

India's Largest Online Community for IAS, Civil Services Aspirants

UPSC PORTAL

<http://www.upscportal.com>

Gist of India Year Book

2013



**for Civil Services Preliminary (CSAT)
& Main Examinations**

Each chapter is compiled according to the requirement of civil services preliminary (CSAT) and main examination

Important points are highlighted for Quick revision

Multiple Choice Questions are given after each Chapter

Compiled by Mr. S.A.Majid & S.N.Jha

<p>Chapter</p> <hr style="width: 100%;"/> <p style="font-size: 2em; font-weight: bold;">26</p>	<h1 style="margin: 0;">TRANSPORT</h1>
--	---------------------------------------

CONTENTS OF THE CHAPTER

- | | |
|---|--|
| <ul style="list-style-type: none"> 8 <i>Intoduction</i> 8 <i>Railways</i> 8 <i>Roads</i> 8 <i>Shipping</i> <ul style="list-style-type: none"> • <i>Coastal Shipping</i> • <i>Maritime Training</i> | <ul style="list-style-type: none"> 8 <i>National Waterways</i> 8 <i>Civil Aviation</i> 8 <i>MCQs for Final Practice</i> |
|---|--|

INTRODUCTION

Transportation plays an important role in the development of country. The Ministry of Shipping, Ministry of Road Transport and Highways is responsible for the formation and implementation of policies and programmes for the development of various modes of transport save the railways and the civil aviation.

Railways

The Railways in India provide the principal mode of transportation for freight and passengers. The first train steamed off from **Mumbai to Thane in 1853**. Now it has played a vital role in the economic, industrial and social development of the country.

Indian Railways have grown into a vast network of **7,133** stations spread over a rout length of **64,460** km with a fleet of **9,213** locomotives, **53,220** passenger service vehicles, **6,493** other coaching vehicles and **2,29,381** wagons as o 31st March, 2011.

About **30 per cent** of the route kilometre, **41 per cent** of running track kilometre and **43 per cent** of total track kilometre is electrified. The network is divided into 17 zones. Divisions are the basic operating units. The 17 zones and their respoective headquarters are given below:

Zonal Railways	Headquarters
Central	Mumbai
Eastern	Kolkata
East Coast	Bhubaneshwawr
East Central	Hajipur
Northern	New Delhi
North Central	Allahabad
North Eastern	Gorakhpur
Northeast Frontier	Maligaon (Guwahati)
North Western	Jaipur
Southern	Chennai
South Central	Secunderbad
South Eastern	Kolkata
South East Central Railway	Bilaspur
South Western Railway	Hubli
Western	Mumbai
West Central Railway	Jabalpur
Metro Railway	Kolkata

Public Sector Undertakings under the administrative control of Ministry of Railways

There are thirteen undertakings under the administrative control of the Ministry of Railways.

1. Rail India Technical and Economic Service Limited (RITES)
2. Indian Railway Construction (IRCON) International Limited
3. Indian Railway Finance Corporation Limited (IRFC)
4. Container Corporation of India Limited (CONCOR)
5. Konkan Railway Corporation Limited (KRCL)
6. Indian Railway Catering and Tourism Corporation Limited (IRCTC)
7. Railtel Corporation of India Ltd. (Rail Tel)
8. Mumbai Rail Vikas Nigam Ltd. (MRVNL)
9. Rail Vikas Nigam Limited (RVNL)
10. Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL)
11. Bharat Wagon and Engineering Co. Ltd. (BWFL)
12. Burn standard Company Limited (BSCL).
13. Braithwaite and Company Limited (BCL).

Rolling Stock Production units of Indian Railways

1. Diesel Locomotive Works (DLW), Varanasi
2. Chittaranjan Locomotive Works (CLW), Chittaranjan
3. Rail Coach Factory (RCF), Kapurthala
4. Integral Coach Factory (ICF), Perumbur, Chennai
5. Rail Wheel Factory (RWF), Bangalore
6. Diesel Loco Modernization Works, Patiala

Indian Railways has started manufacturing of LHB designed high-speed light weight coaches at Rail Coach Factory (RCF), Kapurthala.

The Research, Design and Standards Organization (RDSO) at Lucknow is the R&D wing of Indian Railways.

Since 1924–25, railway finances remain separated from general revenues. They have their own funds and accounts and the Railway Budget is presented separately to Parliament.

ROADS

India has one of the largest road networks in the world. The country's road network consists of National Highways, State Highways, major/other district roads and

village/rural roads. Though the National Highways, which is the responsibility of the Central Government, has about **70,934 km** length and comprises only **1.7 per cent** of the total length of roads, carries over **40 per cent** of the total traffic across the length and breadth of the country. Traditionally, the road projects were financed only out of the budgetary grants and were controlled/supervised by the Government. But now public-pvt. Partnership plays an important role in this regard.

The length-wise distribution is as under:

National Highways/Expressways	70,934 km
State Highways	1,54,522 km
Other Roads	3,88,4136 km

The National Highways have been classified on the basis of carriageway width of the highway. Generally, a lane has a width of **3.75 m** in case of single lane and **3.5 m** per lance in case of multi-lane National Highways. The percentage of National Highways in terms of width is as under:

Single Lane	17,089 km (24%)
Double Lan	36.651 km (52%)
Four Lane/Six lane/ Eight Lane	17,194 km (24%)

The beginning of a significant private sector participation in road projects was made with the launching of India's largest road project—National Highways Development Project (NHDP).

The NHDP is being implemented mainly by NHAI in phases I to VII.

- **NHDP Phase I & II:** Envisage 4/6 laning of about 14,000 km of National Highways, at an estimated cost of about Rs. 65,000 crore at 2004 prices. Those two phases comprise Golden Quadrilateral (GQ), North-South and East-West corridor (NSEW), Port Connectivity and Other Projects. The GQ consists of 5846 km and connects four major cities, viz., Delhi, Mumbai, Chennai and Kolkata. The NSEW corridor comprising a length of 7142 km connects Srinagar in the North to Kanyakumari in the South including a spur from Salem to Kochi and Silchar in the East to Porbandar in the West, respectively. The NHPI also includes Port Connectivity Project comprising a length of 380 km for improvement of

roads connecting 12 major ports in the country and other projects involving a length of 965 km are also included.

- **NHDP Phase III:** NHDP Phase-III involves 4-laning of 12,109 km of NHS having high density corridor connecting State capitals, important tourist places, economically important areas, etc. on PPP basis at an estimated cost of Rs. 80,628 crore.
- **NHDP Phase IV:** It involves upgration / strengthening of 20,000 km of single/ intermediate /two lane National High ways to two lanes with paved shoulders on EOT (Toll) and BOT (Annuity) basis.
- **NHDP Phase V:** It involves six laning of 6,500 km of NHs comprising 5,700 km of GQ and balance 800 km of other sections of NHs at a cost of Rs. 41,210 crore.
- **NHDP Phase VI:** It involves construction of 1,000 km of expressways with full access control on new alignments at a cost of Rs. 16,680 crore.
- **NHDP Phase VII:** It involves construction of 700 km of ring roads of major towns and bypasses and construction of other stand-alone structures such as flyovers, elevated roads, tunnels, underspases, grade separated interchanges etc. on National Highways at a cost of Rs. 16,680 crore.

The State Highways and Major District and Rural Roads are under the responsibility of respective State Governments, these are developed and maintained by various agencies in State and Union Territories.

1. The main thrust of research and development (R&D) in the roads sector is to build a sustainable road infrastructure comparable to the best roads in the world.

2. The **Border Roads Organization (BRO)** was conceived and raised in the year 1960 by Pandit Jawaharlal Nehru.
3. The BRO was entrusted with the construction of the 215 km long road Delaram-Zaranj in Afghanistan by Government of India. Incidentally, this is the first tarmac road in Nimroz Province of Afghanistan.
4. The work on construction of a 8.8 km long Rohtang tunnel is in an advanced stage of tendering action.
5. Four laning of NH-1A from Vijaypur to Kunjwani (17.2 km) under PM's National Highway Development Programme of 'North-South Corridor' has been completed except two bridges and one underpass.
6. Construction and maintenance of 160 km long **Tamu-Kalemyo-Kalewa** road in Myanmar.

Central Road Fund

The Central Government has created a dedicated fund, called Central Road Fund, called Central Road Fund

(CRF) for collection of cess on petrol and high speed diesel Oil. Presently, Rs. 2/- per litre is collected as cess on petrol and High Speed Diesel (HSD) Oil. The fund is distributed for development and maintenance of National Highways, state roads, rural roads and for railway over bridges / under bridges and other safety features as provided in Central Road Fund Act, 2000. Cess is being distributed in the following manner.

- (i) Rs. 1.50 is being allocated in the following manner :
 - (a) 50 % of the cess on high speed diesel (HSD) oil for development of rural roads.
 - (b) 50 % of cess on HSD, and the entire cess collected on petrol are thereafter allocated as follow:

S. No.	State	National Highway No.	Total length (in km)
1.	Andhra Pradesh	4, 5, 7, 9, 16, 18, 43, 63, 202, 205, 214, 214A, 219, 221 & 222	4472
2.	Arunachal Pradesh	52, 52A & 153	392
3.	Assam	31, 31B, 31C, 36, 37, 37A, 38, 39, 44, 51, 52, 52A, 52B, 53, 54, 61, 62, 151, 152, 153 & 154	2836
4.	Bihar	2, 2C, 19, 28, 28A, 30, 30A, 31, 57, 77, 80, 81, 82, 85, 98,	

		99, 101, 102, 103, 104, 105, 106, 107 & 110	3642
5.	Chandigarh	21	24
6.	Chhattisgarh	6, 12A, 16, 43, 78, 111, 200, 202, 216, 217 & 221	2184
7.	Delhi	1, 2, 8, 10 & 24	72
8.	Goa	4A, 17, 17A & 17B	269
9.	Gujarat	NE-1, 6, 8, 8A, 8B, 8C, 8D, 8E, 14, 15, 59, 113 & 228	3245
10.	Haryana	1, 2, 8, 10, 21A, 22, 64, 65, 71, 71A, 72, 73, 73A, 71B, NE-II	1512
11.	Himachal Pradesh	1A, 20, 21, 21A, 22, 70, 72, 88 & 73A	1208
12.	Jammu & Kashmir	1A, 1B, 1C & 1D	1245
13.	Jharkhand	2, 6, 23, 31, 32, 33, 75, 78, 80, 98, 99 & 100	1805
14.	Karnataka	4, 4A, 7, 9, 13, 17, 48, 63, 67, 206, 207, 209, 212 & 218	3843
15.	Kerala	17, 47, 47A, 49, 208, 212, 213 & 220	1440
16.	Madhya Pradesh	3, 7, 12, 12A, 25, 26, 26A, 27, 59, 59A, 69, 75, 76, 78, 86 & 92	4670
17.	Maharashtra	3, 4, 4B, 4C, 6, 7, 8, 9, 13, 16, 17, 50, 69, 204, 211 & 222	4176
18.	Manipur	39, 53, 150 & 155	959
19.	Meghalaya	40, 44, 51 & 62	810
20.	Mizoram	44A, 54, 54A, 54B, 150 & 154	927
21.	Nagaland	36, 39, 61, 150 & 155	494
22.	Odisha	5, 5A, 6, 23, 42, 43, 60, 75, 200, 201, 203, 203A, 215, 217 & 224	3704
23.	Puducherry	45A, 66	53
24.	Punjab	1, 1A, 10, 15, 20, 21, 22, 64, 70, 71, 72 & 95	1557
25.	Rajasthan	3, 8, 11, 11A, 11B, 12, 14, 15, 65, 71B, 76, 79, 79A, 89, 90, 112, 113, 114 & 116	5585
26.	Sikkim	31A	62
27.	Tamil Nadu	4, 5, 7, 7A, 45, 45A, 45B, 45C, 46, 47, 47B, 49, 66, 67, 68, 205, 208, 209, 210, 219, 220, 226 & 227	4462
28.	Tripura	44 & 44A	400
29.	Uttaranchal	58, 72, 72A, 73, 74, 87, 94, 108, 109, 123, 119, 121, 87 Ext&125	1991
30.	Uttar Pradesh	2, 2A, 3, 7, 11, 12A, 19, 24, 24A, 24B, 25, 26, 27, 28, 28B, 28C, 29, 56, 56A, 56B, 58, 72A, 73, 74, 75, 76, 86, 87, 91, 91A, 92, 93, 96, 97, 119 & NE-II	5874
31.	West Bengal	2, 2B, 6, 31, 31A, 31C, 32, 34, 35, 41, 55, 60, 60A, 80, 81 & 117	2377
32.	Andaman & Nicobar	223	300
	Total		66590

Shipping

- Shipping plays an important role in the transport sector of India's economy. Approximately, **95 per cent** of the country's trade by volume (**68 per cent**

in terms of value) is moved by sea. **India has the largest merchant shipping fleet among the developing countries and ranks 16th amongst the countries with the largest cargo carrying fleet.**

2. The salient features of India's shipping policy are the promotion of national shipping to increase self-reliance in the carriage of the country's overseas trade. **There has been an increase of 1.89 per cent million GT in the tonnage during the last four years.**

Ministry of Shipping has prepared a Maritime agenda for the decade **2010-20** to give a vision and road map for comprehensive development of shipping. The agenda envisages to create, build and sustain the maritime infrastructural needs of the country of the next decade. The overall vision of the Ministry as per the Maritime agenda aims towards navigating and steering the Indian Maritime sector realistically into the premier maritime nations of the world. This ten year period agenda of the Ministry of Shipping covers the last two years of the 11th Five Year Plan, the entire period of 12th Five Year Plan and the first three years of the 13th Five Year Plan. This document basically presents an agenda in the Shipping sector for consideration within overall objective to increase efficiency of the delivery system and overall pace of growth in the sector. Indeed, this is a pathbreaking document which will serve as road map for all ports (major as well as non-major ports) and shipping sector during the decade 2010-2020, which includes maritime sector development by maritime states.

3. **Coastal Shipping:** Coastal shipping is an energy-efficient, environment-friendly and economical mode of transport in the Indian transport network and a crucial component for the development of domestic industry and trade. India, with her **7,517** km long coastline studded with **13** major ports and **200** non-major ports provides congenial and favorable conditions for the development of this alternate mode of transport.
4. **Maritime Training:** The Director General of Shipping is responsible for creation of the trained manpower required for the merchant navy fleet of the country. The importance of organised training was recognised in the year 1927 when the Training Ship "Dufferin" was established. In addition to the this, there are about 124 training institutes in the private sector approved by the Director General of Shipping.
5. The Shipping Corporation of India Ltd. (SCI) was formed on **2nd October, 1961**. The SCI was

conferred 'Mini Ratna' status by the Government of India on 24th February, 2000.

6. The training of personnel acquired a new dimension with the setting up of a **Maritime Training Institute** (MTI) at Powai, Mumbai.
7. MTI has been awarded the coveted Golden Peacock Award for excellence in Training.
8. **Sethusamudram Ship Channel Project:** The Government of India through the Ministry of Shipping decided to set up a "Special Purpose Vehicle" (SPV) in the name and style "Sethusamudram Corporation Limited" (SCL) to raise finance and to undertake such other activities as may be necessary to facilitate creation and operation of a **navigable channel from Gulf of Mannar to Bay of Bengal through Palk Bay** (Sethusamudram Ship Channel).
9. Situated in the western coast of India in the city of Cochin, State of Kerala, Cochin Shipyard is the **largest shipyard in the country.**
10. **The Garden Reach Shipbuilders & Engineers Limited** was incorporated as a joint stock company in **1934**, under the name M/s Garden Reach Workshop Limited (GRW). The Government of India acquired the company in 1960. It was renamed as "Garden Reach Shipbuilders & Engineers Limited (GRSE)" on 1st January, 1977.
11. **Hindustan Shipyard Limited (HSL)**, Visakhapatnam was set up in 1941 in the private sector and was taken over by the Government in 1952.
12. **Hooghly Dock and Port Engineers Limited** (HDPEL), Kolkata became a Central Public Sector Undertaking in 1984.

Inland Water Transport

13. India has about **14,500 km** of navigable waterways which comprise rivers, canals, backwaters, creeks, etc. About 50 million tonnes of cargo corresponding to 2.82 billion tonne km was transported in 2005-06 by Inland Water Transport (IWT). Its operations are currently restricted to a few stretches in the Ganga-Bhagirathi-Hooghly Rivers, the Brahmaputra, the Barak River, the rivers in Goa, the backwaters in Kerala.

14. **The Inland Waterways Authority of India (IWAI)** came into existence on 27th October, 1986 for development and regulation of inland waterways for shipping and navigation.
15. **National Waterways:** The Ganga between Allahabad–Haldia (1620 km) the Sadiya-Dhubri stretch of river Brahmaputra (891 km) and the Kollam-Kottapuram stretch of West Coast Canal along with Champakara and Udyogmandal Canals (205 km) in Kerala have so far been declared as National Waterways and are being developed for navigation by IWAI.
 - **Kakinada-Puducherry** stretch of Canal and Kalurelly Tank, stretches of river Godavari and Krishna (1028 km) in 2008.
 - **Talcher-Dharma** stretch of river Brahmani, Geonkhali Charbatia stretch of East Coast Canal, Charbatia-Dharma stretch of Matai river along with Mahanadi delta river system (585 Km.) in 2008.

In addition, declaration of **Break River from Lakhpur to Bhanga** (121 km) as **sixth** National Waterway is under consideration of the Government.

Civil Aviation

The Ministry of Civil Aviation is responsible for the formulation of national policies and programmes for development and regulation of civil aviation and for devising and implementing schemes for orderly growth and expansion of civil air transport.

India has been a member of the International Civil Aviation Organisation (ICAO) and is also on the Council of ICAO since its inception. The Air Transport Companies are both in the public sector and in the private sector.

India has bilateral Air Services Agreements with **104** countries. Recently, New Air Services, Agreements have been signed/initialed with Mexico, Chile and Bosnia & Herzegovina.

The Cape Town Convention has been acceded by the Government of India and it has come into force w.e.f. **1.7.2008**. The principal objective of the Convention/Protocol is the efficient financing of mobile equipment.

India has acceded to the Montreal Convention on **1st May, 2009**. Accession to this Convention shall facilitate higher compensation and fifth State jurisdiction

to international air passengers to/from India.

Some Major Developments in Civil Aviation Sector
Some Major Developments in Civil Aviation Sector

- FDI norms have been liberalised, allowing **100 percent FDI** through the automatic route for setting up green field airport projects.
- A policy for construction of Greenfield airports, addressing procedure for approval of greenfield airports within **150 kms** of existing airports, airports for cargo and or non scheduled flights and for heliports, has been put in place.
- The Airport Economic Regulatory Authority (AERA) has been established. The functions to be carried out by AERA include fixing, reviewing and approving tariff structure for the aeronautical services and users' fees which may be levied by the service providers for airport development and monitoring prescribed performance standards relating to quality, continuity and reliability of service.
- The two national carriers **Air India Ltd.** and **Indian airlines** have been merged to optimise fleet acquisition, leverage the asset base, strengthen network and achieve economy of scales.
- In order to address the acute shortage of operational manpower in aviation sector, **Indira Gandhi Rashtriya Udyan Academy (IGRUA)** has been upgraded and a new flying training institute at **Gondia** has been established and the management has been passed on to the CAE flight Training (India) Private Limited, a wholly owned subsidiary of CAE Inc, Canada.
- **Airports Authority of India (AAI)** is a leader in building airport infrastructure along the length and breadth of the country including remote and far flung areas. Airports Authority of India came into being on 1st April, 1995. AAI manages 115 airports including 23 Civil Enclaves. In addition, AAI provides CNS-ATM facilities at 11 other airports.

The Bureau of Civil Aviation Security (BCAS) was initially set up as a Cell in the DGCA in January, 1978 on the recommendation of the Pande Committee constituted in the wake of the hijacking of an Indian Airlines flight on 10th September, 1976. The BCAS has its headquarters in New Delhi and 4 Regional Offices located at Delhi, Mumbai, Kolkata and Chennai airports.

The Indira Gandhi Rashtriya Uran Akademi located at Fursatganj (UP) is an Autonomous Body under Government of India, Ministry of Civil Aviation.

- GPS Aided Geo Augmented Navigation “Gagan” is an augmentation system to enhance the accuracy and integrity of GPS signals to meet precision approach requirements in Civil Aviation and is being implemented jointly by AAI and ISRO in three phases.

Bangaluru Airport Limited (BIAL) is the 1st green airport. It has been decided to establish a premier pilot Training Institute at Gondia, Maharashtra.

Pawan Hans Helicopters Ltd. (PHHL) an ISO 9001:2000 certified company, is one of India’s leading helicopter companies and is known for its reliable helicopter operations. The company was incorporated in 1985 with the objective of providing helicopter services to the petroleum sector, linking inaccessible areas of the country and operating charters for promotion of tourism.

Pawan Hans is a leader in providing offshore helicopter support in India. Its helicopters fly under a variety of conditions for carrying out ONGC tasks at Bombay High. The company has provided helicopters to Andaman & Nicobar Islands and Lakshadweep Islands for inter-island helicopter services.

Institution	Head Office	
Diesel Locomotives Works Chittaranjan Locomotive Works Integral Coach Factory Rail Coach Factory Rail Wheel Factory Border Roads Organisation	Varanasi Chittaranjan Chennai Kapurthala Bangalore 1960	It started its operations in May, 1960 with just two Projects: Project Tusker (renamed Project Vartak) in the east and Project Beacon in the west)
LBS College of Advance Maritime Studies and Research Shipping Corporation of India Maritime Training Institute	Mumbai 1961 Powai, Mumbai	Conferred a Mini Ratna status Modern training facility so as to ensure that the skill and expertise of SCI personnel at international level.
Cochin Shipyard Ltd. Hindustan Shipyard Ltd. country which was awarded ISO : 9001 certification. Hooghly Dock and Port Engineers Ltd.	1972, Cochin Visakhapatnam Kolkatam, 1984	HSL is the first ship building yard in the It has two working unit in Howrah District of WB, one at Salkia and other at Nazirgonge.

UPSCPORTAL PUBLICATIONS

Civil Services Exam (*Preliminary*)



Also Available at: <http://www.flipkart.com>

Buy Online at: <http://upscportal.com/civilservices/order-books>

Help Line No. 011- 45151781