery of inland transport. After independence 8000 kilometres of new railway routes have been added to the railway network. The present route length of Indian Railways is 62,000 kilometres out of which 12% is electrified. Yet it is Asia's largest, and world's second largest, state-owned railway system under a single management. The railway tracks in India are of three types:

- i) Broad Gauge (1.67 metres)
- ii) Metre Gauge (1.00 metre)
- iii) Narrow Gauge (0.76 & 0.61 metres)

Among these, the broad gauge lines account for 55% of the total network and carry 85% of the total traffic.

The Indian Railways have been concentrating on long distance passenger traffic as against short distance which can be more economically carried by road traffic.

Along with its vital role in economic development the railways play a significant role in the tourism system. In a vast country like India, stretching from Kashmir to Kanyakumari, the majority among the domestic tourists are primarily dependent on railways for long hour travel. One basic reason for the choice of railways as a mode of transport is that it is economical. Moreover, the LTC facility given to the employees permits rail travel as per the salary slabs and relevant category. Replacement of the steam engine by diesel and electric engines has definitely increased the speed of mobility. Electronic signalling and other scientific devices are being increasingly used to make rail journey more faster and comfortable. For example, initially Bombay and Calcutta were connected with Delhi by superfast Rajdhani Express. Now Bangalore and Madras are also connected by Rajdhani. Introduction of superfast Shatabdi Express between Chandigarh-Delhi and Bhopal-Delhi have saved much time of travel and the journey has been made more comfortable. Toy trains running between Kalka and Shimla or New Jalpaiguri and Darjeeling are major attractions for the tourists. Similarly 'Palace on Wheels' which takes the tourists to major historical places in Rajasthan via Agra was introduced to offer a package tour to the tourists. Recently, the railway authorities have introduced the weekend package tours starting from Delhi to nearby tourist places for 2 to 3 days. Similarly more "Palace on the Wheels" like trains are to be introduced in the near future. **Indrail tickets** are sold abroad for foreign tourists.

As a tourism professional it is your responsibility to collect information about the various trains and their destinations, departure, arrival, fares, etc. as well as different concessions and facilities available to tourists. For example, you want to take a group of 70 tourists to South India from Delhi. What you have to do? First task is to contact the local railway commercial manager or chief reservation superintendent. Best suggestion could be to reserve a separate coach for your tourist group and by telegram, message should be sent to different railway stations where you want to stay for one or more than one day. This facility is available and it proves very economical and free from hassles of reservations at different places.

In the existing facilities available with the railways and a large number of trains that connect various parts of our country together you have to plan out different tour programmes to offer to tourists.



Rail car to Shimla



Rail car interior



Train to Shimla

Check Your Progress 1

1) Specify some of the significant changes in transport in post Independence India.

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2) How would you organise a tour by bus? Answer in 10 lines.

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3) Write in 5 sentences about how to do booking in different trains.

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8.5 WATER TRANSPORT

Before the coming of road and rail transport it was water transport (regarded as the oldest transportation mode) which carried goods and persons from one place to another. In spite of bridge construction over rivers it still has relevance because of environmental considerations and less costs. Before analysing its relevance in tourism let us explain the three broad categories of water transport. They are:

- Coastal Shipping
- Inland Waterways
- Foreign Going Traffic.





1) **Coastal Shipping:** India has a vast coastline of about 5500 kilometres. There is considerable scope for utilisation of coastal shipping for transport of goods and passengers. It is the most energy-efficient and cheapest mode of transport over long distances. Passenger traffic on this mode is at present from mainland to Andaman and Nicobar Islands and Lakshadweep Islands. One seasonal service also operates from Bombay to Goa.

2) **Inland Waterways:** The inland waterways like Coastal Shipping has inherent advantages like being the cheapest mode, energy saving, low investment, etc. The share of inland waterways in the country's transport system is 1% though the navigable inland waterways extend to 14,500 kilometres comprising of a variety of river systems, canals and backwaters. Nearly half of these are suitable for mechanised vessels. This mode is still grossly underutilised. The Inland Waterways Authority of India constituted in 1986 has been entrusted with the responsibility of development, maintenance and regulation of National Waterways for shipping which is yet to take effective shape and tap the vast potential of this mode of transport in India.

3) **Foreign Going Traffic:** There are 11 major and 139 minor ports in India. The major ports are under the control of the Ministry of Surface Transport of the Union Government. The minor ports are under the state governments. The number of ships calling on the major ports in 1991 was 9416 with a traffic of 152 million tonnes. India's share in the total world sea trade in terms of value is a mere 0.6%. The development of Indian Shipping industry is extremely slow. India's share in the world sea fleet is 1%.

After knowing this basic information on water transport, you must be interested to know how one can think of using it to promote tourism. Cities having rivers and seas have tremendous potentiality to plan different package tours on boat, steamer or ship. For example, West Bengal tourism department introduced special tourist launches to carry tourists to Sunderban (famous for the Royal Bengal Tiger). In the launch itself various facilities were provided to make the journey and stay comfortable. The project has been a success. The approach to Elephanta Caves is through motor launch only which ply from Gateway of India (Bombay).

Similarly, Goa Tourism Department organises sea cruises of half day and full day. The most interesting experience is that of tourists going to Lakshadweep islands on cruise ships. During day they are taken to the islands by boats and at night they stay back at the ship where different kinds of entertainment is provided. Some travel agencies also conduct sea cruises for tourists — the leading being the Travel Corporation of India. Tourists going on a holiday to Andamans take a ship either from Madras or Calcutta.

There is a further variety of tourist attraction like staying in a houseboat at Dal Lake in Kashmir; taking boat trips at Varanasi or Allahabad; boating at Nainital (boating and water sports are picking up fast in the country. See (Unit 13, Block-4, TS-2). In Cochin, boat buses ply between the various islands. Though they are the local mode of transport tourists enjoy travelling in them.

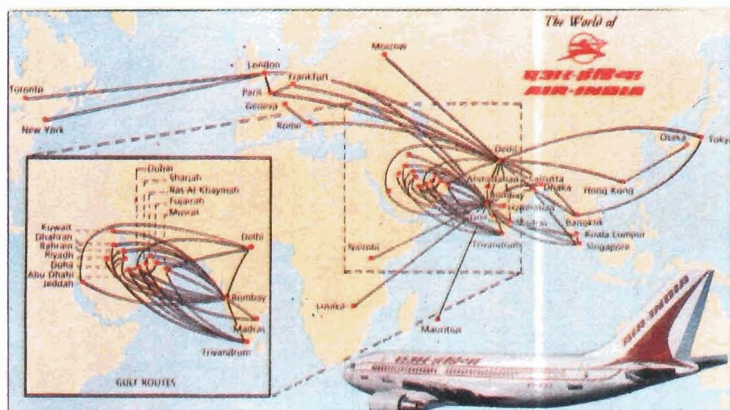
You should keep yourself updated in relation to tourist attractions or waterways as more areas are being developed in this regard.

8.6 AIR TRANSPORT

Scheduled air transport started in India in 1932. Until its nationalisation in 1953, the existence of air transport was only symbolic and played relatively small role in the economy of the nation. As its use to the British government was limited and technological level of this industry being inadequate, they never took any efforts to develop the same.

After the enactment of the Air Corporation Act, 1953 nationalising the air transport industry in India two Corporations were set up viz., Indian Airlines and Air-India. The former operated domestic services and to neighbouring countries while the latter catered to international traffic in and out of the country. Vayudoot was formed as a subsidiary of Indian Airlines and Air-India and caters to the feeder routes in remote hilly and inaccessible areas. Pawan Hans was formed in 1985 to run the helicopter services and was initially named the Helicopter Corporation of India. Its objective was to provide helicopter service in support of the offshore oil drilling in India besides linking Andaman Nicobar, Lakshadweep Islands with the mainland





and connecting inaccessible areas and difficult terrains in Jammu & Kashmir, Sikkim and the North-Eastern States.

After nationalisation, the two Air Corporations updated technology in the industry and today Indian Airlines and Air-India have an all-Jet fleet of the most modern type of aircrafts equipped with the state-of-art technology with matching infrastructure on ground.

Indian Airlines fleet comprises of 57 aircrafts and Air-India has 23 aircrafts as under :

Aircraft Type	Indian Airlines	Air-India
Airbus A300 (200-plus seater)	11	03
Airbus A310 (100-plus seater)	—	08
Airbus A320 (100-plus seater)	23	—
Boeing-737 (100-plus seater)	23	—
Boeing-747 (300-plus seater)	—	11
Boeing-747 (Dash 400) (400-plus seater)	—	01

Since nationalisation, the union government has invested Rs. 100 crores by way of equity and loan capital in Indian Airlines and approximately Rs. 153 crores in Air-India. The annual turnover of these two Corporations is more than Rs. 2000 crores per year each. While Air-India carries annually 22 lakhs passengers, Indian Airlines carries 88 lakhs, Vayudoot carries 4.10 lakhs and Pawan Hans 2.5 lakhs.

Since 1990 the government has permitted private operators to operate trunk routes within India and compete with Indian Airlines. There are a few small companies operating along with Indian Airlines on domestic routes. These are East West Airlines, Trans Bharat Aviation, Jagson Airlines, Modi Luft, City Link Airways, Sahara India Airlines, etc. Recently the Air Corporation Act has been modified to facilitate the 'open skies' policy.

Air transport to India is primarily used for passenger transportation and hence it has a very important rôle to play in the development of tourism in India. The Government is now spending huge amounts to upgrade and modernise the airports as per the requirements of today and the future.

Inside An Air India Plane



8.7 ROLE OF TRANSPORT IN TOURISM

In a vast country like India with extensive geographical diversity, fast and efficient means of transport is very essential to link the various places. Tourism as an industry can only be developed if the time taken to cover the long distances is cut short to the minimum. In today's industrial society, the time at the disposal of a tourist is very limited. A leisure tourist may have only a few weeks while the business tourist can afford to spend only a few days. Consumer psychology is as present in tourist industry as in any other service industry and thus the tourists like to maximise the returns of their spendings by covering in their itinerary as many places as possible within the limited time-frame. Likewise, business delegates cherish sight-seeing and visits to places of historical value at the end of their session.

India's share of world tourist traffic is 0.29% with around a million per annum visiting India. One amongst the various obstacles in achieving an increase in international tourism in India is the serious deficiency in travel facilities from the main points of arrival in the country to the centre of tourist attraction which they want to visit and stay at. The growth of air travel capacity during the next decade will have to cater to this requirement. Tourist traffic is estimated to grow at 6% annually.

The road transport plays a major role in short distance travel. However, the share of buses being only 1.3% and cars, jeeps and taxi 7.8% in the total road traffic, it is inadequately developed. The role of luxury coaches and rent-a-car system is virtually insignificant and has only a symbolic existence in and between certain metropolitan cities. The service through this mode offered today is lacking in comfort and choice and is thus an impediment in the growth of domestic as well as international tourist traffic. In spite of the short-comings it is one of the major modes of transport for inland tourists.

The advantages offered by the railways in long distance has made this mode the main arterial link between the length and breadth of the country for the tourist traffic and its role in inland transportation is no less important. Along with the road transport, it provides the basic infrastructure for movement of tourists inland, though its popularity and utility for the foreign tourists is very little as they prefer the air transport which provides greatest speed and comfort.

The share of water ways, both inland, coastal and overseas, is negligible in tourist traffic. Ropeways also have a distinct advantage in hill ranges and rapid streams, the latter with frequent changes in their courses. More than 16% of the country's areas is hilly. However, the total length of ropeways in India is hardly a few hundred kilometres and thus this mode, though quite suitable in specific areas, has remained untapped till date.

The importance of air transport in tourism stems from the fact that India has a well established surface transport system. This, however, suffers from serious shortcomings :

- road transport being stagnant is unable to play its full role in the promotion and growth of tourism,
- the rail system, on the other hand, though fairly extensive, is good only in parts.

In a large country like ours and the short time at the disposal of the average tourist, rail travel is too slow to satisfy the needs of international tourists. The railways are trying hard to cope with these shortcomings.

At present 40% of the incoming traffic by air consists of tourists. Because of geographical reasons, the vast majority of tourists (90%) coming to India arrive and depart by air. After arriving in India the tourists are again largely dependent on air transport for their movements within the country. This is so because of the vastness of the country and unlike developed countries we do not have a road/coach system offering the necessary quality of service and choice.

Major Entry Points by Air
Bombay
Delhi
Calcutta
Madras
Trivandrum

Surveys of Indian Airlines passengers profile indicated that 73% of its total traffic constituted business travellers while 17% on vacation and the rest are on account of personal reasons. Eighty-two per cent of the passengers were resident Indians, while 18% were foreign nationals and NRIs. Most of the foreign tourists go through one of the 4 metros as they are major entry points. Apart from the 4 metros, Agra, Jaipur, Varanasi, Bangalore and Goa were among the 10 top tourist places visited by the foreign tourists.

8.8 TOWARDS A NATIONAL TRANSPORT POLICY

It is a fact that all modes of transport available in India at present are inadequate to meet the growing demand. Some of the modes like inland waterways or coastal shipping are still untapped.

Since 1950 onwards, the search continues for a National Transportation Policy clearly laying down the role of various modes of transport with short-term and long-term objectives and programmes for their development.

In 1950, the Motor Vehicle Taxation Enquiry Committee stressed the necessity for co-ordinating development of all means of transport. In 1951, the Transport Advisory Council repeated the need for development, co-ordination and preservation of a nation-wide transport system by water, road, rail as well as other means. The Committee on Transport Policy and Co-ordination set up in 1959 (also known as Neogy Committee) submitted its report in 1966 to draw up the broad outlines of a National Policy covering all modes of transport. Further, in 1970, Inland Water Transport Committee emphasized the need for enunciating a National Transport Policy which would define the role of each mode of transport and lay down clear principles and procedures for their co-ordination and integration where feasible and necessary. The search continued with the formation of the Pande Committee in 1978 to propose a comprehensive Transport policy for the country. It was required to recommend an optimal, inter-modal mode of different systems and also suggest appropriate technical choices within each system. This Committee also submitted its report in May 1980. This Committee recommended the co-ordination of all modes of transport and felt that there should be an over-riding accent on energy conservation in a National Transport Policy. The Government of India accepted the recommendations made by this Committee, in full. However, its implementation is still awaited for various reasons.

Check Your Progress 2

- 1) Give your suggestions to promote water transport in order to attract tourist.

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- 2) What is recently the major change in policy in air transport?

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3) How tourism is dependent on transport industry?

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4) What is the relevance of a national policy on transport?

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8.9 LET US SUM UP

This Unit has introduced you to a broad profile of different modes of transport existing in India. Starting from railways to air travel every mode of transport is important keeping in mind the different physical condition of our country and varied interests and demands of the commuters. What we need today is to develop an integrated plan in order to move forward creatively and economically. With technology advancing every day transport industry needs reorientation accordingly and this is an essential pre-requisite for the development of tourism.

8.10 KEYWORDS

Colonial : Here it is used to define the different historical periods. Colonial relates to the British rule in India.

LTC : Leave Travel Concession. In most of the organisations employees are given this facility to travel by the organisations. Rules of LTC vary from organisation to organisation.

Sea cruises : Sailing in the sea for pleasure.

Toy train : This is run in 3 tourist places, Ooty, Shimla and Darjeeling. It is one of the major attraction of the tourists visiting these places.

8.11 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress 1

- 1) See Sec. 8.2.
- 2) In the light of information given in Sec. 8.3 and from your own understanding you have to answer this question.
- 3) You have to write collecting information on your own.

Check Your Progress 2

- 1) You have read about water transport in Sec. 8.5. This would help you in formulating plan.
- 2) Permission given to private air operators as well as abolition of air corporation act of 1953. See Sec. 8.6.
- 3) See Sec. 8.7.
- 4) See Sec. 8.8.

ANNEXURE

Some Essential Information for Travel by Train

I) Reservation

Where to go for your reservation, how you would get your reservation, different types of reservation, system of onward reservation and return reservation. etc. You will get up-to-date information on all these from your area railway reservation centre.

II) Lost Tickets and Refunds

Contact Chief Commercial Officer, Railway Reservation or Station Superintendent.

III) You must have a current **Railway Time Table** and you have to learn how to see the Time Table.

IV) **Different Class Structure** in various Trains i.e. 2nd class ordinary, 2nd class sleeper, AC chair car, etc. Trains like Rajdhani Express, Shatabdi Express, for example, do not have any non-AC class.

V) Facilities Available at Station

Cloakroom, Waiting room, Retiring room, etc.

VI) Different Concessions and Facilities for Travel

Indrail Pass, Old Age concession, Hill concession, Student concession, Circular Trip, Break journey, etc.

VIII) Left Luggage

A tourist can check the luggage into a cloak room for short periods.