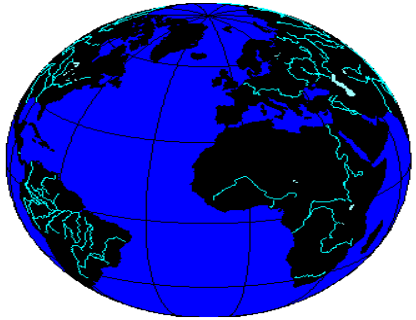
WELCOME—NTPC RAIL

WELCOME TO RICE SMART



GEOGRAPHY

DR. RAJ SIR

MY INTRODUCTION

Raj

FACULTY OF GEOGRAPHY

16+ Years of Experience in Competitive Exams in Offline and Online field.

QUALIFICATION

- Ph.D, M.Sc, B.Ed, B.Sc

8820442530

RRB NTPC 2025

EXAM PATTERN

CBT 1

SECTIONS	QUESTIONS	TOTAL MARKS	DURATION
MATHEMATICS	30	30	90 MINUTS
GENERAL INTELLIGENCE AND REASONING	30	30	
GENERAL AWARENESS	40	40	
TOTAL	100	100	

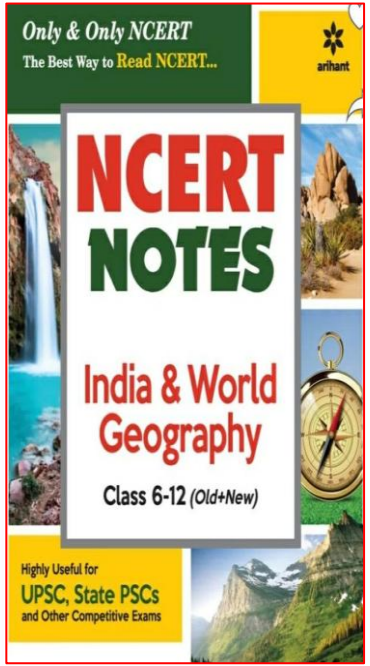
CBT 2

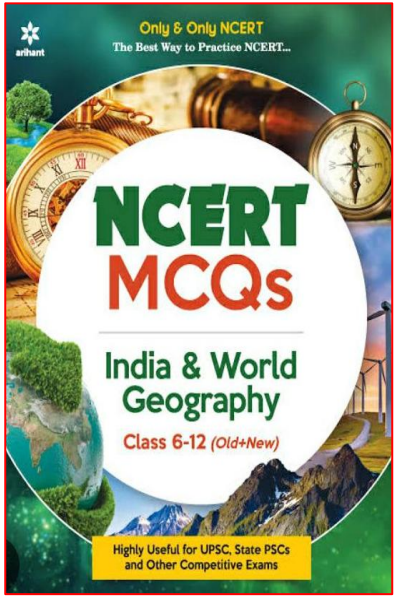
SECTIONS	QUESTIONS	TOTAL MARKS	DURATION
MATHEMATICS	35	35	90 MINUTS
GENERAL INTELLIGENCE AND REASONING	35	35	
GENERAL AWARENESS	50	50	
TOTAL	120	120	

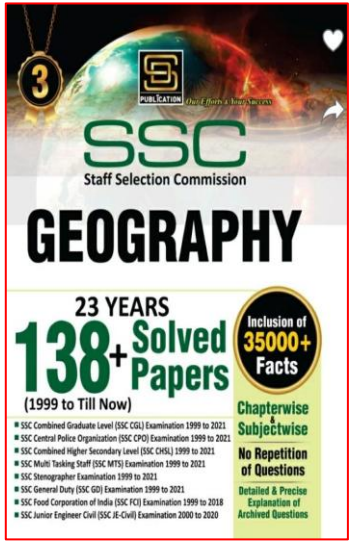
IMPT. GEOGRAPHY

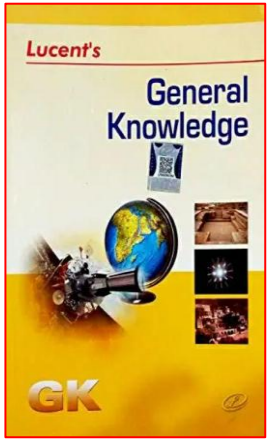
BOOKS FOR NTPC RAIL SPECIAL EXAMINATIONS

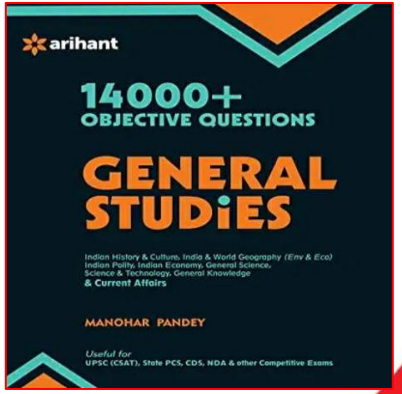
IMPT. GEOGRAPHY BOOKS FOR NTPC + SSC & OTHER EXAMINATIONS







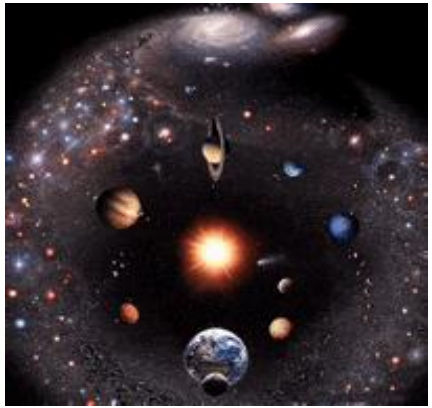
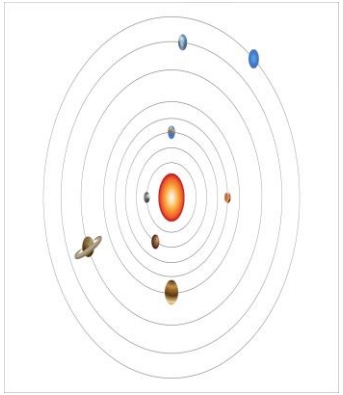
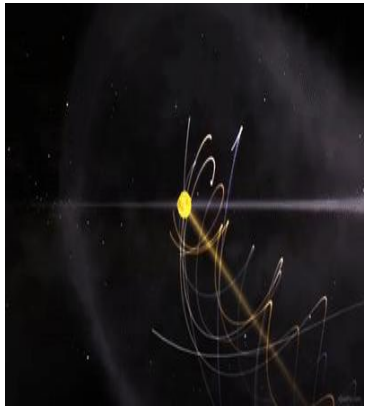
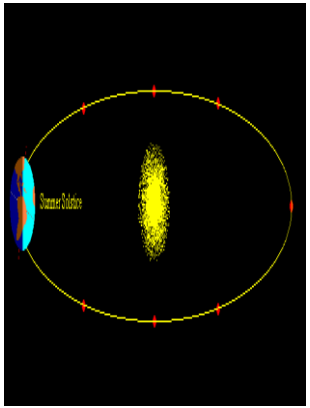


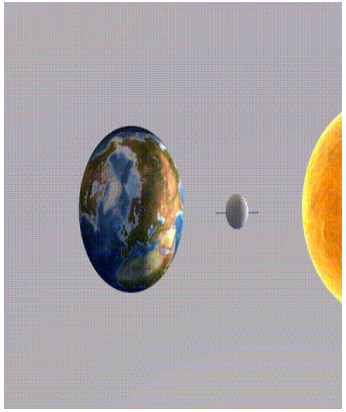


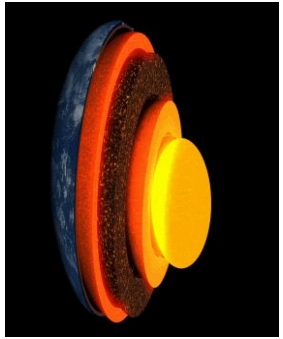
Transport

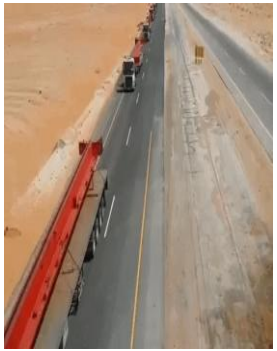
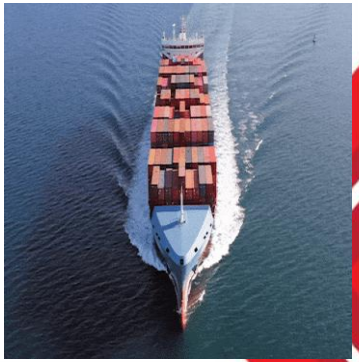
1. RAILWAY (VVI)

- The Earth rotates at about 1,670 kilometers per hour at the equator (460 meters per second).
- The Earth's speed of revolution is around 1,07,000 km/hr (30 kilometers per second).
- The sun and the solar system appear to be moving at 200 kilometers per second.





RAIL WAY

RAIL WAY

World Rank, Network size wise

1.U.S.A

2.China

3.Russia

4.India (68,525 km)

State Rank, Length wise

1.U.P

2.Rajasthan

3.Maharastra

RAILWAY GAUGES

	Gauge		Special features
1	Broad		(A) Width---1.67m (B) Location-Every Plain Region In The Country Like Howrah, Sealdah, Delhi, Mumbai, Chennai, etc. (C)Max. Type Of Indian Gauge.
2	Meter		(A) Width---1m (B) Location--North-East Region and Others. (C)At Present--- Totally Meter Gauges are Converted Into Broad Gauges.
3	Narrow		(A) Width---0.762m (B) Location-Mountain & Hilly Areas / Specially Foothill Areas (C)Himalayan Railway, Nilgiri Railway, Kalka-Shimla Railway Are Famous For Narrow Gauge.
4	Standard		(A) Width-1.43m (B) Location-Every Plain Areas In Metro Cities. (C)Tramway ,Metroway Are Famous For Standard Gauge.

Impt. Railway Locomotives,Coach Factories & Others (India,with picture)

Impt. Railway Locomotives,Coach Factories & Others (India,with picture)

	Names	Location
1	Electric Locomotive	Chittaranjan (Paschim Bardhaman ,WB)
2	Diesel Locomotive	Varanasi (UP)
3	TELCO [Tata Engineering & Locomotive Works]	Jamshedpur , Jharkhand [Only steam Locomotive]
4	Diesel Components Works	Patiala (Punjab)
5	Integral Coach Factory	Perambur (Chennai, Tamil Nadu)
6	Rail Coach factory	Kapurthala (Punjab)
7	Wheel Plant & Axle	Bengaluru (Karnataka)
8	Rail Slipper	Bhilai (Chhattisgarh)
9	Bharat Earth Movers Limited	Bengaluru (Karnataka)
10	Rail Research Unit	Lucknow
11	National Rail Museum	Chanakya puri (New Delhi)

Impt. Railway Locomotives,Coach Factories & Others (India)

Railway Wagon, Coach, Locomotive , Workshop	1.Electric Locomotive-Chittaranjan in Paschim Bardhaman in WB
	2.Diesel Locomotive-Varanasi in UP
	3.Steam Locomotive-Jamshedpur in Jharkhand
	4.Integral Coach Factory-Perambur in Chennai
	5.Rail Coach Factory-Kapurthala in Punjab
	6.Modern Coach factory-Raebareli in UP
	7.Wheel & Axle Plants-Bengaluru
	8.Rail Wagon in WB-Jessop, Dumdum
	9.Railway Workshop in WB-Liluah, Kanchrapara, Kharagpur-(Kharagpur Workshop was established in 1898 / 1900)
	10.Bharat Earth Movers Ltd-Bengaluru

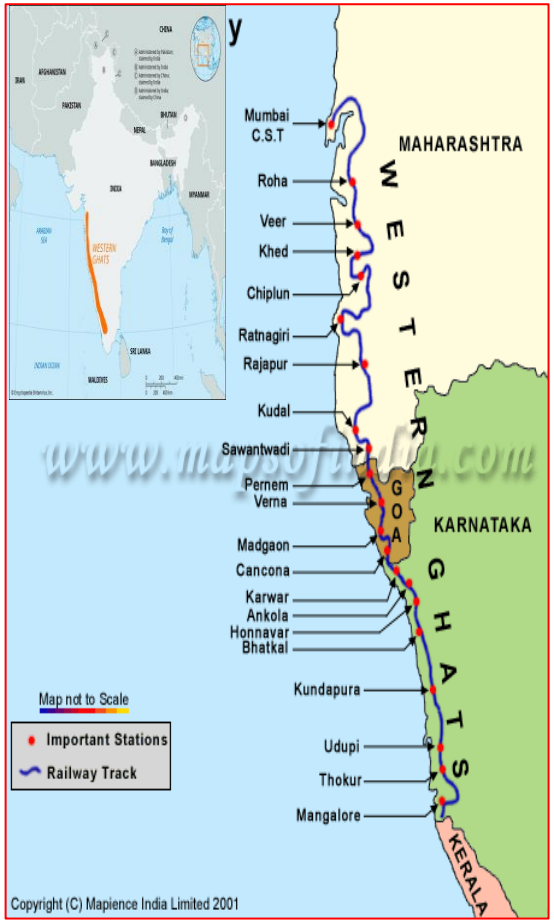
SIR

Railway Zones & Their Headquarters:-[18th Zones]

RAILWAY ZONES	HEADQUARTERS
Central	Mumbai CSMT
Northern (Largest)	Delhi
North- Eastern	Gorakhpur
North-East frontier	Guwahati
North Central	Prayagraj
North Western	Jaipur
Southern (Oldest,1951)	Chennai Central
South Eastern	Garden Reach, Kolkata
South Western	Hubbali
South Central	Secunderabad
South East Central	Bilaspur
Western	Mumbai (Church gate)
West Central	Jabalpur
Eastern	Fairley Place, Kolkata
East Coast	Bhubaneshwar
East Central	Hajipur
South Coast Railway (Youngest,2019)	Vishakhapatnam
Metro Railway (Smallest)	Park Street, Kolkata

Konkan Railway :-{Special Railway}

1	The Railway	Konkan Railway
2	Operator	Konkan Railway Corporation
3	Set up	26th January,1998
4	Length	756km
5	Connection	Roha (Mumbai)-Mangalore (Karnataka)
6	Headquarter	Belapur in Navi Mumbai



Impt. METRO RAILWAY

(operational services in 26 cities in India 2026)

	Popular/Impt. Metro	Started in
1	Kolkata Metro [Indian Oldest]	24th Oct,1984 [Bhawanipore to Esplanade]
2	Delhi (Largest)	2002
3	Bengaluru / Namma	2011
4	Gurgaon	2013
5	Mumbai	2014
6	Jaipur	2015
7	Chennai	2015
8	Kochi	2017
9	Lucknow	2017
10	Hydrabad	2017
11	Noida	2019
12	Ahmedabad	2019
13	Nagpur	8th Mar,2019

14.Pune Metro ----------March,2022

❖ Fun Facts

- ❖ Oldest (First) Metro Rail System: Kolkata Metro
- ❖ Largest Metro System: Delhi Metro
- ❖ Smallest Metro System: Patna Metro
- ❖ Busiest (Highest Ridership) Metro System: Delhi Metro

MONORAIL

1	Name	Mumbai Monorail
2	Operation	1st Feb,2014
3	Connection	Wadala (M.H) to Jacob (M.H)
4	Headquarter	Mumbai

Information About Impt. Express

1	Thar Express (2006)	Jodhpur (Rajasthan)– Munabao (Rajasthan)--- Karachi (Pakistan).
2	Samjhauta Express (1976)	Delhi – Attari (Punjab)-- Lahore (Pakistan).
3	Maitree Express (2006)	Kolkata-Dhaka.
4	Maitree Express-II (2017)	Kolkata-Khulna.
5	Bandhan Express (2017)	Kolkata-Khulna.

6	1st Rajdhani Express(1969)	Howrah--Delhi
7	1st Satabdi Express(1988) [For Jawaharlal Nehru]	Jhansi (UP)--New Delhi
8	Longest Railway & Express "Vivek Express "Connects (2017)	Dibrugarh (Assam)-Kanyakumari [4234km]
9	Gatiman Express(2016)	Nizamuddin (New Delhi)-Jhansi (UP)
10	Tejas Express(2017)	Chhatrapati Shivaji Terminus /CST (Mumbai)---Karmali (Goa)
11	Vande Bharat Express (2019)[High Speed Express][180km/hr]	Delhi-Varanasi (UP)

- The first Vande Bharat sleeper train was inaugurated by Prime Minister Narendra Modi on January 17, 2026, in Malda Town, West Bengal.
- Commercial operations for this inaugural service between Kamakhya (Guwahati) and Howrah began on January 22, 2026, from Kamakhya and January 23, 2026, from Howrah.

The first Amrit Bharat Express train was flagged off on December 30, 2023, running between Ayodhya Dham Junction (Uttar Pradesh) and Anand Vihar Terminal (Delhi).

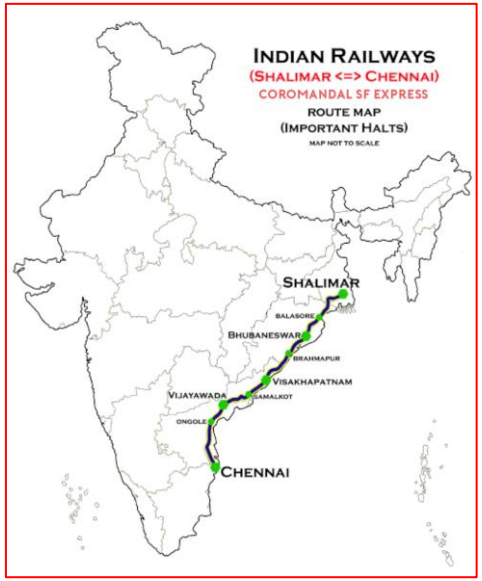
HYDROGEN-TRAIN

Germany. In September 2018, the world's first commercial hydrogen-powered passenger train entered service in Lower Saxony, Germany.

India Is set to launch its first hydrogen-powered train ,The trial run is planned on the Jind-Sonipat route in Haryana.

COROMANDEL EXPRESS

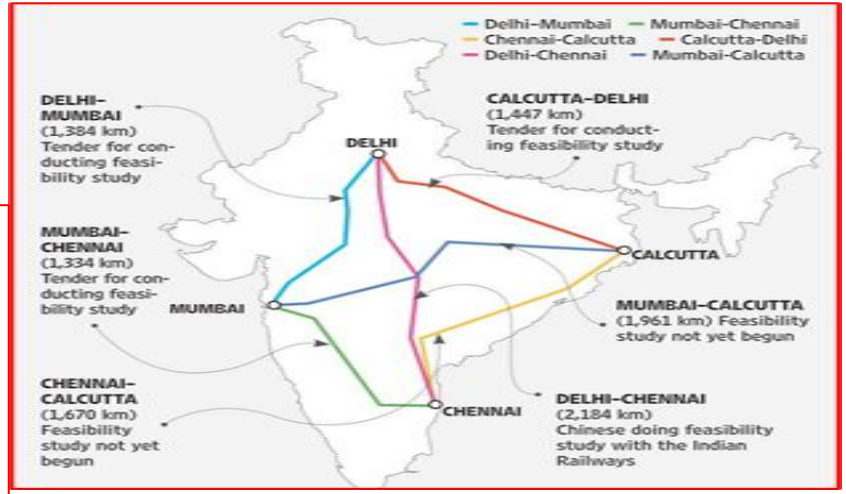
- Connection----Shalimar Railway Station (W.B) & Chennai Central Railway Station (T.N).
- Coromandel Exp.No----- 12841/12842.
- Train Was Introduced In ----1977.
- This Train Is Currently Hauled By---- CLW.
- Maximum Permissible Speed ----130 Km/H.
- Total Distance ----1659 Kms.
- Accident ------On 2 June 2023, An Accident In Bahanaga Bazar Railway Station (Balasore,O.D).
- More Than 288 People Were Dead, And More Than 1000 Passengers Injured.



Diamond Quadrilateral (RAILWAY)

Six corridors on Diamond Quadrilateral connecting metropolitan cities and growth centers of the country (Delhi, Mumbai, Chennai & Kolkata) have been identified for feasibility studies for high speed rail connectivity .

- Delhi-Mumbai,
- Mumbai-Chennai,
- Chennai-Kolkata,
- Kolkata-Delhi and both diagonals.
- Delhi-Chennai and
- Mumbai-Kolkata routes.



Golden Quadrilateral (ROAD WAY)

1.Project--The project was planned in 1999, launched in 2001, and was completed in 2013.

2. The Golden Quadrilateral project is managed by the (NHAI) under the Ministry of Road, Transport and Highways.

3.Phase-1st Phase

4.Lane-6

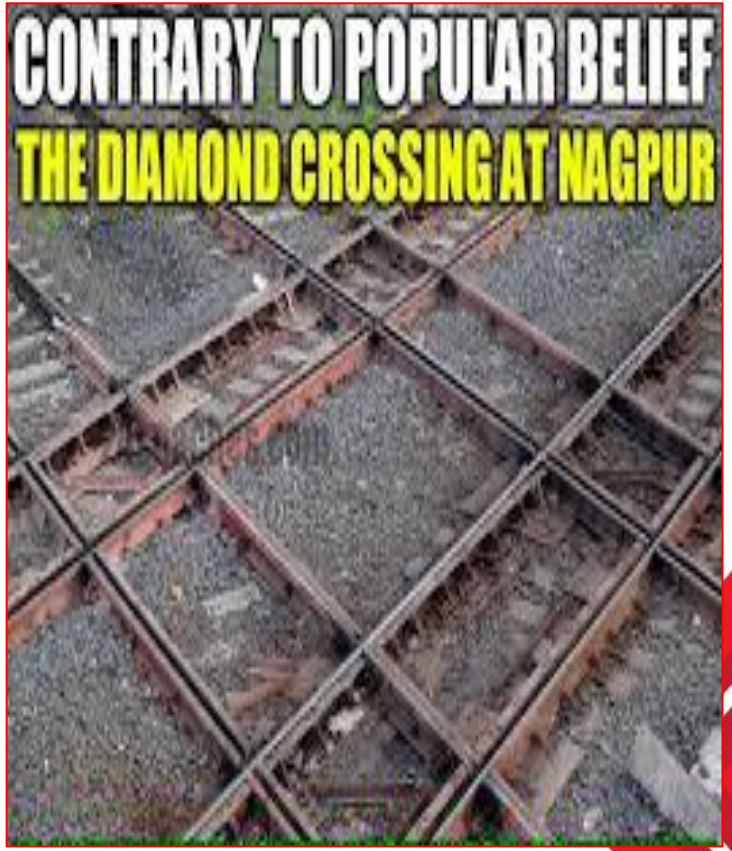
5.Langth-5846km

6.Connection---Delhi-Mumbai-Chennai-Kolkata

7. Prime Minister Atal Bihari Vajpayee-- laid the foundation stone for the project on 6 January 1999.

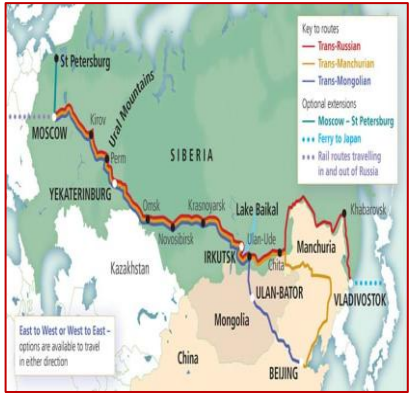
❖ National Highways Development Project (NHDP) is a project of four laning of existing national highways and six laning of selected major national highways of India. The project was started in 1998 under the leadership of Prime Minister, Atal Bihari Vajpayee. This project is managed by the National Highways Authority of India (NHAI) under the Ministry of Road, Transport and Highways.

DIAMOND CROSSING



Information about Impt."World Railway"

1	*World's 1st Railway*	*1825, UK (*Stockton and Darlington)
2	*World's Longest Railway*	*Trans Siberian Railway; Russia*
3	*World's Highest Railway*	*Tanggula (Tibet, China)*
4	*World's Longest Railway Bridge*	*Danyang* (Yangtze River, *China)*
5	*World's Longest Railway Tunnel*	*Gotthard (Switzerland)*



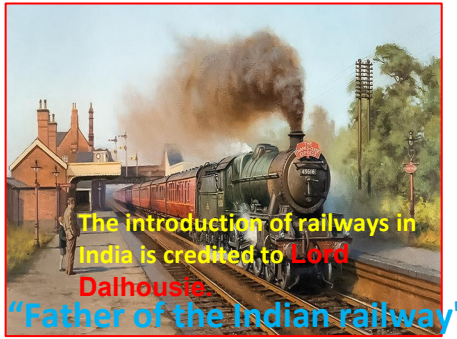
First Train In India

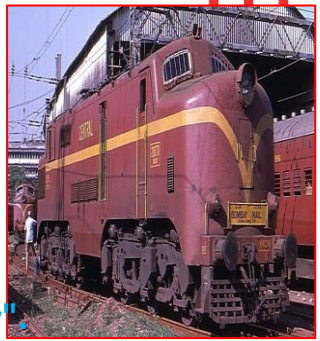
- In 1954, the first diesel locomotive was used in India, which was manufactured by North British Locomotive Company.
- The first electric train ran in India with the inauguration of services between Bombay VT and Kurla Harbour on 3rd Feb 1925 .
- The first Steam locomotive in India 1853
- The first double-decker train in India was the Flying Ranee Express, which started running between Mumbai Central and Surat in 1906.

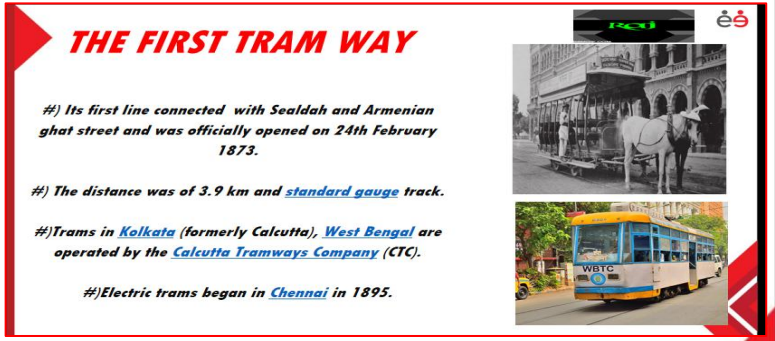
Indian 1st Railway	16th Apr, 1853,34kms Bori Bunder (Bombay/Mumbai) To Thane (M.H)

Impt.MCQs about Railways

1	Indian 1st Railway	16th Apr, 1853,34kms Bori Bunder (Bombay/Mumbai) To Thane (M.H)
2	1st Electric Train	1925,Kurla (M.H) to Mumbai
3	1st Railway Board was set up in	1905 (Delhi)
4	1st Tramway	(a)1873 (Kolkata; Horse Drawn) (b)1895 (Chennai; Electric)
5	1st Train in India	1853; Sahib Sindh, Sultan
6	Bengal 1st Railway	1854, 15th August (Howrah to Hooghly)

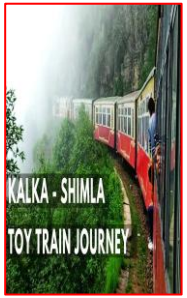


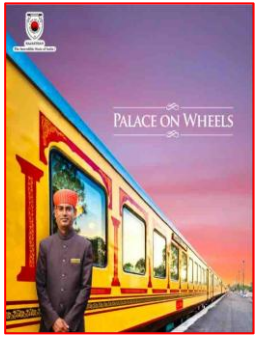


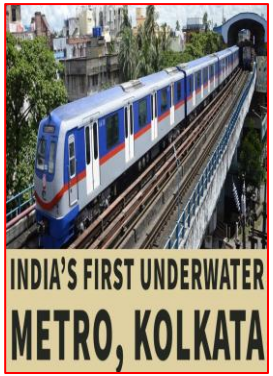


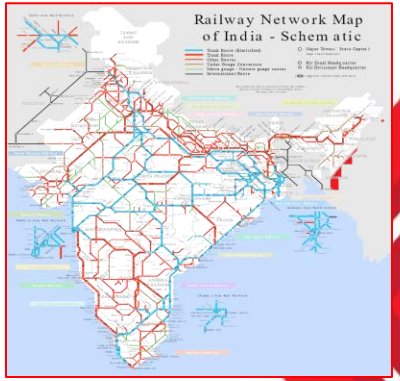
7	Longest Railway Platform	Shree Siddharoodha Swamiji (Hubli , Karnataka,1505m) /Gorakhpur (UP,1366m)
8	Largest / Busiest Railway Station	Howrah Station (W.B).
9	Highest Station	Ghum (Darjeeling)
10	Longest Railway Bridge / Rail cum Road Bridge	The Bogibeel Bridge,(Brahmaputra (Assam)
11	Highest Railway Bridge	Chenab (J&K)
12	Longest Railway Tunnel	Pirpanjal (J&K)
13	NO. of Railway stations & Railway Division in India	❖ Estimated Station-7000+ ❖ Division-70

14	Heritage Railway & Station by UNESCO	(a) Darjeeling Himalayan Railway (1999) (b) Nilgiri Railway (2005) (c) Kalka –Shimla Railway (2008) (d) Chhatrapati Shivaji Terminus Station (2004)
15	Most Expensive Express	(a)Palace On Wheels (New Delhi – Jaipur-Udaipur-Agra-New Delhi [1982]. (b) Maharaja Express (Goa-Hampi (Karnataka)-Mysore (Karnataka)-Thiruvanantapuram (Kerala) [2012]
16	Indian 1st Tube Under Water Railway	East-West Metro (Under The Hooghly River)
17	Max Railway in	UP
18	No Railway in	Sikkim

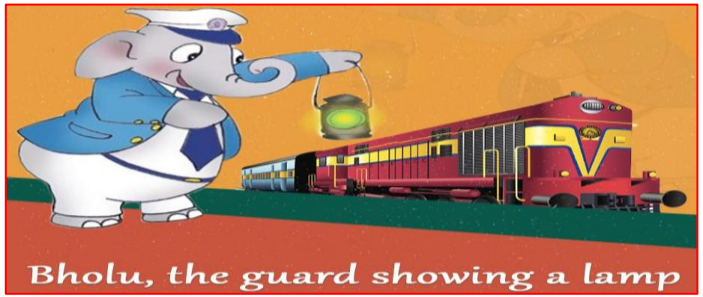








19	Longest Railway Yard	Mughal Sarai / Pandit Deendayal Upadhyaya (UP)
20	Mascot of Indian Railway	Bholu / The Train Manager Guard Elephant ; 2002
21	NO. of stars in Indian Railway Logo	18 stars
22	Proposed Bullet Train connects	Sabarmati Station (Ahmedabad) to Mumbai; 2024/26



THANKS TO ALL